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Rome, 28 July 2017

## **Directive of the Italian Ministry of Interior**

#### Organizational models to guarantee high level of safety during public events

The following indications were given to ensure the highest operating framework, both in terms of security and safety, to conduct public events, also in relation to the danger arising from the terrorist threat. The guidelines that follow derive from experience with the incidents occurred in Turin on the occasion of the screening in Piazza San Carlo of the Champions League final.

As well as for urban security, also the security system that supervises the conduct of public events requires maximum interinstitutional synergy and the closest collaboration of all its components, from the State to those expressing local and territorial powers.

The present document has been drafted with the contribution of the components of the security system that, coordinated by national authorities also within the framework of the Forces appointed for this purpose - Provincial committees for public order and safety and Provincial commissions for supervision of public entertainment venues - each one for the part of their competence, have outlined the framework of the necessary planning and prevention interventions in such a way as to minimize the potential risks to citizens.

# Guidelines for the safety measures to be adopted in the processes of governance and management of public events

#### **Introduction**

The recent events in Turin, Piazza San Carlo, have highlighted how the suggestions deriving from the delicate international climate and / or panic situations provoked, also amplified by states of consciousness possibly altered by the assumption, if not prevented, of alcoholic substances and / or drugs, can significantly reduce the resilience of a crowd in the face of unforeseen and / or normally unpredictable events.

For these reasons, with two separate directives issued by the Chief of Police and by the Head of the Fire Department, the safety aspects were defined, intended as measures to protect public safety and those of security, safeguarding instead the order and public safety that must be taken into consideration in order to improve the digesting processes and management of public events.

Both aspects must necessarily be integrated, starting from an information base provided by the individual organizers, at the moment in which they forward the request and / or the communication for the realization of the events.

This document is a quick tool to help organizers in making a first assessment of the risk levels of the event to be organized (high, medium, low), in relation to each of them suggesting how to calibrate, in terms of safety, the measures of mitigation prescribed by the directives mentioned above.

So much so in the awareness that for any event the risk can never be equal to zero, so the mitigation measures proposed provide for the reduction of risk up to a residual level normally considered acceptable, without prejudice to an *alea* that is and remains imponderable.

#### Types of risk

The safety measures must then interface and coordinate with those set by the police to protect public order, and it is on their overall balance that the effectiveness of the organizational model under discussion is tested.

In the construction of the organizational model the main role belongs to the offices of the Municipality that receive the authorization to carry out the event and that define, based on the evaluation made by the organizers, the measures to be taken, supported in collaborative function by the representatives of the local law enforcement agencies. In the event that the conditions prescribed by law are met, a further screening will be referred to the municipal or provincial supervisory commission on public entertainment venues; where then particular conditions are presented, which require a *quid pluris* in terms of precautionary measures, the analysis and evaluation can be requested in the Provincial Committee for public order and safety.

It should also be noted that since further directives are being prepared by the Fire Department of the Fire Brigades, this document is launched on an experimental basis and will undergo all the additions and adjustments that may be necessary, at the end of its concrete application and / or the occurrence of further operational indications issued by the central bodies.

#### Risk classification of events

The approach to the classification is a classic one of risk analysis in which we try to attribute a weight to those aspects that can influence:

- the probability of an event occurring;
- its potential magnitude

The **risk classification** is therefore determined by the attribution of a numerical index to the variables related to the event, to the characteristics of the area and to the type of audience / spectators, as estimated by the organizers.

Following this classification, specific mitigation measures arise for each level of risk.

### 1. EVENTS CLASSIFICATION

For the classification of the risk level, reference was made to the current rule of law (in Italy: agreement between the Ministry of Health, the Regional Authorities Autonomous provinces of Trento and Bolzano published by the State-Regions Conference  $n \cdot 13/9$  / CRSC / C /).

With respect to this document, some parameters relating to the needs of safety have been updated, with respect to health care, referring to events / or manifestations that can be defined as follows:

 Scheduled and / or organized gatherings that recall a significant influx of people for sports, recreational, social, political, religious, organized by individuals, organizations / associations, public institutions.

