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**MCRIT** ([www.mcrit.com](http://www.mcrit.com)) was created in 1988 by engineers of the Polytechnical University of Catalonia. At the moment it counts on a multidisciplinary staff of consultants specialised on decision support systems for private companies, and public institutions, mostly concerning the transportation field. In order to carry out these projects, MCRIT develops advanced information and knowledge management systems adapted to each case. MCRIT has co-ordinated research projects in the 4<sup>th</sup> and 5<sup>th</sup> Framework Programme of Research of the European Commission, has participated actively in the European Spatial Planning Observation Network (ESPON) and regularly collaborates with companies and universities from many European countries.

During the last three years, an average of 15 consultants has worked in MCRIT. Progressively, some of them have been incorporated as partners of the company (1992-2000) and, more recently, of **GEOVINCLES** ([www.geovincles.com](http://www.geovincles.com)) firm and/or partners and managers of the **ERSILIA Foundation** ([www.ersilia.org](http://www.ersilia.org)) of MCRIT. GEOVINCLES and the ERSILIA Foundation were created in 2004 to give a more suitable frame for the works, which are not directly related to transport planning.

## **EVOLUTION OF THE ACTIVITIES OF MCRIT 1988-2007**

MCRIT research activities in 1988 have been focused on the realisation of territorial planning studies and of the transport systems; since 1995, MCRIT has participated in research works and development of advanced informatic systems to support to the decision, and since 2002 develops interactive and knowledge management communication systems, and educational projects, activities transferred to GEOVINCLES and to the ERSILIA Foundation, to focus MCRIT on strategic, territorial and transport planning studies.

Thus, activities of MCRIT are in chronological order described in the following way:

- **Since 1988:** Realisation of **studies, plans and projects**. Since its creation, the main activity of MCRIT has been to develop many studies on territorial and transport planning, at European, Spanish and Catalan level, to institutions like United Nations, European Investment Bank, the European Commission –DG TREN and DG REGIO, Ministry of Public Works and Economy, several departments of the Government of Catalonia, the City Council of Barcelona, the Chamber of Commerce of Barcelona, Barcelona Regional Agency, the Transport Metropolitan Entity, Metropolitan Transport Authority, the Delegation of Barcelona, the Local Agency of Urban Ecology, the Institut of Terres d'Ebre, the Institut Ignasi Vilallonga d'Economia i Empresa.
- **Since 1995:** Research and development of **advanced software to build support systems for the strategic planning and management** (information, prospective modelling, evaluation and representation). MCRIT has co-ordinated three big projects of research in the 4<sup>th</sup> and 5<sup>th</sup> Framework Programme of Research of the European Commission in the field of the spatial systems of information, forecast and evaluation of the transports. Recently, MCRIT has participated on the development of forecast and evaluation models of the transport infrastructure network in the Western Mediterranean for the European Commission, as well as on the maintenance of an infrastructure project evaluation system for the European Bank Investment.
- **Since 2000: Advanced support systems for transport planning, the territory and the environment.** Since 2000, MCRIT has developed more than 10 advanced information systems, transport forecast and evaluation for Catalan and European institutions, using them from

time to time directly as support systems of studies and analysis (SIET, SIMU, BRAX, ATMAX, EMTAX, SIMCAT, IGIS, SIMAE, SILAE, SIRGA, DIVERS, DESTIN...). MCRIT has developed works of systems analyst, direction of technical office of the SITCAT in the Department of Territorial Policy and Public Works (SITCAT project) and works of analysis and development of the GIS for the Road General Direction of the Regional Government of Catalonia (networks analysis module and road security). Since 2004, these activities are carried out through **GEOVINCLES**.

- **Since 2002:** Design and development of **interactive systems and multimedia by Internet:** Virtual Laboratories of e-education, educational resources, management instruments of participatory processes with shared knowledge like Agenda21, realisation of multimedia systems and videos for the communication of plans and programmes. Since March 2004, these activities are carried out by **ERSILIA foundation**.

