

## **A challenge for Europe: meeting the national specifics in disaster and emergency management systems, towards attaining efficiency, resiliency and integration**

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### **Abstract**

*This paper highlights the advantages a more integrated European emergency care and disaster management system would bring in this very divided field of work through the lens of emergency physicians and contributors with a specific focus on the example Romania has to offer in matters of legislation, financing, dispatch centres, education and training of professionals, pre- and in-hospital care and European cooperation mechanisms. At the same time, we share the belief that this desiderate of attaining a certain degree of homogeneity inside the European Union is more likely to be reached by following slightly different paths, according to national specifics of the countries. To sustain this theory, we will bring various examples in our study of such events that already happened and together concurred to prove the above mentioned ideas. We do believe that the dream of a Europe without borders transforms unfortunately into a nightmare when it comes to disasters, which definitely know no borders. Our response to their threat should be standing together in unity and acting in solidarity.*

**Keywords:** European Union, emergency care, disaster management, resiliency, cooperation

### **Introduction**

The current paper aims to analyse a series of emergency and disaster medicine management systems and their congruency inside the European Union, while putting accent on the most worldwide renowned for their performances or simply for the principles that stay at their grounds and inspired other countries to found their own systems following the example they offered.

At the same time, we will strike to bring up solid arguments in favour of our strong belief that, albeit the motto of the European Union *In varietate concordia* (English – United in Diversity) continues to inspire us and remains the symbol that should drive us further together, in terms of emergency and disaster medicine, the progress can only be achieved by building bridges of common knowledge, principles, laws and practice, while, of course, learning all the lessons which diversity has to offer. Therefore, unity should be the stronghold of this particular domain, with palpable results in the future in terms of successful interventions, lives saved and costs spared.

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In order to have a better understanding of the domain, it is of utmost importance to present the current state of things with regard to the domain. The European Society for Emergency Medicine offers us a very conclusive definition of emergency medicine, which includes the full spectrum of medical assistance, from prevention to diagnosis and acute treatment, all of this put in a very restrictive time framework and being done both in and out of the hospital. Therefore, we are entitled to affirm the certain degree of complexity and diversity this particular branch of medicine brings along, which can partly explain the various perspectives nations have regarding essential aspects of its organisation. The current status of implementing the 2005/36/EC Directive of the European Parliament and of the Council of 7<sup>th</sup> September 2005 on the recognition of professional qualifications in the field of emergency medicine<sup>12</sup>, which is firmly gaining acceptance among states, is that a number of 20 member states<sup>13</sup> have accepted, in one form or another, this specialty as part of the authorized and recognized qualifications in the field of medical professionals (EC, 2005).

When it comes to defining disaster, the only certain thing is uncertainty. World Health Organization offers us anyway a sort of definition which mark disasters as being “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources” (WHO, 2008a).

Koenig states in the preface of Koenig and Schultz *Disaster Medicine: Comprehensive Principles and Practices* the following:

*Conceptually, at the most basic level, we are describing a scenario in which the need exceeds the available resources at a given moment. It is not the event itself that defines a disaster; rather it is the functional effects of that event on the system of reference at the time. For example, if an airplane crashes, is this a disaster? From the perspective of the regional trauma hospital, if everyone is uninjured or if everyone dies, there may be absolutely no effect on hospital*

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<sup>1</sup> “Emergency medicine is a specialty based on the knowledge and skills required for the prevention, diagnosis and management of urgent and emergency aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioural disorders. It is a specialty in which time is critical. The practice of Emergency Medicine encompasses the pre-hospital and in-hospital triage, resuscitation, initial assessment and management of undifferentiated urgent and emergency cases until discharge or transfer to the care of another physician or health care professional. It also includes involvement in the development of pre-hospital and in-hospital emergency medical systems”, European Society for Emergency Medicine, <http://eusem.org/about-us/policy-statement/>

<sup>2</sup> “Emergency Medicine is currently recognised as an independent specialty in 18 member states of the European Union (although only 9 are listed in the EU Directive 2005/36/EC) and in two EU countries it exists as a supra-specialty [...] It is thus recommended that all other European countries should work towards the establishment of Emergency Medicine as a primary medical specialty”, European Society for Emergency Medicine, <http://eusem.org/about-us/policy-statement/>

