



RESEARCH ACTIVITIES AT EUROPEAN LEVEL PERFORMED AT THE INSTITUTE FOR PUBLIC SAFETY OF CATALONIA

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1. THE CATALAN EMERGENCY RESPONSE MODEL

Catalonia is one of the seventeen autonomous regions of Spain which is a member of the European Union, it is located on the eastern coast of the Iberian Peninsula next to France and Andorra on the north-east side and next to the Mediterranean Sea. With an estimated population of 7,5 million inhabitants in 2010 it is the second most populated region of Spain. Moreover two-thirds of the population lives in Barcelona and its outskirts.

Approximately, 28,7% of the land in Catalonia is used for crops, 15,7% are meadows and pastures, 1% corresponds to rivers, 43,4% are forests, 6,7% are urban or developable areas, and 4,6% other unspecified activities.

Catalonia has a mild Mediterranean climate, typical of its latitude within the northern hemisphere. Average annual temperatures range from 0°C in the Pyrenees, up to 17°C on the southern coast; maximum temperatures can reach 43°C and minimum ones -30°C. Rainfall has an equinoctial tendency. In the Mediterranean summers are dry and there are spring rains and storms. In the Pyrenees, rainfall is abundant during May and June, and summers are generally wet.¹

Finally, it must be highlighted the Protection of Nature. There are eleven natural parks in Catalonia: the Natural Park of the High Pyrenees, Empordà Marshes, the Cadí Park Natural, Cap de Creus, the Ports, Park Natural of Monseny, Monserrat, Sant Llorenç de Munt, Montsant mountain and the volcanic area of Garrotxa, Aiguestortes i l'Estant de Sant Maurici, the Llobregat Delta nature reserve and the Medes Islands marine reserve.

All these geographical features are of great importance in relation to forest fires, which are frequent in summer time.

1.1. Teams, forces and other organizations involved in Emergencies

The Catalonia region governs itself in most of the subjects apart from those which the constitution establishes as Spanish competence. The basic institutional regulation of Catalonia is the Statute of Autonomy. According to it, the self-organized government in Catalonia (Govern de la Generalitat²) includes several government institutions: the Parliament of Catalonia, the Government Presidency and the Government also called Executive Board.

¹ Catalunya: El clima i la Hidrografia. Enciclopèdia. Barcelona. Grup Enciclopèdia Catalana

² The autonomous government of Catalonia is called Generalitat.

One of the powers granted to the Generalitat are the emergency response teams. It embraces the system for public security of Catalonia, the authorities with powers on this field, the services which depend on the local governments and the coordination and citizen participation services. The public safety and security system of Catalonia aims to contribute to the development of public policies for prevention and effective protection of the citizens' rights and freedoms, the preservation of life and promotion of social cohesion.³

These organizations are:

Police

The police service is comprised mainly by Mossos d'Esquadra (the Generalitat police) and Local Police, but other police forces with Spanish scope (Policia Nacional, Guardia Civil and harbour police) are in charge of some functions and powers such as customs and immigration control. Both forces are in contact with each other through a single central command.

Generalitat Police: Mossos d'Esquadra

They work to protect, in accordance with the law, freedom and security of citizens. That's why its functions range from protection of people and goods to the maintenance of public order. They ensure a comprehensive security, including areas like public safety, criminal investigation, public order and traffic on interurban roads.

Local Police

Its purpose is to contribute according to their organizational and functional capabilities to the general purpose of the Catalan police and security system. They intervene in the territory under the authority of the local board. Its functions include regulating and ordering the interurban traffic and the application of the local bylaws (for example the antisocial behaviour).

Fire and Rescue Emergency Services⁴

The emergency department incorporates the rescue, fire extinction and prevention service, and other emergency services and forces in charge of preventing and responding to specific incidents.

The Fire Service of the Generalitat

The Fire Department of the Generalitat carries out the prevention, firefighting and rescue functions and coordinates its actions throughout the whole territory except in Barcelona where the city council has its own firefighters.