#### STRATEGIC PLANS AND STUDIES

Study	Customer	Period of realisation
Analysis of the Strategic Plans of Barcelona	Diputació de Barcelona	02/2006-06/2006
Strategic analysis of Montserrat	Consorci Montserrat	09/2005-09/2006
Strategic Plan of Maresme	Consell Comarcal del Maresme	09/2005 - 03/2007
Strategic Plan of the Metropolitan Littoral of Barcelona	Association of municipalities of the Littoral (Consorci El Far)	05/2004-07/2005
The futur of the Metropolitan Region of Barcelona	Ajuntament de Barcelona	01/09/2005
Strategic study of Catalonia 2020: Visions of the future of the territory	ODECAT, Department of the Presidency of the Regional Government of Catalonia	06/2003 09/2003
The government of the territory in the 21st century	Department of the Presidency of the Regional Government of Catalonia, Program CAT21	02/2003 07/2003
Implantation of logistic platforms	CIMALSA	19/10/2006
Masterplan of Pla de l'Estany	PTOP	01/09/2006

Strategic forecast of the potential market of the Port of Barcelona with Southeast Asia	Port Authority of Barcelona (APB)	06/2006 - 12/2006
Infrastructure Transport Plan of Catalonia	DPTOP	04/2006-06/2006
Environmental management of the Industrial Parks of Catalonia	Department of Environment	01/09/2005
Analysis of the potential market of the Port of Barcelona	Port Authority of Barcelona (APB)	06/2005-12/2005
Roads Plan of Catalonia	GISA, DGC, DPTOP, Government of Catalonia	08/2004 - 12/2004 22/05/2003 - 15/07/2003
Infrastructure Railway Plan	DGPT, DPTOP	01/2005-05/2005
Functional analysis of the incorporation of new municipalities to the AMB from the point of view of the mobility	Entitat Metropolitana del Transport (EMT)	12/2004-06/2005
Rail way accessibility to the Port of Barcelona.	Port of Barcelona (APB)	09/2004
Territorial analysis of the Spanish Infrastructure Director Plan 1993-2007	SPT, DPTOP	02/2004 - 05/2004
Key factors of the Territorial Planning in the Metropolitan area of Barcelona	Metropolitan Territorial Plan of Barcelona (PTMB)	12/1999
Anàlisi de l'impacte energètic del transport en el marc del Pla de la Energia 2015	ICAEN	05/2005-12/2005

## STRATEGIC STUDIES AT EUROPEAN AND INTERREGIONAL LEVEL

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Elaboration of territorial indicators of evaluation of the Intermodal Strategic Plan of Transports of Spain	CEDEX - Ministerio de Fomento	14/07/2006
Governance in Europe	Eurofutures	21/03/2005-04/04/2005
World Cities Research (WCR)	MVA	08/03/2005 02/03/2005
Ultrapерipheral Regions of the European Union: ultraperipheral indicators	Government of Canarias	12/2004-12/2005
EURAM: Study on transport networks of the Mediterranean Euroregion	Institute of Economy and the Company Ignasi Vilallonga	09/2004 - 12/2005
ESPO Project 3.3. Impact of the economic policy of the EU in the regions	DG REGIO - IEC	2004-2006
ESPO Project 3.2. Spatial scenarios and aims in relation to the EU Cohesion Policy	DG REGIO - IEC	2004-2006

ESPON Project 2.3.2. New models of Governance in Europe	DG REGIO - IEC	2004-2006
ESPON Project 2.2.3. Territorial effects of Structural Funds in urban areas.	ECOTEC	2002 - 2005
ESPON Project 2.2.1. Territorial effects of Structural Funds	DG REGIO - IEC	2002 - 2005
ESPON Project 2.1.2. Territorial Impact of EU Research and Development Policy	ECOTEC	2002 - 2005
ESPON Project 3.1. Integrated Tools for European Spatial Development	Bundesamt für Bauwesen und Raumordnung (BBR)	2002 - 2004
ESPON Project 1.1.2. Urban-rural relations in Europe	Helsinki University of Technology (HUT)	2002 - 2004
ESPON 1.2.1 - Impact of the Transport Policy in the regions	DG REGIO - IEC	01/2002-12/2004
Estudio del impacto territorial y urbanístico de la autopista A-2, tramo Zaragoza-Mediterráneo	MOPU	1992 - 1993
Definition and evaluation of a strategic network of transport infrastructure in the western Mediterranean	DGTREN - IEC - CETMO	02/2003 - 11/2006
Analysis of mountain areas in the EU and candidate countries	NORDREGIO	2002-2003
Territorial strategies of the EU linked to Trans-European Networks	DG7 - IEC	01/1995 - 07/1996
Trans-European corridors in South Mediterranean	DGTREN - IEC	1998
Transport infrastructure forecast in Western Mediterranean	DGTREN - IEC	1997
Study of accessibility to the peripheral regions of Europe	DGXVI - IEC	06/1994-12/1994
Accessibility study on Atlantic regions.	DGREGIO - IEC	1991
Accessibility study on Western Mediterranean.	DGREGIO - IEC	1990
Indicators of accessibility to the road and railway transport networks of Catalunya	DPTOP, Regional Government of Catalonia	12/2002 02/2003
Location of industrial companies in the Metropolitan Region of Barcelona	European Institut of Studies of the UAB	2000