The identification of the risk level, in the initial phase, can be calculated by the event organizer by applying hypothesis according to the classification table.

Based on the result obtained, it is therefore possible to obtain the level of risk and the relative score.

For events with estimated attendance of more than 10,000 people, the table evaluation is not necessary because the event is, in all cases, among those with a high risk profile.

RISK LEVEL	POINTS
Low	< 15
Medium	15 ÷ 25
High	> 30

## Risk classification table ("Safety")

VARIABLES LINKED TO THE EVENT			
	Annually	1	
Frequency of the event	Monthly	2	
	Daily	3	
	Occasionally /redundantly	4	
	Religious	1	
	Sport	1	
Event type	Entertainment	2	
	Political, social	4	
	Concert pop/rock	4	
	Expected sale/consumption of alcohol	1	
	Possible drugs use	1	
Other variables	Presence of weak categories(children, elderly, disabled)	1	
(more choices)	Event widely publicized by the media	1	
(111010 01101003)	Presence of political/religious representatives	1	
	Possible traffic congestions	1	
	Presence of socio-political tensions	1	
Duration (to	< 12 hours	1	
consider entry/exit	between 12h and 3 days	2	
times)	> 3 days	3	
	In the city	1	
	In the suburbs / country or small urban centres	2	
	In aquatic environment (lake, river, sea, swimming pool)	2	
	Outdoors	2	
Place (more	Localized and well defined	1	
choices)	Wider area than a football field	2	
Gridioco)	Not delimited by fences	1	
	Delimited by fences	2	
	Presence of stairs to enter/exit	2	
	Temporary fences	3	
	Temporary scaffolding, stages, covers	3	
Area logistics (more choices)	Toilets available	-1	
	Water available	-1	
	Refreshment point	-1	
	Difficult access to emergency vehicles	+1	
CLIDTOTALA	Good accessibility means of rescue	1	
SUBTOTAL A			

VARIABLES LINKED TO THE PUBLIC				
	0 – 200		1	
	201 – 1.000		3	
	1001 – 5.000		7	
Estimated number	5001 – 10.000		10	
of participants	> 10.000 Events with a than 10.00 participants a present high		00 always	
Average age of	25 -65		1	
participants	< 25 - > 65		2	
Density of participants	Low < 0,7 people/sq m		-1	
	Medium-low (between 0,7 and 1,2 people/sq m)		2	
	Medium high (1,2 ÷ 2 people/sq m)		2	
Emotional state of participants	Relaxed			
	Excited			
	Aggressive			
Accommodation of participants	Seated			
	Partially seated			
	standing			
SUBTOTAL B				

#### 1. STRUCTURE OF THE RISK MITIGATION SYSTEM

SECTION 1	Regulatory framework
SECTION 2	Requirements for access to the area
SECTION 3	Separate routes for access to the area and de-flow
SECTION 4	Capacity of the event area
SECTION 5	Subdivision of the spectators' area into sectors
SECTION 6	Fire protection
SECTION 7	Emergency management – Emergency plan
SECTION 8	Security operators

## **SECTION 1 – Regulatory Framework**

#### To be adapted to national legal framework.

#### In Italy:

- Ministerial Decree of 19 August 1996
  - Approval of the technical fire prevention rule for the design, construction and operation of the entertainment and public entertainment areas
- Ministerial Decree of 18 March 1996
  - Safety rules for the construction and operation of plants
- Ministerial Decree of 10 March 1998
  - o General criteria for fire safety and emergency management in workplace
- Circular of the Chief of Police no. 555/0P/0001991/2017/1 on 7.6.2017
- Circular of the Chief of the Fire Brigades Department no. 11464 on 19.6.2017

## SECTION 2 - Requirements for access to the area

#### Rescue vehicles accessibility

width: 3.50 m
headroom: 4.00 m
turning radius: 13 m.
slope: not more than%

load resistance: at least 20 t (8 on the front axle and 12 on the rear axle)

#### Identification of stationing areas for rescue vehicles

In addition to the requirements for access to the area mentioned above, as far as possible, a road network dedicated to rescue vehicles must be identified, allowing the area of the event to be reached without interfering with the exodus of people.