³ De les institucions. Estatut d'Autonomia de Catalunya, 2006

⁴ <http://www.gencat.cat/temes/cat/seguretat.htm>

Firefighters of the Generalitat are involved in many types of emergencies: fires in buildings, industry, vegetation, intervention in building collapses, rescues in very different fields such as mountains or water, rail infrastructures, extrication tasks in traffic accidents, floods... In addition to the prevention activities, directed both to minimize the risk of an accident and prepare themselves for a future event.

The Fire Department of the Generalitat is organized territorially into fire stations, areas and regions. And at the top there is the whole territory operative management.

- The fire station is the set of personnel staff and material firefighting apparatus, with its own organization, located in a municipality with a defined intervention area. There are 167 fire stations among professional fire stations, volunteer fire stations and summer fire stations.
- The area is a series of stations with a coordination unit at county level (Comarca⁵). Exceptionally, there may be inter-county areas.
- The Region is a higher level territorial unit that comprises several areas and ensures their coordination, operational and functional working. There are seven Emergency Regions.
- The highest level is in charge of the overall control of the whole territory and the operations of the special units like the Mountain Rescue, Wildfires Specialists and Aerial Means among others and it is assumed by the Central Room, the Operative Head and the mobile command and control facilities.

The personnel belonging to the services of firefighting and prevention of local entities

This is the case of Barcelona city, which has its own Fire Department. It consists on 6 permanent stations and one seasonal station in the Collserola Range to cope with the risk of forest fires in summer. The permanent stations are Llevant, Montjuïc, Sant Andreu, Eixample and Vall d'Hebron. As they provide service to the city of Barcelona it is an urban tailored fire brigade with broad experience in building fires, urban rescues and emergencies related to urban areas.

Volunteer firefighters

They are people who, due to their vocation, provide their services altruistically to the structure of any of the prevention, firefighting and rescue services of Catalonia. It is governed by the rules established by Law and develops the prevention, firefighting and rescue functions of the Generalitat Fire Service. They receive an adapted training which enables them to perform the basic functions professional firefighters develop.

⁵ Comarca is the territorial organisation of a size between the municipalities and the provinces. The actual division was made by a Geographer called Pau Vila, who identified each county as the territory formed by all the towns that went to the same marketplace.

Technical and specialized staff for support and aid tasks.

In this group participate: Prevention technicians, control operators, engineers, radio technicians, drivers... who are meant to develop support and aid tasks for the Fire Department, furthermore, if its necessary, they must pass the training courses that are established.

Private firefighters

There are private firefighters giving its services mainly to Seveso Industries, Nuclear Power Plants, Ports and Airports. They are people who have a rating issued by the Catalonia Fire School that certifies them as such and develop the prevention, firefighting and rescue functions in the company which they depend on.

Emergency Medical System (SEM)

Emergency medical system (SEM) provides emergency medical care through the management and control of personal, material and financial resources available to ensure at all times the pre-hospital care, transportation assistance and income right in the centre of critical patients, and collaborate in reducing mortality and morbidity, and optimize the resources available to help reduce the social and economic cost related to emergencies. The SEM performs all the primary paramedical services, while all the secondary transports are made by other local services.

Civil Protection

Responsible for the management of emergency services in a country that extends to all levels and involving all parties. However, civil protection is understood in the strict sense of the specific forces responsible for protecting citizens of a country from disasters of any kind, whether human or natural. Agencies that regulate civil protection are also set for a form of public participation which has a group of people prepared to act against disasters, in support of emergency service workers, and are responsible for organizing citizen support. Below, is explained in more detail the operation of civil protection.

In Catalonia the civil protection agency is in charge of developing, approving and testing Emergency Plans whether they are General Emergency Plans for all the country or In-Site Emergency Plans.

The Civil Protection also has the power to activate and deactivate emergency plans, and to perform the multi-agency coordination from the Operative Coordination Centre of Catalunya (CECAT) or in the Advanced Command Centre (CCA).