## FEASIBILITY AND TRANSPORT FORECAST STUDIES

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Demand forecast of the intermodal station of Cerdanyola del Vallès	Consorti del Centre Direccional	01/2007 - 02/2007
Demand forecast study of the Railway Transversal Axis	IFERCAT	07/2006-10/2006
Modelisation of freight transport by road in the Eix del Llobregat	Barcelona Regional (BR)	07/2006-02/2007
Feasibility study of the Axis Berga-Bagà	GISA	01/05/2006
Socio-economic study of the Port of Ciutadella, Menorca	Consell Insular de Menorca (CIME)	04/2006-12/2006
Traffic study of the Axis Centelles-Ripoll (C-17)	Dragados Concesiones	03/2006-05/2006
List of road infrastructures in the marc of thePDM	Metropolitan Authority of Transport (ATM)	01/2006-06/2006
Cost-Benefit study of the establishment of a new station in Passeig de Gràcia	GISA - DGPT	01/2006-03/2006
Cost-Benefit study of the establishment of a new RENFE station in Montornès	GISA - DGPT	08/2005-12/2005
Traffic study of the Axis Maçanet-Platja d'Aro (C-35, C-65, C-31)	Dragados Concesiones	06/2005-09/2005
Traffic forecast study of the Transversal Axis (C-25)	GISA, DGC (DPTOP, Generalitat de Catalunya)	09/2005-04/2006
Feasibility study of the Transversal Axis (C-25)	GISA - DGC	08/2005-04/2006
Traffic study of the N-340 Barcelona-Vilafranca in the framework of the Informative Study	Ministerio de Fomento	09/2005-04/2006
Traffic forecast study of the axis Vilafranca-El Burgo de Ebro	OHL Concesiones	07/2005-08/2005
Territorial and urban impact statement of the A-2 highway, Zaragoza-Mediterranean section	MOPU	01/2003 07/2003
Analysis of energy impact of transport in the framework of the Energy Plan 2015	ICAEN	05/2005 - 12/2005
Study of Alternatives of the Constructive Projects of the Dock outer and of the Sport Basin in the Port of Ciutadella, Menorca	Consell Insular de Menorca (CIME)	04/2005
Study of railway transport of freight, an oportunity for the catalan enterprises	Barcelona Chamber of Commerce	03/2005-07/2005

Study of viability of the deployment of the C-17. Centelles-Ripoll Section.	GISA, DGC (DPTOP, Regional Government of Catalonia)	02/2005-03/2005
Study of viability of the deployment of the C-14. Reus-Alcover Section	GISA, DGC (DPTOP, Regional Government of Catalonia)	02/2005-03/2005
Study of traffic of the deployment of the C-14 Reus-Alcover	GISA, DGC (DPTOP, Regional Government of Catalonia)	01/2005-04/2005
Study of viability of the deployment of the Maçanet-Platja d'Aro axis (C-35, C-65, C-31)	GISA, DGC (DPTOP, Regional Government of Catalonia)	01/2005-02/2005
Perimetral Motorway B-40 in the Metropolitan Region of Barcelona: forecast of traffic and social-economic evaluation	Cambra de Comerç de Barcelona	07/2003 04/2004
Study on economic viability of the transformation of the direct toll in the highways in indirect toll. Simulation of the flows of transport by road i motorway	Institute of Territorial Studies (IET)	06/2003 10/2003
Strategic analysis of transit to the access of the basic network of the Logistic Platform of the Delta of the Llobregat	Autoritat Portuària de Barcelona (APB)	03/2003 09/2003
Study of the interest of a new central railway tunnel in the Metropolitan Region of Barcelona	SPT, DPTOP of the Regional Government of Catalonia	02/2003 07/2003
Motorway P-Z: Traffic demand forecast in a 15 km new motorway Parbayón-Zurita (Santander)	ACS-Dragados	9/2002 - 11/2003
Needs for Infrastructures of Transport in Catalonia	DPTOP, Generalitat de Catalunya	01/2001- 06/2001
Study of interest and viability of a high-speed station in the Airport of Barcelona	Metropolitan Territorial Plan of Barcelona, DPTOP, Generalitat de Catalunya	1998
Study of the orbital road of Barcelona, section Abrera Sant Celoni	Consell Comarcal del Vallès Oriental	1997
Viability study of the crossing of a railway line in Martorell	Metropolitan Territorial Plan of Barcelona, DPTOP; Generalitat de Catalunya	1997
Study of interest and viability of a station of High Speed in the Vallès	Metropolitan Territorial Plan of Barcelona, DPTOP; Generalitat de Catalunya	1997
Territorial analysis of accessibility to the transport networks within the framework of the Director Plan of Infrastructures 2003-2007	MOPU	07/1992 - 01/1993

