

INTERNATIONAL CBRNE MASTER COURSES SERIES

COLLANA DI SICUREZZA CHIMICA, BIOLOGICA, RADIOLOGICA E NUCLEARE

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COLLANA DI SICUREZZA CHIMICA, BIOLOGICA, RADIOLOGICA E NUCLEARE



Peace cannot be kept by force; it can only be achieved by understanding.

Albert EINSTEIN

The CBRNe Book Series was born as an initiative of the Directive Board and of the Scientific Committee of “International Master Courses in Protection Against CBRNe events” ([www.mastercbrn.com](http://www.mastercbrn.com)) at the University of Rome Tor Vergata. The evolution and increase in Security and Safety threats at an international level place remarkable focus on the improvement of the emergency systems to deal with crisis, including those connected to ordinary and non-conventional events (Chemical, Biological, Radiological, Nuclear, and explosives). In every industrial Country there are multiple entities with specialized teams in very specific fields, but the complexity of the events requires professionals that not only have specific know-how, but also expertise in the entire relevant areas. Given the global interest in these issues, the Department of Industrial Engineering and the Faculty of Medicine and Surgery of the Tor Vergata University organize the international Master Courses in “Protection against CBRNe events”: I Level Master Course in “Protection against CBRNe events” (120 ECTS) and II Level Master Course in “Protection against CBRNe events” (60 ECTS). These courses aim at providing attendees with comprehensive competences in the field of CBRNe Safety and Security, through teaching and training specifically focused on real needs. Both Master Courses are designed according to the spirit of the Bologna Process for Higher Education, the Italian law and educational system. The Master Courses are organized also in cooperation with the following Italian Public Entities:

- Presidenza del Consiglio dei Ministri (Prime Minister’s Office);
- Ministero della Difesa (Ministry of Defence);
- Ministero dell’Interno (Ministry of The Interior);
- Istituto Superiore di Sanità (National Health Institute);
- Istituto Nazionale di Geofisica e Vulcanologia (National Institute for Geophysics and Vulcanology);
- ENEA (Italian National Agency for New Technology, Energy and Sustainable Economic Development);

- University Consortia CRATI, MARIS and SCIRE;
- Comitato Parlamentare per l’Innovazione Tecnologica (Parliamentary Committee for Technological Innovation).

And together with the following International Entities:

- OPCW (Organization for the Prohibition of Chemical Weapons)
- NATO Joint Centre Of Excellence (Czech Republic);
- NATO SCHOOL of Oberammergau (Germany);
- HotZone Solutions Group (The Netherlands);
- VVU-026 Sternberk (Czech Republic);
- Seibersdorf Laboratories GmbH (Austria);
- Chernobyl Centre (Ukraine).

All the above-mentioned organizations have signed official cooperation agreements with the University of Rome Tor Vergata in the aim of Master course activities. The Master have also cooperation with OSCE, IAEA, ECDC, KEMEA in the aim of the didactical activities and we are working to formalize this collaboration with a formal cooperation agreement.

Both Master Courses have been officially granted the “NATO selected” status and have been included in the NATO Education and Training Opportunities Catalogue (ETOC) and also they are supported by OPCW.

The purpose of the CBRNe book series is to give a new perspective of the safety and security risks from both a civil and military point of view, touching all the aspects of the risks from the technological to the medical ones, talking about agents and effects, protection, decontamination, training, emergency management, didactic, investigation, communication and policy.

The authors will be experts of the sector coming from civil, military, academic/research and private realities. A special thanks for the realization of this series goes to Prof. Carlo Bellecci for his initial encouragement, continuous support and help.

Nel mese di Agosto 2016 il Ministero dell’Istruzione, dell’Università e della Ricerca (MIUR) ha inserito la collana nella lista di quelle ufficialmente riconosciute con i seguenti riferimenti:

- codice di classificazione: E237557;
- titolo: CBRNE BOOK SERIES.

During the month of August, 2016, the Italian Minister for Instruction, University and Research (MIUR) has officially added this book series in the list of the official publications recognized by the Minister itself with the following references:

- classification code: E237557;
- title: CBRNE BOOK SERIES.



Claudia Quaranta

## **The ability to communicate**

Who knows how to communicate the crisis  
knows how to manage it





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## Abstract

The communication is the base of the daily life of everyone, it is present in every moment and in various forms: verbal, paraverbal and nonverbal. It is impossible for the people do not communicate, everyone often does it unconsciously, through body language, eye contact and facial expressions.

Let us think, therefore, how much this element can be important in case of emergency.

The communicative processes are decisive for the management of a crisis and, if well realized, they can limit both the risk and the consequences.

«In the emergency, the possibility to effectively communicate inside and outside of the infrastructure exchanging and giving unidirectionally the necessary information to implement the right behaviors, can become one of the keys of the success or the failure in the management of an event». (Unali F., 2010)

The internal communication is the exchange of information inside an organization to improve its processes. The external is turned, instead, to public/population and it is finalized to the diffusion of ideas, objectives and actions carried out.

Before and during an event, accidental or deliberate, the crisis communication must be accompanied by an able action of crisis management, to prevent and/or face it in the best way, limiting its effects.

It is fundamental to prepare a communication plan that includes:

- the identification of the competent National Body that has the coordinating role;
- the appointment of an official spokesman;
- a continuous training of professionals;
- the setting up of teams with various competences that effect integrated measures to respond in all the phases and the places of the emergency;
- the facilitation of the relationships among Institutions;
- the circulation of information between all the involved subjects;
- the “construction” of credibility and trust;
- good Media relations;
- the choice of communicative channels appropriate to the situation and target audience.