There are three different kinds of Civil Protection Organisations depending on the scope and its attributions. The first level is the Spanish Civil Protection which is in charge of some particular risks, like the nuclear risk and the war risk among others. The second scope is the Catalan Civil Protection which covers most of the special risks as well as the general framework for all the Catalan territory. The last scope is the Local (Municipalities) Civil Protection which is responsible for the development and implementation of local emergency plans for the general and specific risks of each municipality.

Reception and management of emergency calls (112 Call Centre⁶)

The Government has an integrated centre that provides permanent attention to the demands on emergencies, civil protection, police and medical emergencies. It is in charge to redirect all the needed information to the responsible agency in an optimal way. This service it is also a filter for the false and fake alarms. The unified telephone number 112, in accordance to the regulations of the European community must provide universal and free access to the whole territory and population of Catalonia.

Rural Agents

Rural agents are in charge of surveillance, inspection and collaborative management of protected natural territories, both land and sea areas, including hunting and fishing reserves as well as other natural areas which have flora and fauna preservation measures. They are also in charge of combating illegal practices as well as preventing forest fires and any other activities that may be entrusted to fulfil the law of the environment.

It is also under its jurisdiction to investigate the causes which might have originated a forest fire.

ADF's (Forest Defence Association)

Forest Defence Associations of Catalonia are organizations that integrate forest owners, volunteers, local councils and other organizations. They are responsible for the maintenance of the forest property in constant and coordinated way, encouraging prevention and risk awareness. They also participate actively in any emergency situation that occurs in the fields mentioned above...

These organizations usually have materials and resources such as tractors, agricultural machinery, water tanks... if these resources are managed and organized correctly they can become very useful in a response operation.

UME (Unidad Militar de Emergencias)

In the last few years the Spanish Army has created the Emergencies Unit, to response and to provide aid for major disasters and large emergencies. It is under the authority of the Spanish Defence Ministry, but during the response they are put under the unified command usually performed by the Interior Councillor (Political level) and the highest command of the Fire Service (operative unified command).

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<http://www20.gencat.cat/docs/interior/Home/010%20EI%20Departament/Adreces%20i%20telefonos/Serveis%20Territorials/Tarragona/Documents%20relacionats/CAGTU%20112%20Reus.pdf> In Catalonia there will be two centres with the same characteristics, one in Reus and the other in Barcelona. This duplicity gives redundancy and resilience to the system.

2. THE TRAINING MODEL: The Institute for Public Safety of Catalonia

In 2007 a new law unified the former Police School and the School of Firefighters and Civil Protection, forming the Institute of Public Safety of Catalonia, which depends directly on the Ministry of Interior, Institutional Relations and Participation, of Catalonia's regional government, Generalitat de Catalunya.

The Police School and the School of Firefighters were unified in order to share knowledge, experience and training facilities, as well as to coordinate and develop, together with other organisms, the management of public safety matters. The law, by unifying the schools introduced new aims for the Institute in addition to the former ones: training of the members of the public security services, private police and civil protection, training of the prevention, firefighter and rescue services as well as the control and environmental protection services. Another aim is the management, diffusion, application and development of technical knowledge on the selection and training of public safety professionals, as well as research, documentation and international networking.

The Institute provides basic training as well as promotional training to first responders, firefighters and police. In the basic firefighters' training course there are approximately 130 candidates each year, whereas the basic police training is taught to approximately 1300 candidates every year. The Institute also trains Rural Agents, prison staff, private firefighters of companies and private security personnel.

In relation to the task of gathering knowledge and innovating on security, generally speaking, the institute has an area dedicated to research, knowledge and international cooperation.

2.1. The Area for Research, Knowledge and International Cooperation of the ISPC

Promotion of knowledge and research on security involves, among others, conducting conferences and seminars, workshops with experts on various up to date topics or interesting topics for the public security system. It also works through the creation of permanent Research Groups who work to deepen the knowledge in certain specific sectors (e.g. fire and explosions research, safety in new generation vehicle in the case of fire or accident, land use planning, among others).

As a result of these activities it also develops publications and shares work documents and other papers on internet open platforms. ISPC currently performs two types of publications (a part of the internal teaching documents) that are the Catalan Journal for Public Safety and the compilation of monographs called Safety Segments.