## PLANS AND STUDIES RELATED TO LOCAL MOBILITY

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Mobility study in Sant Cugat	Ajuntament de Sant Cugat	01/2007
Mobility study of the POUM of Móra d'Ebre	METRÒPOLIS 08	11/2006-12/2006
Sizing of the TAV station of Figueres	INCASOL	11/2006-01/2007
Mobility study - Montjuïc	Barcelona Regional (BR)	08/2006-09/2006
Mobility study of the Axis Berga-Bagà	GISA	01/05/2006
Evaluation study of the Mobility Generated of the Partial Plan Sector IIIC of Moià	Mercedes Juncadella i Hnos	02/2006-03/2006
Mobility study for the POUM of Rubí	Ajuntament de Rubí, CCRS	01/03/2005
Transport study of the establishment of Logis Penedès	CIMALSA	06/2006-09/2006
Mobility analysis by word in Alt Penedès	Consell Comarcal de l'Alt Penedès	09/2005-02/2006
Evaluation study of the mobility of the Transversal Axis (C-25)	GISA - DGC	08/2005-02/2006
Study of alternatives and traffic demand of the enlargement of the METRO L2 line of Barcelona	DGC (DPTOP, Generalitat de Catalunya)	01/08/2004
Diagnosis on the availability of Collective Public Transport to the 36 municipalities of the Metropolitan Strategy Plan	Metropolitan Authority of Transport (ATM)	12/2003 04/2004
Access alternatives study of the metropolitan system in the interchanger of Prat de Llobregat	DPTOP, Government of Catalonia	10/2004 - 11/2004
Inventory of parking places in the railway stations of the Metropolitan Region of Barcelona	Metropolitan Transport Authority (ATM)	05/2000- 07/2000
Accessibility study to the Metro of the Baix Llobregat	Railway of the Regional Government of Catalonia (FGC)	1996

## PLANS AND STUDIES RELATED PUBLIC TRANSPORT

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Demand forecast of the intermodal station of the Directional Centre of Cerdanyola del Vallès	Consorci Urbanístic del Centre Direccional de Cerdanyola del Vallès	04/2007