*operations, and thus this might not be considered a disaster. From the perspective of the first responders or the mortuary teams, if the crash does generate mass fatalities, baseline operations would likely need to be augmented, and this event would require the implementation of disaster protocols (Koenig and Schultz, 2010).*

The question may come naturally. If there is no certain thing to base on, then how can disasters be best approached? The answer may seem to be as simply as -it cannot-. However, while understanding the major problems which are being raised by the complexity of any given intervention to a disaster, from the unicity of the scenario, the irreproducible chain of events and lack of patterns to the high grade of unpredictability and spontaneity, it is our duty to obtain continuous improvement in dealing with disasters and analysing certain events or even simulating different systems' reaction. This is why we will try throughout this study to plead for unity and emphasize at the same time the importance of acting accordingly to a unitary plan of actions. Changing the perspective may prove essential in the future understanding and approaching of disaster intervention in Europe, because if we are going to see ourselves as an orchestra which is singing for life, then we should at least follow the same score

Before the closure of our introduction, we would like to state that, although we present our point of view about the effectiveness a more integrated European system would have on this matter, it remains obvious that we understand the features and hallmarks the member states have and that the emergency systems cannot, at least not in the near future, act by the same rules in all of their parts.

## **1. Foundation of emergency medicine systems – a brief look back in history**

Only a deepened knowledge of the domain, including its history and foundations, can make the deciders of its future more aware of the relevance of the field in current medical practice and, more specifically, of the importance of common laws and practice.

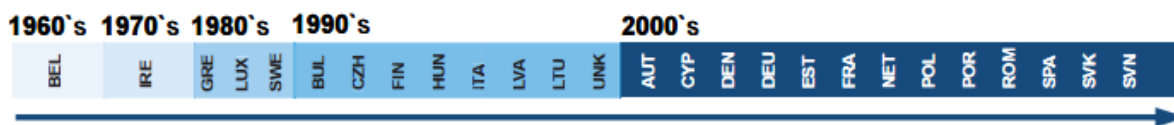
At the end of 1960, the chosen president of the medical staff from the Alexandria Hospital, USA, James Mills Jr. was confronting with a very worrying setback. The emergency department of the hospital he run, registered a hard to manage, 300% increase in the number of patient visits in only a decade. At the same time, the number of medical staff willing to work in the department lowered with more than 50%. Facing all these problems and some failed attempts to restore the functionality, dr. Mills came with the idea of giving entirely up at his general practice and to exclusively focus on emergencies. His choice was followed by a small team of devoted doctors, who together put the basis of what was to be the Alexandria Plan, the launchpad of this revolutionary field of medicine, a new

medical specialty to deal with emergency medical cases. The mentioning of this brief lookback to the foundation of the domain, from our point of view, is important due to its capacity to highlight some makings which we consider to be of utmost importance if we are to succeed in our desideratum towards attaining resiliency through integration at a European level. Disaster medicine systems, as a field where the available resources are exceeded by the ‘acute’ need, similarly to the case above mentioned, requires innovative measures, openness and close cooperation in order to prove itself efficient and, furthermore, trustworthy.

## 2. Legal framework for EMS in Europe – current status and future implications

This brief look back into the origins of the domain obliges us to take into consideration the relative youth of the domain, which more or less explains the fact that some countries do not yet have comprehensive legislation or regulations with regard to the structure, functionality and establishment of their emergency systems.

**Figure 1. Decade during which EMS legislation was enacted (by EU countries)**



Notes: \*Croatia and Malta are missing

Source: World Health Organization, 2008

As we can clearly observe, a vast majority of EU countries enacted the legislation after 1990 in matters with regard to the financing mechanisms, required training for staff operating in EMS, minimum standards of care and equipment, minimum requirements of qualification and free access for all to in-hospital care (including uninsured & unidentified persons). However, only the latter is guaranteed in all of the EU countries, which constitutes a major advantage, being given the constantly increasing pace of mobility of citizens throughout Europe.

In problems regarding crisis preparedness and disaster management, the EMS is referred to, by most EU Member States' legislation (24), as a major component of the intervention. Anyhow, just mentioning the EMS in the legislation cannot be enough, as other aspects such as the continuous education and training of the staff involved or financing mechanisms are to be clearly convened. In terms of financing, most the States appear to assume that it is the Government's responsibility to

mobilize funds according to the needs that may appear during a certain disaster, with limited or no regulations or direction on certain possible scenarios (WHO, 2008b).