#### Event with low risk profile

• The accessibility requirements of the aforementioned rescue vehicles must be ensured at a distance from accesses to the demonstration not exceeding 50 meters.

#### Event with medium risk profile

• The accessibility requirements of the aforementioned rescue vehicles within the area of the event must be ensured if it is outdoors.

#### Even with high risk profile

- Access to emergency vehicles must be ensured within the event area.
- In the area adjacent to the event area must also be identified areas of accumulation of emergency vehicles for the operational management of accident scenarios configurable as maxi emergencies.

## SECTION 3 - Separate routes for access to the area and de-flow

#### Event with low risk profile

• Given the modest size of the event in terms of crowding, it is considered that this requirement should not constitute a binding obligation.

#### Even with high risk profile

#### Permanent outdoor areas and facilities

 The hypothesis of providing for a differentiation between the access routes and the outflow routes can be practicable when this possibility has already been foreseen in the design phase of the place or structure and, therefore, cannot be adopted if necessary for a change of the pre-ordered system of escape routes of the activity.

#### Outdoor venues occasionally used for events open to the public

- The differentiation between the access routes and the outflow routes can be arranged after
  evaluating the characteristics of the routes that leave the area. To this end, if the road network
  adjacent to the exhibition area allows it, it will be possible to evaluate the possibility of creating
  separate entry and exit flows on the same route.
- However, in the event of an emergency involving the removal of people from the area, the
  passages used to enter the demonstration must be made available for the exodus, provided
  that these have not been set up for pre-filtering activities and control with spreader barriers,
  aimed at avoiding the forcing of the entrances.

In this regard, the need to point out the presence of obstacles not immediately visible in the case of crowded areas, especially when these are close to the exit points, must be taken into account. For this purpose, in addition to the ordinary safety signs conforming to Legislative Decree 81/08, it will also be necessary to provide light inflatable signs, for events in the evening, indicating both non-removable barriers and the location of the exodus gates. Such signalling systems must be positioned at such height that they can be seen from every point of the event area.

## **SECTION 4 – Capacity of the Event area**

The capacity of the space reserved for spectators must always be defined, even when this is taken from the public square or street, the event is free admission and no special facilities are available for the stationing of the public.

In this regard, density parameters that vary between 1.2 and 2 people / sq.m must be take into account according to the characteristics of the site, square or public street surrounded by buildings or structures or completely free space.

The crowding defined by the aforementioned parameters must in any case be verified against the width of the evacuation routes system (paths to move away from the area), guaranteeing an outflow capacity of 250 people/sector.

The minimum width of the entrances and of the escape routes inserted in the escape routes system must not be less than mt.1.20.

The entrances to the event area, in case of free access, must be monitored through the issue of free access titles, counter-persons or equivalent systems.

#### Event with factors low-medium-high risk profile

#### Permanent outdoor areas and facilities

 The crowding parameters provided for by the reference standards mentioned in point 1 shall be applied.

#### Outdoor venues occasionally used for events open to the public

- The crowding parameter of 1.2 persons per square meter is applied in the case of dance halls and discos, while for other types of activities, in analogy with the provisions of Ministerial Decree 6.03.2001 (Amendments and additions to the decree of the Minister of the Interior 19 August 1996 with regard to occasional shows and entertainment held inside sports facilities, as well as to the overcrowding of dance halls and discos),
- It will be able to adopt a crowded density of up to 2 people per square meter. It is clarified that the choice of density of crowding to be applied should take into account the shape of the area where the event takes place, if completely free from obstacles or interposed by structures, buildings or the orography of the surrounding land.