TPC diagnosis in the polygons of Alt Penedès	Consell Comarcal de l'Alt Penedès	10/2006-11/2006
Study of alternatives. Central railway connection RMB	Metropolitan Authority of Transport (ATM)	09/2006-10/2006
Simulation model of the demand of subway of Barcelona	GISA - DGPT	03/2006-05/2006
Impact study on Rates Integration in towns of the RMB - AMTU	Diputació de Barcelona - AMTU	02/2006-06/2006
Demand study of FGC	Metropolitan Authority of Transport (ATM)	07/2006-09/2006
Demand study of the L9 of the Barcelona subway	IFERCAT - INECO	09/2005-07/2006
Technical attendance in BR on the analysis of the transport system of the second metropolitan crown	Barcelona Regional (BR)	05/2005-02/2006
Study of the location of a new station of subway in Virrei Amat	DPTOP	05/2005 - 07/2005
Study of alternatives and traffic demand of the enlargement of FGC lines Anòia-Llobregat (L12)	GISA, DGC (DPTOP, Generalitat de Catalunya)	08/10/2004
Analysis of accessibility of the Coastal Front with the introduction of a new sketches of public transportation	Barcelona Regional (BR)	05/2004
Diagnosis on availability of Public Transport in the 36 municipalities of the Metropolitan Strategic Plan	Metropolitan Organization of Transport (EMT)	12/2003 - 04/2004
Urban Public Transport Study in El Vendrell	Ajuntament d'El Vendrell	10/2005-05/2006
Feasibility Study of the new Tram Cornellà-Almeda-Feixa Llarga	Metropolitan Authority of Transport (ATM)	09/2003-04/2004
Remodelling of lines of bus in the area of influence of the TramBaix and the TramBesòs	Metropolitan Authority of Transport (ATM)	04/2003 11/2003
Territorial analysis of the lines of evening bus of the EMT	Metropolitan Entity of the Transport (EMT)	01/2003 06/2003
Analysis of the variant of the line RENFE C1-Surrounding Districts in Badalona and Sant Adrià, between the RENFE-La Sagrera station and RENFE-Montgat, within the framework of the proposals of the PDI 2001-2010	Barcelona Regional (BR)	01/09/2001
Analysis of the alternatives of location of stations on the new RENFE-Surrounding Districts tunnel among the stations of Sants and La Sagrera, within the framework of the proposals of the PDI 2001-2010	Barcelona Regional (BR)	05-2001
Analysis of accessibility of the Metropolitan Region of Barcelona to the Airport del Prat. Private and collective transport of fixed infrastructure	Barcelona Regional (BR)	01/11/2000

Analysis of accessibility in Barcelona (Pl. Catalunya) of the ensemble of the Metropolitan Region of Barcelona (RMB). Private and collective transport of fixed infrastructure	Barcelona Regional (BR)	11-2000
Analysis of the control of accesses to the railway stations of the Metropolitan Region of Barcelona	Metropolitan Transport Authority (ATM)	07/2000 - 10/2000
Interest and viability of the Central Station of Vallès	Metropolitan Territorial Plan of Barcelona	1997
TPC diagnosis in polygons of Alt Penedès	Consell Comarcal de l'Alt Penedès	10/2006-12/2006

## EVALUATION AND DECISION SUPORT SYSTEMS

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Implementation of Local Development Agencies	Diputació de Barcelona	01/09/2006
SIMPORT	Port authority of Barcelona (APB)	03/2006-12/2006
EMTax System	Entitat Metropolitana del Transport (EMT)	01/2006-10/2006
Expert advice on GIS and decision-support systems	TINA, DGTREN	21/06/1999
SIRGA Ex-post policy evaluation system	Institut per al Desenvolupament de les Terres de l'Ebre (IDCE)	11/2004 - 02/2005 2003
Multicriteria Evaluation of alternatives of railway connexion in the Airport of Barcelona	DPTOP, Generalitat de Catalunya	03/2002 - 02/2003
Evaluation of the alternatives of interurban road network in the frame of PDM	Autoritat Metropolitana del Transport (ATM)	11/2006- 01/2007
Environmental Impact Study of the "Constructive Project of the sport basin of Cala en Busquets in the Port of Ciutadella, Menorca"	Consell Insular de Menorca (CIME)	11/2004
Environmental Impact Study of the "Constructive Project of the dock outer of the Port of Ciutadella, Menorca"	Consell Insular de Menorca (CIME)	10/2004
Economic evaluation of the Infrastructure Plan of Catalonia	DPTOP, Government of Catalonia	04/2006-06/2006
Integrated metropolitan planning system	Regional Barcelona (BR)	2001

PHARE Toolbox: Interactive Models based on already existing models developed by Mkmetric & NEA	DGTREN	1999
SENIT. Transport Policy Support System	DPTOP, Government of Catalonia	01/2001 - 06/2001
Evaluation of a new Road Master Plan for Catalonia 2003-2020. Regional Government of Catalonia	GISA, DGC (DPTOP, Generalitat de Catalunya)	12/12/2003 - 13/04/2004
Energy evaluation and forecast models	Barcelona Regional (BR)	01/2001 - 06/2001
Spatial data processing _SIG	CEDEX, Ministerio de Fomento	14/07/2006 - 01/2007