One of the conclusions of the same study conducted by the World Health Organization showed that the field of EMS throughout Europe consists of a large, diverse legislation which directly conducts to different procedures and ways to smooth over the effects of any given disaster. On one hand, it is somehow obvious to see that the most relevant “mitigating” circumstances for all of these happening can be, of course, national history and cultural diversity. But, on the other hand, it is important to take benefit from the relatively short-term development of the legislative systems, which presumably offers them plasticity and openness to improvements, as stated before, and start to commonly work on a real harmonization of these for the benefit of all civil protection mechanisms and finally, for the benefit of the European society in all of its components. (WHO, 2008b)

### **3. The example the European emergency number in terms of legal coordination between states**

A positive example of legislative harmonization is represented by the success of the idea and implementation of a European emergency number – 112 – encountered. The decision of introducing a common emergency number for all members of the European Union emerged with the Council (nr. European) Decision of 29 July 1991 on the introduction of a single European Emergency Call Number no 91/396/EEC. Later on, this decision was reinforced through Directive 98/10/EC and then included in the Universal Service Directive in 2002.

The enactment of 112 was particularly significant having in mind the steady increase of the migration of people in Europe, people who, when confronted with an emergency, should be in complete knowledge of where to ask for guidance or help. The chosen number of 112 was not very widespread at the moment it was voted to become the common emergency number in Europe, as it was being only used by the German fire brigade and the Italian police forces. Knowing this, it is more of a real success the high awareness 112 has through the citizens of Europe, as the numbers encompassed in the Flash Eurobarometer 339 reveal a rate of over 86% percent in six out of seven countries where this is the sole/main emergency number – Sweden, Finland, Netherlands, Denmark, Romania and Portugal- and more than 50% in the majority of states where 112 operates alongside other emergency numbers. The lowest awareness rates were in 2013 in the UK and Greece with less than 2%. (EC, 2012)

Since 2008, the number operates in all Member States of the EU, while in 21 countries an integrated dispatch centre<sup>14</sup> will take over the calls and take decisions. In other 7 countries, security services will take the call, with the noticeable exception of some regions of Germany, where Red Cross is involved in the procedures.

What remains to be noticed is the fact that, although 112 was imposed as a mandatory emergency care number for all Member States, differences continue to exist between countries. However, this is somehow understandable and does not affect the addressability of individuals who can reach the emergency number wherever and whenever, free of charge and free of area code.

#### **4. Raising efficiency through integrated dispatch centres – a path to the future? Romania's example.**

In this particular matter, we will stop and discuss the case of Romania to present how dispatch centres are functioning at the moment and to highlight some important aspects of how the system developed throughout the years. We choose to present this particular case of Romania in order to enforce our belief that the road of reaching a better integration in terms of disaster medicine should be paved with the best examples and to demonstrate, that this does not necessarily have to be, at least not in every single aspect, a long, time-consuming process.

Since the implementation in the Romanian legislation of the bill no. 160/2008 regarding the functioning of the National Unique System for Emergency Calls, the system of dispatch centres underwent a serious transformation, reaching the point where, nowadays, integrated emergency dispatch centres are at citizens' disposal. They manage to represent a viable interface, well suited to its purposes and accessible, between the citizen confronted with an emergency situation and the responsible structures. According to the Health Law, the dispatch centre includes all from the security services, fire brigades and medical pre-hospital units at the same place, covering all of the country's surface, 24/7, from 42 DC, one in every county. (Romanian Parliament (2006), Law no. 95/2006 regarding the reform in Health domain)

As we are speaking, Romania represent, alongside with 4 other member states an example of good practice in the domain, having one of the best response time of 3,74 seconds, high accuracy in call detection, and the highest rate of calling 112 during an emergency situation at an impressive 98%

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<sup>14</sup> "The integrated dispatch centre is the specialized structure which, besides taking the emergency call, assures the alarm and coordination of intervention teams of all the specialized intervention services, both medical and nonmedical, from the same physical location. The coordination is made by specially trained personnel, having a medical coordinator with superior studies from the Ambulance Service or S.M.U.R.D., in permanent function" (Romanian Government, 2008)<sup>14</sup>