## SECTION 5 – Subdivision of the spectators' area into sectors

The creation of sectors in the spectator area with mobile barriers (barriers) on the one hand limits the uncontrolled movement of the masses, often causing accidents (turbulent movement phase), on the other it constitutes further constraints that are inserted in a context that it may already be heavily conditioned, in the case of open spaces, by buildings, fences and terrain.

This type of mobile separation does not guarantee any resistance to the thrust, so much so that, as a result of its ribbing, it causes people to fall and consequent trampling, especially when one is in a turbulent movement phase, with people in panic.

As an alternative to a physical separation with barriers, the spectator sectors can be defined by creating spaces that prohibit parking and movement, defined with elements that do not constitute an obstacle in

case of emergency, occupied exclusively by reception staff, addressing and observing spectators (sports steward mods). These spaces would also be available to rescuers to penetrate the area reserved for spectators, otherwise not easily accessible.

If the area of the event is completely free from elements (structures, buildings, limits given by the conformation of the terrain) that define the areas, the spaces dedicated to the penetration of the area occupied by the public, for the use of rescuers, can be determined from hurdles "anti-panic" type which, due to the method of installation, conformation and consistency ensure adequate resistance to the public's push by providing guarantees against the overturning of the delimitation.

The possibility of creating, with anti-panic barriers, multiple penetration directions, orthogonal to each other, positioned transversely and / or longitudinally with respect to the shape of the area would in fact also constitute the division of the spectator area into sectors.

It should be noted that this solution can be considered applicable provided that the individual sectors of spectators present a completely open plan along the other sides to ensure a homogeneous and linear removal of the public even in the event of an emergency.

However, the need to define the entire area affected by the event not only for safety, but also for security, could be overcome even with the creation of quiet spaces of suitable surface, to be obtained along the perimeter of the occupied area of the public, or by annexing the adjacent road network, in case of events in public squares or public streets, to be used both as areas for decanting flows and for public order requirements. The expansion of the area affected by the event beyond the space of the show, would also prevent the movement in exodus on obligatory lines constrained by the position present on the fence, placed close to the area of the event that are critical for the phase of removal of the public in emergency situations.

#### Event with low risk profile

#### Permanent outdoor areas and facilities

The measures given by the relevant legislation cited in folder 1 apply.

#### Outdoor venues occasionally used for events open to the public

Considering the modest size of the event in terms of overcrowding and, subject to different
provisions set by current regulations for the type of activity, it is believed that the requirement
to separate the area spectators who stand up to the show, for the sole aspects of safety, is
not a mandatory obligation.

#### Even with medium risk profile

#### Permanent outdoor areas and facilities

Refer to the application of the measures provided by the reference legislation cited in folder
 1.

#### Outdoor venues occasionally used for events open to the public

- For crowds above 5000 people, if the characteristics of the area allow it, it will be possible to separate the spectator area in at least two sectors by adopting one of the aforementioned methods, creating a longitudinal or transversal penetration viability available to the agencies responsible for the rescue, of a width suitable to also ensure the passage of any vehicles (minimum width m.4.50).
- For capacities of less than 5,000 spectators, please refer to the provisions for events with a LOW risk profile

#### Even with high risk profile

#### Permanent outdoor areas and facilities

Refer to the application of the measures provided by the reference legislation cited in folder
 1.

#### Outdoor venues occasionally used for events open to the public

- Crowds of more than 10,000 people and up to 20,000 people
  - Separation of the spectator area in at least two sectors by adopting one of the aforementioned methods, creating a longitudinal or transversal viability of penetration also available to rescue personnel, with a width suitable to ensure also the passage of any vehicles (suggested width at least 4.50 m). Along the delimitation of the aforementioned road network, crossings must be provided which, if the operating conditions allow it, will allow these routes to be used as a further way of removal for the public.
- Crowds above 20.000 people
  - Separation of the spectators area in at least three sectors by adopting one of the aforementioned methods, creating transversal longitudinal and penetration viability with "anti-panic" barriers, also available to the bodies responsible for the rescue, with a width suitable to ensure the passage of any vehicles (minimum width 7.00 m). Along the delimitation of the aforementioned road network, crossings must be provided which, depending on the operating conditions, will allow these routes to be used as a further way of removal for the public. It should be noted that the delimitation with "anti-panic" barriers may be considered applicable as long as the individual spectators sectors present a completely open plan on the other sides to ensure a homogeneous and linear removal of the public even in case of emergency.