#### TRANSPORT FORECAST SYSTEMS

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Information system and traffic forecast in the highways of Catalonia	DPTOP, Generalitat de Catalunya. Secretaria per a la Planificació Territorial	10/2001 - 05/2002
Evaluation model of the projects of the Infrastructure Master Plan of the ATM	Autoritat del Transport Metropolità (ATM)	2001
Network modelling and Information System for the Metropolitan Plan of Barcelona	Institute of Territorial Studies	2000
SIMU: Urban modelling and Information System	Local Agency of Urban Ecology	1999
Calibration of the SIMCAT forecast model in the province of Barcelona	Diputació de Barcelona	01/2007 - 03/2007
Calibration of the SIMCAT forecast model in Metropolitan Region of Barcelona (RMB)	Diputació de Barcelona	07/2006 - 09/2006
Development of a model of traffic forecast in Catalunya and application for the evaluation of the Plan of Roads of 1995	SPT, DPTOP, Regional Government of Catalonia	09/2001 - 06/2003
Pa European Strategic Transport and Spatial Development forecast model	DGTREN - DGREGIO	

#### INFORMATION SYSTEMS

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
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GIS. Transport Network of Aragón	Ayuntamiento de Aragón	10/2005-02/2006
System of Infrastructures of the European Bank of Investments	European Bank of Investments (BEI)	04/2004 - 04/2007
Information System and Modelisation of Collective Public Transport Networks in the RMB Development of the ATMax system and technical attendance for the accomplishment of the Public Transport Services Plan of the Metropolitan Region of Barcelona Definition and implementation of the ATMax (Transport Network Analysis and Information System)	Metropolitan Transport Authority (ATM)	07/2004 01/2001 - 07/2003 11/2000 - 04/2001
SITPIR: Public Transport System	DGPT UTIC	12/2006 05/2007
Sistema d'Anàlisi Territorial d'Autobusos	Entitat Metropolitana del Transport (EMT)	12/2006
Extension of public transport. Modelling and Information System of Catalunya for the analysis of Territorial Policies	DPTOP, Generalitat de Catalunya; INTERGRAPH	01/11/2004-11/2005
ATM ESRI	Metropolitan Transport Authority (ATM)	01/2005 -12/ 2006
ATM SAE Services	Metropolitan Transport Authority (ATM)	2004 - 03/2005
Service about economic activity and the innovation of the Metropolitan Region of Barcelona	Industrial agreement of the Metropolitan Region of Barcelona	04/2003-06/2004
SIMPORT forecast model	Autoritat Portuària de Barcelona (APB)	03/2006 - 12/2006 2001
Information Systems of the parkings in the railway stations of the Metropolitan Area of Barcelona	Metropolitan Transport Authority	2000
Development of the BRAX system and analysis of global accessibility in the RMB by private vehicle and collective transport of fixe infrastructures	Barcelona Regional (BR)	01/11/2000
Information System of Analysis and of the Transport. GIS of the Transports	Metropolitan Entity of Transport	01/2002-09/2002
Field research on Mobility GIS	Ajuntament de Sant Cugat	01/2007
SIMAE: interurban public transport in the industrial zones of the Metropolitan Region of Barcelona	Pacte Industrial de la Región Metropolitana de Barcelona	2002 - 2003

## COMMUNICATION SYSTEMS

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Flora Vascular Website	Junta de Castilla y León	01/2007
Agenda21 Website	City Council of Barcelona	04/2006 2005 01/2004 - 12/2004
Environmental Website of Maresme	Consell Comarcal Maresme (CCM)	04/2006
Ecurban website	Urban Ecology Agency	03/2006
Bianchi Web Bianchi-vending Web	Bianchi Bianchi-vending	02/2006 - 12/2006 10/2005
Observatory of Infrastructures and Public Areas	Delegation of Barcelona. OTC	02/2005-05/2005
Web of Sustainable Mobility	Department of Environment	2005 - 2006 09/2004 - 12/2004
Observatory of the Energy BCN	Department of Environment	09/2004 - 12/2004
ESPON project 1.1.2. Applet JAVA of visualisation of European datum at level of NUTS3	EU	07/2003-02/2004
Evaluation of the transport indicators. Web	European Investment Bank	2002-2003
Interactive maps for the visualisation of the Catalonia Observatory data (ODECAT). Instrument of support to the strategic vision	DPTOP, Regional Government of Catalonia	2003
Applet JAVA for the Statistical Institute of Catalunya	Institute of Statistic of Catalonia	2001
Interactive System for the Terres de l'Ebre	Regional Government of Catalonia	1996