(Special Telecommunications Service of Romania, 2016). Raising the awareness of the existence of 112 as unique phone number for emergencies was done mostly using TV stations, and in a far less range using radios, newspapers or public advertising. Important to say that the proportion of interviewed people who admit receiving information at least once is at a peak of 53%, according to Flash Eurobarometer no. 368/2013. Keeping in mind that all of this performance was only attained in less than 10 years (Romania officially joined EU at 1<sup>st</sup> January 2007), we are perfectly entrusted to affirm that seeking performances in this matter is only a matter of political will, rather than an unsolvable problem (European Commission, 2013).

Based on the existing data with regard to dispatch centres and the course of action between emergency call and reaching emergencies care units, a WHO report to which we submit recommended the foundation of institutions capable of providing quality indicators concerning out-of-hospital EMS, to propose internationally recognized curricula of first aid for first responders such as fire brigades, volunteers and police, an institution which could „pave the way for a common research strategy in the European Union” in the future (WHO, 2008). It is therefore widely acknowledged and commonly accepted that the most efficient course of action would be the development of common strategies for the future, rather than bringing solitary improvements by any region or member state.

## 5. Education in EMS

Emergency Medicine System is a system which, like any other system, exists through its professionals, whether we speak about physicians, nurses, paramedics or technicians. There was, during the past decades, a big evolution in the understanding of emergency medicine as a critical part of any medical system, which mirrored in the ways education, training and legal framework are now being provided in the interest of empowering the system and reaching better results. Emergency Medicine as a recognized accredited specialty is no longer a dream in most of the European Countries and, moreover, EM has undoubtedly managed to become what some call a global specialty. (Fleischmann and Fulde, 2007). Although there is a certain majority of European Countries which included the specialty in their national board of specialties, for EuSEM remains an important target „to work with the national societies and national governments to make the specialty of emergency medicine become a reality in EACH European countries and with the same level of quality” (Petrino, 2017). This means there is still room for improvements and reaching the same level of quality can only be done, as far as we are concerned, by acting with the same weapons.

In terms of European policy regarding medicine, the European Union recognizes 53 different medical specialties, one of which is Emergency Medicine (EC, 2006). This, however, does not consequently mean a certain uniformity throughout member states, which is clearly to be observed in the manner the specialty developed or is planned to be developed. Education and training in the field of emergency medicine varies widely between states, lack of uniformity is the main finding when confronting data regarding educational programmes. A certain desire and inclination to change is, however, obvious if we are to assess the launch of a common core curriculum establishing the basis for the specialty, which was created so that it would serve as a guide and a standard for all European countries seeking to train future emergency physicians. The main recommendations and directions for this document were primarily set in 2002, but the first meeting of the Task Force of the European Union of Medical Specialists to discuss its content was first held in 2007 in Novara, Italy in the presence of representatives of 17 countries: Belgium, Czech Republic, Estonia, France, Germany, Greece, Ireland, Italy, Malta, Netherlands, Poland, Romania, Spain, Sweden, United Kingdom as members of EU together with Turkey and Switzerland. The final form of the Curriculum was signed during the Fifth European Congress on Emergency Medicine held in Munich in September 2008.

The documents approval was considered to be a huge step forward towards a unitary development of the specialty, as it clearly states, right from the beginning, the status of Emergency Medicine as an independent medical specialty, following the role model of other countries, such as Australia, Canada, Ireland, United Kingdom or USA. In addition, the recommendations were made for a minimal length of five years of postgraduate training, enforcing the guidelines included in the European Doctors Directive from 2006, which pleaded for the same minimal amount of time. (EuSEM, 2009). It is important to note that the existence of such an important document was made possible through common teamwork and multinational cooperation, from within and without EU's borders, underlining once again the importance and effectiveness of working together for uniformity and progress.