During a crisis 5 levels/relationships of communication are activated:

- into the same Institution;
- between different Authorities;
- to the population;
- from citizens to Authorities;
- among citizens.

Inside each category we can identify subgroups of communication: Decision Makers to First Responders; Institutions to people; Decision Makers to Media; Media to population.

The communication plan is necessary, and it is created considering all levels/relationships and the possible events and its consequences. Each relationship has problems and needs different way to communicate, but all need of transparency, clarity, honesty and planning for the optimal resolution of the events.



The management of a crisis must take account of the involved stakeholders, the relationships between Institutions and Media, the brief timing for action and communication and the necessity of a coordination (among technical, experts on emergency, political vertexes, professionals of the communication...).

An efficient and effective communication process must activate timely initiatives by a side, and to reassure from the other

As mentioned above, the cooperation among who works in emergency and the Institutions is fundamental, this is a critical aspect for the good result of the management of a disaster, accidental or intentional that it is.

A well realized action of coordination, in fact, assures that the efforts are not doubled or useless and the resources, included the time, are well used. To realize all of this and to improve the abilities to manage an event, the creation of a network among all the involved subjects is essential.

Without doubt, the greatest part of the decisions about the resolution of the emergency lies with the Decision Makers and the First Responders, but it's important not to skip the importance of the communication to every single level, among stakeholders, for the citizens, etc. A wrong communication and popularization of information can worsen the situation already critical, causing unexpected consequences. They are included in an inappropriate and failed management of the event.

As previously said talking about the communication plan, the communication can exploit various channels for the different targets, and, to be as efficient and effective as possible, it must answer, in phase of planning, to the following questions:

- *who*: to whom do you want to communicate?
- *what*: what do you want to communicate and why?
- *how*: which is the best way to communicate a message?
- *when*: when to communicate?

- *where*: which places and spaces do you want to use?
- *why*: which impact do you want to produce?

Considering that the meaning and the value of the communication change with the subject that receives the message, it's important to keep in mind that the same word can be different in base of the audience, it may be different if the subject is a journalist, a citizen, a politician, an expert on emergency, etc.

## Communication

### 1.1. What is the communication?

The word Communication derives from the Latin, *communis*, that means common.

Communication is the process of sending and receiving information among people.

This definition underscores the fact that unless a common understanding results from the exchange of information there is not communication. It seems reasonable to conclude that one of the most inhibiting forces to organizational effectiveness is a lack of effective communication. (Lutgen–Sandvik, 2010).

#### 1.1.1. *Communication elements*

Two common elements in every communication are:

- a) *The sender*, who begins the communication and, having an idea, decides how to communicate it. He chooses the kind of communication (written, verbal, non-verbal, ...), the channel (face-to-face, e-mail, report, ...), the words, symbols, ..., used to encode the message;
- b) *The receiver/s*, the individual to whom the message is sent. He decodes the received message into meaningful information. (Fig. 1).

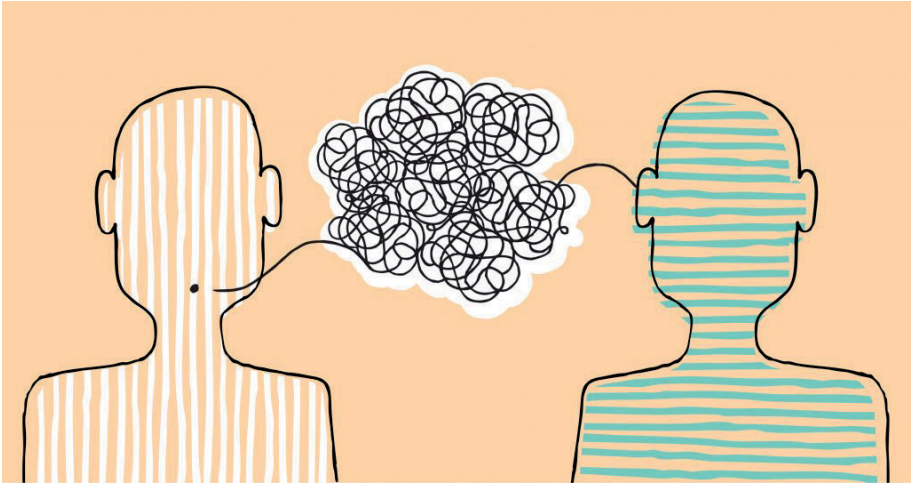


Figure 1. The subjects involved in the communication.

Another fundamental element is *the message*.

The sender develops an idea, transforming it in a message, that is transmitted to the receiver/s. The receiver than must interpret the message if he wants to understand the meaning.

Every message uses a *channel* to be communicated and must be encoded by the sender and decoded by the receiver. A successful decoding is a vital communication skill.

*Noise* is everything that can distort the message (different languages, misunderstanding, ...).

In a communication process (Fig. 2) may occur different perceptions of the message, languages barriers, interruption, emotions and these elements can disturb the right decoding.

At the end, *the feedback*. This is the only way to assess whether the message has been understood as intended and to correct the message in case of confusion. The feedback is the “answer” to the sender by the receiver/s. As already mentioned, only at this moment is possible to determinate if the message has been received and understood or not.