## SOFTWARE DEVELOPMENT

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Prototype of City-planning Regulator	Institute of Advanced Architecture	05/2004-06/2004
Definition of functional architecture, the model of datum of the system and the process of integration and of implementation	DPTOP, Regional Government of Catalonia	12/2002-12/2003
LUPA of urban exploration	Local Agency of Urban Ecology	01/2003 - 11/2003
Generator of images for the module of Urban diversity	Local Agency of Urban Ecology	09/2003-10/2003

Advice and support in the implementation of the model of datum of the SIG-DGC; Submodule of nets analysis; Submodule of road security	DPTOP, UTE AURENSIS - INTERGRAH	09/2002-11/2003
Assistants for the calculations of endowment and accessibility	Metropolitan Entity of Transport	09/2002-12/2002
Software implementation of Transport Planning support System, GIS and Transport Network (ATMax)	Metropolitan Transport Authority	2002
Territorial dynamics monitoring System for the Terres de l'Ebre	Institute for the Development of the Terres de l'Ebre (IDCE)	2002
Urban Diversity model development (DIVERS), and application to the SIMU. Calculation of the urban diversity as a sustainable indicator	Local Agency of Urban Ecology	2001
SIMCAT Calculation	BCNEcologia	09/2006-11/2006
Utilities of exploitation of the results of ATMax	Metropolitan Transport Authority (ATM)	07/2004-09/2004
Calculation of indicators of accessibility in Catalonia and Europe	Autonomous University of Barcelona (UAB)	06-2003
Integration on ESRI of rutins of networks Bridges NIS analysis	Metropolitan Transport Authority (ATM)	2005
Development and implementation of the information and modelisation system of Catalonia for the analysis of Territorial Policies. Extension to Public Transport	INTERGRAF	12/2004 - 9/2005

## SOFTWARE MANAGEMENT

<b>Study</b>	<b>Customer</b>	<b>Period of realisation</b>
Assistants for the integration of the ATMax on ARCGIS 8.2 and TransCAD 3.1	Metropolitan Transport Authority - ICC	06/2002-12/2002
Consulting on the performances of the Network "Barcelona, Quality Town"	Local Co-operation Service	2001
Finantial Management System	Local Co-operation Service	1998-1999
Directory for the Municipalities' Technicians for the OTC	Diputació de Barcelona	1998
Exploitation and monitoring System for the Management Urban Institute	Diputació de Barcelona. Institute of Urban Management	1998

Exploitation System of the performances of the PCAL Management, documentation and monitoring of the performances of the PCAL for OTC	Government of Barcelona Province. Local Co-operation Service	1993-1999 1988-1995
Validation System of the results of the Survey on Infrastructures and Equipment	Government of Barcelona Province	1994
Migration of the SIMCAT in Geomedia Transportation	DPTOP, Regional Government of Catalonia	07/2004-12/2004
Second phase of the LUPA of Urban exploitation and improvements of the functionality	Local Agency of Urban Ecology	03/2004-09/2004
Integration of ATMax with the SAE used. Functionality of cession of informació among the models of datum	Metropolitan Transport Authority	04/2003-12/2003
Enlargement and improvements of the system SITCAT Indicators of basic Net, functionality of forecast of the traffic, calculations of maps of accessibility and tools of diffusion on the territory	DPTOP, Generalitat de Catalunya	2003
Systems of external contract of the OTC	Diputació de Barcelona. OTC	10/2006
Consulting on the performances of the Network "Barcelona, Quality Town"	Generalitat de Catalunya. Local Cooperation Service	1999

## EUROPEAN RESEARCH PROJECTS

Study	Customer	Period of realisation
DESTIN: Definition and evaluation of a strategic network of infrastructures of in the western Mediterranean.	ECDGTREN), CETMO	02/2004 - 07/2006 02/2003 - 11/2005
SPOTLIGHTS-TN	EC-DG TREN	1999 - 2002
Web-based monitoring systems for transport infrastructure in Europe, on the 4th European Research Programme	EC-DG TREN	1997 - 2001
Advanced middleware to integrate transport forecast models, GIS and databases in the framework of the 4th European Research Programme.	DGTREN/EC	1996-2000