Going back to numbers, it is of utmost importance for our study to throw a lookback at where the specialty of emergency medicine caught roots in Europe. Hungary established emergency medicine as an academic branch in 1979 according to a study of WHO, whereas the United Kingdom only in the 1980s, although a certain form of training programme in the field of "Accident and Emergency Medicine" existed since 1977. Seven more countries managed to develop educational programmes in the 1990s, followed by ten more during the 2000s. This steady increase in numbers regarding educational offer can be easily linked with the development of the specialty by itself, but also with the foundation of European organizations, such as EuSEM in 1994, which managed to bring



together more and more countries and, of course, different point of views regarding the matter. By the end of 2009, a number of 19 EU countries recognized EM as a specialty by law, whereas a number of 16 countries included EM courses as a mandatory part of their undergraduate curriculum. At a postgraduate level, specialist education for physicians, but as well, for nurses and paramedics are offered by government, universities or private institutions. In fact, in the matter of training physicians most countries prefer university-based programmes of training (10), while government-based include 6 countries and private only 3. The situation is balanced in the matter of nurses between these three forms of education providers and differs substantially when it comes to paramedics preparation where government-based programmes lead the top of preferences with 9 countries out of 14. The situation of paramedical staff and nurses is even more heterogeneous, as even data gathering could prove a real challenge at the moment, not to speak about reaching a form of standardization in the near future.

Based on all this data put in connection with the actual information regarding the domain, we are right to highlight the remarkable differences in the education systems of the EU, although certain steps were made in the direction of bringing harmony to this sensitive domain. It is a matter of time and political commitment to evolve to similar systems which we think is the key to a more prepared Europe in front of not only disasters, but other casualty incidents as well, where multinational cooperation could prove to be literally life-saving.

Further on our study we will focus on the example the Romanian education system regarding the education professionals in the field of EMS receive, both during undergraduate and postgraduate mandatory educational programmes. We will assess both weak and strength elements of the system itself, hallmarks and points of congruency with other EMS systems around Europe and the way the Romanian example could influence the face of other similar systems.

As we speak, unfortunately we cannot bring proofs of a common perspective about emergency medicine throughout the medical universities in the country. The study programmes during undergraduate degree vary significantly in matters which include principles, objectives, organization, logistics or evaluation methods. These are somehow normal drawbacks if we consider the variable penetration the subject of emergency medicine had in the mental of academic communities, as a result of lack of explanation regarding its purposes or loss of knowledge in matters of cost-benefit analysis.

Nowadays, emergency medicine is being studied as a stand-alone subject in five universities from Craiova, Bucharest, Iasi, Cluj-Napoca and Galați, while in one university students undergo emergency medicine courses during the Anaesthesiology and Intensive Care clerkship (Targu-Mures) and at the Medical University of Timișoara there is a pre-hospital training programme for students offered by the Public Ambulance Service. At another academic centre, there are no emergency

medicine related courses whatsoever. It is however simplistic to perceive as a failure the lack of uniformity which is understandably hard to attain even when we refer to one country, but this is only if we refuse to take into consideration aspects regarding where the domain situated in the past. Generally speaking, we can observe a continuous concern in all academic centres regarding the field of emergency medicine and an increasing trend of inclusion of the specialty in the curriculum, things we consider to be the normal consequence of a gain of experience and human resources in time combined with a slight change of perception between medicine professionals, in a positive manner, towards this medical specialty. A special remark has to be made on the situation from the Medical University of Craiova, where alongside with the mandatory studying of emergency medicine subject in the VI<sup>th</sup> academic year, all students need to pass a First-Aid Medical Course during the 1<sup>st</sup> year of study. It was important to mention because it drives us to a consistent question of our study. How much attention should we invest in the future in the field of training professionals, which are the best methods and how can we allure people to this domain, how can we make it attractive for people in search of a career? Of course, the answers are and will be intricate, but what better way to find them than to sit together, all nations of Europe with their own perspective, examples and results and then to act together, as well. If we are to speak about disaster medicine or crisis management regarding medical resources, no course for students is available whatsoever at any of the medical universities in the country.

In the majority of academic centres the practical clerkships in the field of emergency medicine students are offered the possibility of having direct or via group assistants contact with the acute patients. While having in mind this very important aspect for a proper practical education, it is however of same importance, at least in the context of emergency medicine, to gain some kind of customization of the debated casuistry, with the aim of both extending the horizons of knowledge of individuals and obtaining uniformity of the study programmes. This is reachable through an extended use of technological capabilities which can play an important role in simulating different scenarios, mannequins or even the use of trained actors. The effectiveness of direct participation of students at intervention exercises would be interesting to study as well.