The Catalan Journal of Public Security "*Revista Catalana de Seguretat Pública*" (RCSP), was created under the idea of a participatory magazine and open to all the researchers,

professionals and institutions interested in everything that refers to public safety. The magazine is published twice yearly and distributes 1,500 copies, of which 1100 are in Catalan and 400 in Spanish.

The compilation of Safety Segments “**Segments de Seguretat**” disseminates knowledge on safety and the results of the research activities, mainly the research groups promoted by the Institute of Public Safety of Catalonia. Each issue addresses an up to date topic in order to provide a better understanding of the security and safety fields.

Both magazines are published on paper, but nowadays, it is of great importance to allow the information to be accessed through the network. The Catalan Journal for Public Safety can be accessed online at **RACO** (Catalan Magazines with Open Access) (www.raco.cat/index.php/RCSP) a cooperative repository which provides full open access to articles, scientific papers, cultural documents. The latest book of the compilation Segments of Safety: Investigation of fires and explosions can be downloaded for free at the ISPC website (www.gencat.cat/interior/ispc).

For all the unpublished documents which may be interesting to the public, ISPC has an agreement with **RECERCAT** to upload the content so that they are accessible to everyone on the Internet. RECERCAT (<http://www.recercat.cat/handle/2072/116593>) is an institutional repository of digital documents used for research in universities and research centres in Catalonia. This repository includes gray literature, ie, unpublished articles, conference papers, research reports, work papers, final projects, etc... in order to increase its visibility. The main purpose of RECERCAT is to make more visible the research carried out in Catalonia and to contribute towards global open access movement.

Finally, one of the main cornerstones of the Area for Research, Knowledge and Foreign Affairs of ISPC are European research projects.

2.2. European Research Projects

Previous European Research Projects

ISPC has previously participated in European Projects related to safety and security as well as emergency response and cross-border crisis management:

From 2001 to 2004 the Institute participated in the **MULTICOM 112** project the aims of which were to develop modern tools for language training to enable control room operators to achieve a sufficient linguistic competence in a foreign language. The structure of the project includes the analysis of the necessary linguistic competence and the related knowledge of basic and

advanced vocabulary, development of the didactical concept for the self-tuition tool, development of a CD for autonomous training, development of an INTERNET environment for the on-line training and field test of the developed learning tools on the final user level

From 2004 to 2007 the institute participated in the **FiReComp** project. The project aim was to achieve a common standard regarding the core competences necessary to fulfil the different functions in the European fire and rescue service sector across Europe.

The basis for these standards was meant to be generic, and later allowed for national, regional and local adaptation.

Other goals addressed by the project were:

- The need for sharing knowledge about vocational training and organisational development for the fire and rescue services on a European level
- The need for achieving harmony on a European level where possible and advisable
- Provision of lifelong learning opportunities for people in the sector
- Create a concrete survey of possible strategies/best practices, regarding the different ways in which fire and rescue personnel is able to become, and remain competent
- Strengthening the European network regarding the fire and rescue services;
- the need for improved mobility for fire and rescue personnel within the European Union

Other past projects in the field of emergencies was **LIFE-APT** (1997-1998) about environmental protection by means of training firefighters, **GAMMA-EC** (1998-2000) about the improvement of decision-making in environmental emergency situations, **SAFE-T** (2003-2006) that studied the safety in fires and emergencies in tunnels and **RED** (2008) participation as an expert guess in the Workshop: Reinforce Rescuers' Resilience

Current European Research Projects

- COIM BEST⁷



**Prevention, Preparedness and Consequence Management of Terrorism and other
Security-related Risks Programme
European Commission - Directorate-General Home Affairs**

⁷ <http://coimbest.eu/>

COIM-Best (acronym of Coordination Improvement by Best Practices) project principal aim is to improve coordination by creating a training model and a best practices manual which would help the authorities, the training planners and the emergency agencies to gain capability when dealing with major crisis events and its related challenges on multi-agency coordination, specially in crisis resulting from terrorist attacks.