## EVALUATION AND SUPPORT

Study	Customer	Period of realisation
Room Maps. Policy support system	Government of Catalunya	01/02/2006
Technical courses	Generalitat de Catalunya	10/2006
Virtual Laboratory. Interactive maps and simulators	Regional Government of Catalonia, Department of Education	01/2002-10/2002
5th Biennial of city planners	AETU	2004
Moianès Observatory	Consorti Promoció Moianès	2007

## RESEARCH ON TRANSPORT POLICY- SUPPORT SYSTEMS

Since 1997 MCRIT has co-ordinated three great projects on the 4<sup>th</sup> and 5<sup>th</sup> Research Programme of the European Union, with partners from 15 European countries:

- **"Bridges"** (1997-1999): *Building bridges between databases, GIS and transport models to develop open multi-software support systems* (1 MEUROS, 6 universities, research institutions and European companies, 1997-2000), in which it was developed a new GIS software to transports.
- **"ASSEMBLING"** (1998-2000): *Assembling regional monitoring centres into an Internet Executive Support System for European Transport policy-makers* (1 MEUROS, 8 universities, research institutions and European companies, 1997-2001), in which it was developed a new service to Internet of support to the European decision-takers in policies of transport.

- **"SpotlightsTN"** (2000-2002): Keys to bring advanced forecast models to light (transport model's "Scientific pedigree" and Generalised Transport Format) (650.000 Euro, 3 European companies, 2000-2002), in which new methodologies have developed al (graphic interfaces, protocols of communication...) to make the advanced prevision models accessible to the political deciders.

MCRIT, in co-operation with the Territorial Institute of Studies (IET) of the University Pompeu Fabra and the Group of Complex Systems (UPC), investigates models of microsimulation based on the Theory of Complex Systems (disintegrated formulations, dynamics, not lineal and stochastic) applied to Social Sciences (problems of territorial location and of mobility).

The Staff of MCRIT participates regularly as professors in courses of the Polytechnic University of Catalonia (Master in Sustainability), Public School of Administration (Master of Urban Planning), Advanced Architecture Institute (IaaC), the University Pompeu Fabra, the Center Ernest Lluch of the University Menéndez Vidal and others.

## **STAFF (JULY 2007)**

Most of the members of MCRIT come from the Polytechnic University of Catalonia and some of them from the writing team of the Metropolitan Territorial Plan of Barcelona.

## **MCRIT**

**Andreu Ulied.** Engineer, Master in Planning by the University of Harvard, USA. Doctor by the UPC. Teacher of the Master of Urban Planning at Public School of Administration and of different programs of teaching at UPC, UAB and UPF. Partner founding of Mcrit in 1988. General Director.

**Andreu Esquiús.** Engineer, specialist in studies of planning and modelization of the transports. Teacher of the Master of Urban Planning at Public School of Administration. Responsible for transports planning of the Metropolitan Territorial Plan of Barcelona until 1993-1999. Partner of Mcrit since 2000. Technical director.

**Meritxell Font.** Engineer, specialist in economic evaluation of infrastructures and forecast models.

**Raquel López.** Engineer, specialist in forecast models of the transports.

**Efrain Larrea.** Engineer, specialist in strategic studies of infrastructures and in transport forecast models.

**Nati Franco.** Geographer, specialist in digital cartography and GIS.

**Cristina Trujillano.** Geographer, Master in territorial planning by the ULP of Strasbourg, France.

**Frederic Lloveras.** Engineer, he is working on transport forecast models at regional level.

**Cristina Izquierdo.** Politics Sciences

**Oriol Biosca.** Engineer

**Ramon Català.** Engineer of telecommunications. Computer Scientist. Developer of BridgesNIS. Partner of MCRIT since 1994 and founding partner of GEOVINCLES since 2005. Director of GEOVINCLES.

**Jaume Jorba.** Computer Scientist, specialist in Java, Visual C and Visual Basic. Developer of advanced software of interactive simulation for Internet at MCRIT since 1995.

**Álex Palau.** Computer Scientist, specialist in ORACLE.

**Maria Teresa Guevara.** Multimedia Editor at MCRIT since 1995.

**Daniel Crespo.** Multimedia Designer.