Both postgraduate education for doctors and the rigours at which the participants are constrained differ, generally speaking, from a university to another. The aspects which are clearly defined by law and practice itself are the residency in emergency medicine with a length of 5 years, as recommended by the European Union and the certificate of medical training in the field of emergency medical assistance, both pre-hospital and in-hospital, which are directed to the specialists

in domains such as general practitioners or family medicine, who were already acting in the emergency assistance system.

What the above-mentioned information concerning the undergraduate support for medical students in the field of EMS state by itself is that variety is not only an attribute of Europe as a whole, but of countries in particular as well, which makes the idea of attaining a certain degree of uniformity in Europe, at least in terms of common education and training, in the near future not realistic. On the other side, it remains debatable the extent to which uniformity is to be useful and where it has to stop, in order not to restrict future research and development.

## **6. European Cooperation Mechanism**

The dream of a Europe without borders is unfortunately a nightmare when it comes to disasters, which definitely know no borders. This is why, although at first a disaster involves local communities and depends almost exclusively on local resilience, really major incidents will end up in being treated and solved internationally. Preparedness is, from this point of view, of great relevance. During the past decades, history offered the world countless unpleasant events in which international cooperation proved to be vital for the success of interventions. Nonetheless, these are examples from which we need to learn to stand together in front of disasters, especially having things eased up by the existence of the European Union.

Multinational and international cooperation mechanisms in the field of EMS represent an essential pillar when it comes to resilience, preparedness and adaptability of different systems in front of a disaster. Its purposes are mainly directed towards those situations who exceed the capabilities of local, regional or national response mechanisms. The trans-national assistance showed, on countless occasions, its relevance, utility and efficiency and, at times, proved to be an indispensable element of the intervention in cases of disasters. Whether we speak about the immediate period of time after the occurrence of any given catastrophic event or we refer at the aftermath of such an event, international teams offered the necessary support for a convenient result.

As we are to see in the upcoming lines, the adaptability of international aid mechanisms and, in particular, European mechanisms, is a crucial matter in terms of the success of the intervention. One of the keys towards progress and making them more effective could reside in attaining certain common standards and values at a communitary, European level among member states. This would/is primarily and practically (be)/(already) visible in setting EU-controlled institutions in charge with the matter of European aid, capable of deploying resources and unitary recognised. Furthermore, a

common legislation combined with proportionate degrees of involvement of states would be desirable.

As we speak, in the EU works since 2001 the European Civil Protection Mechanism (CPM), under the control of the European Commission (EC). Nowadays, this particular mechanism encompasses all 28 Member States and Iceland, Norway, Serbia, Montenegro, Turkey and FYRO Macedonia. The declared purpose of its existence is that of foster a coordinated assistance among participating states in case of disaster occurrence, both on European and non-European territory, when the aid is asked for by the state in need or at the call of the United Nations or one of its agencies.

A coordinated assistance should include efficiency as a vital matter in situations regarding the dislocation of intervention forces, of costs and time management and, naturally, of acting in a proportionate manner in relation with the amplitude of the disaster and the current needs in its aftermath. Putting into action the resources of one nation could be a harsh, time-consuming process, let alone coordinating the resources of 34 participating states. However, the utility and efficiency such a mechanism brings to the matter is not questionable, if we are to think of it as a main coordinator and a dispatcher of capabilities. Having an exact dimension of all the resources, both human and technical, this group of states can offer, is a major advantage in terms of time management. For the party who asks for support it is obviously more effective to alert one mechanism, instead of having bilateral discussions with 34 different states.

Since its launch in 2001, EuCPM has monitored over 300 worldwide disasters and received over 230 assistance calls. It is noticeable a constant concern towards improvement and development, if we are to think not only about the extension in the number of participating countries, but also in terms of quality, through the creation of new structures for a better monitoring, organisation, analysis and control of events. The number of interventions had known an important increase, from a number of only 8 between 2003 and 2005 to a number of 14 missions in 2016 alone (EC, 2016a).

In addition, EuCPM provides support for the participating states in matters of training professionals, exchange programmes for a better connectivity and teamwork, common, periodic exercises and guidance for the harmonisation of the intervention techniques. The Emergency Response Coordination Centre, which has its headquarters in Brussels, Belgium is the European institution in charge of permanently analysing and monitoring disaster situations, making intervention plans and field deployment of experts, equipment and specialised teams (EC, 2016b).