The project follows the steps below:

A first phase of experiences gathering, through a wide research on existing studies, interviews to experts on emergency management and case studies about focused topics. This establishes the State of the Art which the project sets as the basis for the further developments.

Then the project puts its efforts to develop a reference Model for multi-agency coordination training which discusses the following main themes:

- actors involved in response activities (first responders, cooperation responders and general public);
- the most relevant training subjects (multi-agency coordination, command systems, both internal and external communication, decision making models and leadership theories and resource management methodologies);
- the process of training design (objectives and participants identification, objectives tailored scenario design, type of exercise choice and production methodologies for the material implementation of the training activities);
- the evaluation methodologies and opportunities of the whole process.

The last phase of the project, after the realisation of an international workshop to share points of view and experiences (that has been in Brussels, in April), is to create a Best Practices Manual putting together the best practices identified in training activities in a way that eases the use and implementation of the recommendations proposed.

The consortium of the project is the following:

- FORMIT (Fondazione per la Ricerca sulle Migrazione e Integrazione delle Tecnologie), (IT) - Project Leader
- GLEN Institute (Global Law Enforcement Institute), (IT)
- UPC (Universitat Politècnica de Catalunya), (ESP)
- ISPC (Institut de Seguretat Pública de Catalunya), (ESP)

The duration of the Project is from January 2010 to April 2011, and it is partially funded by the Prevention, Preparedness and Consequence Management of Terrorism and other Security related risks of the European Commission⁸.

- **BeSeCu**⁹



The aim of the BeSeCu project is to investigate cross-cultural differences of human behaviour in fire disasters and other crisis situations (earthquakes, floods, and terrorist attacks) in order to better tailor security related communication, instructions and procedures with a view to improving evacuation and protection. The project provides evidence that will be useful to first responders, building designers and those involved in the development of emergency operating procedures for buildings.

The BeSeCu project is carrying out the following research studies:

A) A cross-cultural survey of individual experiences has been conducted to identify determinants of inter-individual differences in people who have experienced a range of emergency situations, including domestic fires, fires in public buildings, floods, earthquakes and terrorist attacks. In parallel a similar study has been carried out among fire fighters. The two questionnaires have been based on previous qualitative research – interviews and focus groups with survivors and first responders – performed by all project partners. In total 1170 survivors and 3070 fire fighters in 8 European countries have participated in the questionnaire study.



This project has been funded with the support of the Prevention, Preparedness and Consequence Management of Terrorism and other Security-related Risks Programme European Commission - Directorate-General Home Affairs

This communication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein

⁹ <http://www.besecu.de/>

B) Experimental trials conducted by Professor Galea (University of Greenwich) have been carried out in 3 university libraries in 3 different countries - Czech Republic, Poland and Turkey - simulating real time evacuation scenarios in standardized settings including objective measures (e.g. response time) as outcomes as well as videotape analysis. Results are analysed to identify similarities and differences between cultures as well as a range of socioeconomic factors. The analysis triangulates findings obtained with objective measures, subjective experiences and behavioural observations.

The research is carried out by the consortium of 8 European partners including end-users (e.g. fire service colleges) in the process of research. Two types of research findings and products will be provided by the BeSeCu project: (A) An evidence base that will enable designers of buildings to develop culturally appropriate emergency operating procedures. (B) An evidence base of inter-individual differences that will be employed to improve communication in emergency interventions.

Project Coordinator:

Prof. Dr. Silke Schmidt

Ernst Moritz Arndt University Greifswald,

Department of Health and Prevention (GER)

Project Partners:

University of Greenwich (UK)

Institute of Public Security of Catalunya (SP)

Hamburg Fire and Emergency Service Academy (GER)

Man-Technology-Organisation-Psychology (SW)

The Main School of Fire Service (PL)

Prague Psychiatric Centre (CZ)

Association of Emergency Ambulance Physicians (TR)

University of Bologna (IT)

Duration: May 2008- December 2011

Additional analysis using the projects results: Confidence, The key factor in Working Relationships.


Taking advantage of the opportunity that provides the fact of doing such a great number of surveys to experienced firefighters (in the framework of the BeSeCu project) the Research Area of the ISPC incorporated to the questionnaire a series of items to evaluate the relationship and confidence level between the different actors in emergencies.

The enquiries were made over a sample of 90 firefighters, with a minimum amount of years of experience as emergency responders. In those questionnaires, we asked about the levels of confidence perceived, communication and help received from other actors (including firefighters itself).

Actors:

- Professional firefighters
- Paramedics
- Volunteer firefighters
- Local Police
- Generalitat Police: Mossos d'Esquadra
- Civil Protection Professionals
- Civil Protection Volunteers
- Red Cross Members
- Spectators and neighbours
- Occasional Volunteers

S'ha gifu, contasti les següents preguntes del qüestionari.
Et recordem que és totalment confidencial.



1. Quin és el seu nivell de confiança amb els següents col·lectius quan es troba en una situació d'emergència?

	1	2	3	4	5	6	7	8	9	10	Nu./Nú.
Bombers d'Home companyia	0	0	0	0	0	0	0	0	0	0	0
Policia Local	0	0	0	0	0	0	0	0	0	0	0
Mossos d'Esquadra	0	0	0	0	0	0	0	0	0	0	0
Sanitat	0	0	0	0	0	0	0	0	0	0	0
Protecció Civil	0	0	0	0	0	0	0	0	0	0	0
Espectadors o veïns	0	0	0	0	0	0	0	0	0	0	0
Bombers voluntaris	0	0	0	0	0	0	0	0	0	0	0
Voluntaris del Protecció Civil	0	0	0	0	0	0	0	0	0	0	0
Cross Pèg	0	0	0	0	0	0	0	0	0	0	0
Voluntaris cross a eb	0	0	0	0	0	0	0	0	0	0	0
Altres (especifica):	0	0	0	0	0	0	0	0	0	0	0

2. Quin és el seu nivell de comunicació amb els següents col·lectius quan es troba en una situació d'emergència?

	1	2	3	4	5	6	7	8	9	10	Nu./Nú.
Bombers d'Home companyia	0	0	0	0	0	0	0	0	0	0	0
Policia Local	0	0	0	0	0	0	0	0	0	0	0
Mossos d'Esquadra	0	0	0	0	0	0	0	0	0	0	0
Sanitat	0	0	0	0	0	0	0	0	0	0	0
Protecció Civil	0	0	0	0	0	0	0	0	0	0	0
Espectadors o veïns	0	0	0	0	0	0	0	0	0	0	0
Bombers voluntaris	0	0	0	0	0	0	0	0	0	0	0
Voluntaris del Protecció Civil	0	0	0	0	0	0	0	0	0	0	0
Cross Pèg	0	0	0	0	0	0	0	0	0	0	0
Voluntaris cross a eb	0	0	0	0	0	0	0	0	0	0	0
Altres (especifica):	0	0	0	0	0	0	0	0	0	0	0

3. Quin és el nivell d'ajuda que rep dels següents col·lectius quan es troba en una situació d'emergència?

	1	2	3	4	5	6	7	8	9	10	Nu./Nú.
Bombers d'Home companyia	0	0	0	0	0	0	0	0	0	0	0
Policia Local	0	0	0	0	0	0	0	0	0	0	0
Mossos d'Esquadra	0	0	0	0	0	0	0	0	0	0	0
Sanitat	0	0	0	0	0	0	0	0	0	0	0
Protecció Civil	0	0	0	0	0	0	0	0	0	0	0
Espectadors o veïns	0	0	0	0	0	0	0	0	0	0	0
Bombers voluntaris	0	0	0	0	0	0	0	0	0	0	0
Voluntaris del Protecció Civil	0	0	0	0	0	0	0	0	0	0	0
Cross Pèg	0	0	0	0	0	0	0	0	0	0	0
Voluntaris cross a eb	0	0	0	0	0	0	0	0	0	0	0
Altres (especifica):	0	0	0	0	0	0	0	0	0	0	0

The “*relationship*” variable is a complex concept, which involves a great number of factors and nuances. Despite that, three fields are established, “*confidence*”, “*communication*” and “*help*”. These three fields are the core elements to try to define the level of relationship which could be considered “positive relationship” or “negative relationship”.