In 2014, Emergency European Response Capacity was launched which is basically the voluntary fusion of states' resources for the mechanism. It is hereby obtained a sort of centralisation

of data and resources, whether we speak about experts, intervention teams or technical support, with benefic outturn on the final result. (EC, 2916c)

A relevant example of how the system improves by itself after learning practical lessons is the observation of a certain in the lack of medical personnel during the recent Ebola crisis, immediately followed by the establishing of the European Medical Corp, as part of the voluntary fund of resources of the EERC. By this time, 9 states are rated as contributors to this particular corp, which consist of medical emergency teams and public health professionals, advanced medical posts and medical evaluation and coordination experts and logistic support. All medical teams are certified according the World Health Organization standards. Furthermore, EMC is the common contribution of the European Union to the Global Health Emergency Workforce (EC, 2016d).

## **Conclusions and Future Debates**

As we were mentioning right from the introductive part of this paper, a durable and sustainable development in this sensitive domain is a question of sharing, at an European level, a series of common values and ideas, which are to be established through consensus between member states and based on the desire of harnessing the specifics different models, patterns and visions states or regions have, while having in mind the past experiences and the lessons learned.

We strongly believe that, although it is impossible to reach all of the essential points in this paper, a future common strategy in matters of civil protection in case of emergencies and/or disasters should be built around some fundamental pillars. While stating this, we bear in mind the significance of a better integration and increased interconnectivity, long-term sustainability, flexibility and adaptability as starting points of this debate. Assessing the strengths and weaknesses, the opportunities and the threats every national system may have could prove to be a difficult task. However, we are confident that the results of such an effort, combined with reaching common points of interest between member states and a more unitary vision, would exceed the expectations on medium and long term results.

It is perhaps useless to say that an efficient system in terms of lives-saved, costs spared and resources used can only be achieved through attaining adaptability and flexibility in face of the numerous regional or national specifics. It is obvious that we cannot share the same „modus operandi” for regions with, for example, different landforms, but debating between multinational taskforces specialised in only some of the matters could lead to effective results and a similar or even identical structure in terms of intervention protocols and procedures. This standardisation could be of essential

significance in case of a disasters where multinational teams would have to work together. As well, in cases of cross-border mass casualty incidents, having joint teams working by the same rules could prove to be life-saving.

An increase in terms of resilience communities would have in face of emergency and/or disaster situations is undoubtedly the most important attribute that comes into light from our study. Resilience, as the result of a thorough planning, adaptability, interconnectivity and multinational completion of operational, logistics, support or „know-how” needs, should be the aim and the stronghold of our common goals. While reaching resilience, as we have already stated, is most important, the path which will bring us there is significant, too. Sustainability, as key-element of our future common projects, will assure the development and harmonization of the new components in the already functional gear that we nowadays bear.

We completely understand that European policies cannot go from being unthinkable to inevitable without any intervening stage. A certain degree of openness, both financial and professional, combined with a real desire for improvement are vital for attaining our purpose. We therefore plead for the importance flexibility and convergence should and will have as part of the road and as part of the final mechanisms. Only they will drive us to reaching multinational integration.

To sum up, we foresee the evolution of the emergency care and disaster management systems throughout Europe as a matter which, inevitably, will concern and involve every single one of the member states. With more and more hazardous events occurring on the continent or even around the globe, whether we speak about manmade or natural causes, Europe should evolve to a more unitary, ready to intervene system, taking advantage from the existence of the European Union and developing inside its mechanisms a proper, well-suited to modern times system. Of course, we reaffirm the importance national or even regional specifics have and should have in the future in the debate for a more integrated disaster management vision, while at the same time supporting the need for congruency in matters concerning procedures, education of professionals, logistics usage or technical support.

History usually teaches us the best lessons and it is our duty to act accordingly to this saying. If we are to bear in mind the effects and the tremendous problems past unfortunate events brought, events that definitely put a mark on the way we see disaster's before and aftermath, such as hurricane Katrina, Haiti earthquake or even the recent Ebola outbreak, it is mandatory for us to react properly and decisive in the direction of a better integration, as the single and most effective manner to reach a certain level of preparedness.

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