In this sense, a ranking was made using the average of those three fields. This ranking shows the relationship level perceived by the point of view of professional firefighters.

Actors	Relationship	σ
Professional Firefighters	9.2	0.89
Paramedics	7.6	1.58
Volunteer Firefighters	7.5	1.89
Local Police	7.3	1.42
Mossos d'Esquadra	7.2	1.49
Civil Protection Volunteers	5.8	1.85
Red Cross Members	5.5	2.03
Civil Protection Members	4.9	1.93
spectators and neighbors	4.4	1.64
Occasional Volunteers	4.3	1.72

Looking at this first step, a thing that draws the attention is that the relationship between professional and volunteer firefighters, apart from having a high average (7.5 points), it also has a high standard deviation (1.89 points). From this point, the study tries to determine by a factor analysis which are the groups that could be established and that explain most of the variance. Doing so it results that 71% of that variance could be determined using two components (component 1 = Positive relationships, Component 2 = negative relationships). This highlights that the group of volunteer firefighters appears among the actors that forms the component 2, the group which in an emergency situation has a relation (a perception of the relationship) considered negative with the professional firefighters.

Before arising any conclusion, a deeper analysis should be performed. It should be evaluated in the ground which are the parameters that could determine in an objective way the relationship level. This study its still at the preliminary phase and the need for better nuances is obvious, but, the results of the surveys arise the possible existence of a certain degree of conflict between the volunteer firefighters group and the professional firefighters group that mustn't be ignored.

As said at the beginning of this document, both professional and volunteer firefighters are members of the same Fire Service of the Generalitat de Catalunya and they do jointly its tasks and operations in emergency response everyday day. For this reason this finding could be used as an attention point to improve in the future.

Finally, this little study also reflects one of the key findings arisen from the COIM-Best project which is the importance of relationships and mutual trust in the job of responding to emergencies. In highly demanding environments, with such a high level of exigency and little margin for error, being able to trust on other actors is critical.

2.3. Further studies in the field of the European Research Activities

e-Fire Proposal

In the last EFSCA conference meeting at Barcelona, it was proposed the implementation of a shared platform to enable the development of Distance Learning Courses, now this proposal is gaining sense according to the opportunity offered by the new 2.0 universe, to which everybody is used nowadays. This proposal was called e-Fire project.

It is still important to implement a common training platform among the fire service training centres of Europe. A number of Fire Service Colleges already has platforms where they:

- Share information, research documents, technical data, contents and knowledge
- Perform distance training programmes
- Discuss about new tendencies, procedures, problems faced, lessons learned, etc.

This would allow firefighters to share experiences and lessons learned in a unique way that couldn't be possible without these platforms. The initial purpose was to make possible to any fire service college to instruct or to attend a distance learning course, with the particularity that

the time would be the currency coin. Each Fire Service has its own strengths considering the own experience on some kind of emergencies, the research performed and investigation on some innovative issues or the results of the use of new adopted techniques and technologies. For this reason other Fire Services could be interested in learning what they could teach about and vice versa. Moreover, due its European reach, it would prevent mistakes and accidents from a particular country or Fire Service to happen again in another country.

The challenges of this proposal are mainly:

- The costs that could suppose the implementation and maintenance of such a platform. This could be overcome by adapting some contents in the own Training Centres websites or platforms and post the links in the EFSCA website.
- The translation of the contents to English.
- The tutoring and evaluation of the courses is a key issue in order to assure the quality of the imparted training.

To sum up and to try to achieve this goal, ISPC suggest to the EFSCA assembly to create a partnership composed by members of the EFSCA, companies, universities and research and development centres to submit a proposal to the next call for proposals of the 7th framework programme¹⁰ of 2012. There is talent and there is the opportunity.

Jordi Sans Pinyol
Robert Abelló Guimet
Andorra, June 2011

¹⁰ http://cordis.europa.eu/fp7/understand_en.html