## **SECTION 6 – Fire protection**

#### 1. General rules

#### Portable extinguishing media - Fire extinguishers

- Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
  - Wheeled fire extinguishers: to be used outdoors following the assessments made on the structures set up.

#### Fire-fighting water systems

- Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - Mapping of the hydrants present in the area where the event takes place
  - Time of intervention of the competent Fire Brigades teams on the territory
  - Use of fire-fighting devices with adequate water resources also belonging to associations;

 Use of Fire Brigades fire-fighting vehicles provided for within the insured fire protection service according to Ministerial Decree 261/96 (reference is made to Italian regulatory framework)

#### 2. Events with low risk factor

#### Portable extinguishing media - Fire extinguishers

#### Crowds up to 200 people

- o Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - By analogy, the indications provided for by the reference standards will be applied: in particular, a fire extinguisher must be provided for every 200 square meters of surface to be integrated, if necessary, with wheeled fire extinguishers to position in the stage area.

#### Crowds between 200 and 1.000 people

- Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - By analogy, the indications provided for by the reference standards will be applied: in particular, a fire extinguisher must be provided for every 200 square meters of surface to be integrated, if necessary, with wheeled fire extinguishers to position in the stage area.

#### Fire-fighting water systems

#### Crowds between 200 and 1.000 people

- o Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - Mapping of hydrants in the area where the event is carried out.

#### 3. Events with medium risk factor

#### Portable extinguishing media - Fire extinguishers

#### Permanent outdoor areas and facilities.

 Refer to the application of the measures provided by the reference legislation cited in folder 1.

#### Outdoor venues occasionally used for events open to the public

By analogy, the indications provided for by the reference standards will be applied: in particular, a fire extinguisher must be provided for every 200 square meters of surface - to be integrated, if necessary, with wheeled fire extinguishers to position in the stage area.

#### Fire-fighting water systems

- Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - Mapping of hydrants in the area where the event is carried out.
  - o Intervention time of the Fire Brigades competent for the territory. Timing that in any case should not exceed 15 minutes. In the hypothesis in which the area of the event is located at such a distance that the journey time is longer than 15 minutes, a dedicated water resource must be provided by using private fire-fighting equipment which must remain in place for the entire duration of the event;

#### 4. Events with high risk factor

#### Portable extinguishing media - Fire extinguishers

#### General

- o Permanent outdoor areas and facilities.
  - Refer to the application of the measures provided by the reference legislation cited in folder 1.
- Outdoor venues occasionally used for events open to the public
  - By analogy, the indications provided for by the reference standards will be applied: in particular, a fire extinguisher must be provided for every 200 square meters of surface to be integrated, if necessary, with wheeled fire extinguishers to position in the stage area

#### • Crowds between 10.000 and 20.000 people

- o Permanent outdoor areas and facilities.
  - Fire protection must comply with the reference standards cited in Section 1 integrated with Ministerial Decree 20: 12: 2012
  - Outdoor venues occasionally used for events open to the public
    - Mapping of the hydrants present in the area where the event is carried out;
    - Time of intervention of the Fire Brigades teams competent for the territory;
    - Presence of fire-fighting devices with adequate water resources also belonging to associations;

#### Crowds above 20.000 people

- Permanent outdoor areas and facilities.
  - Fire protection must comply with the reference standards cited in Section 1 integrated with Ministerial Decree 20: 12: 2012
- Outdoor venues occasionally used for events open to the public
  - Use of Fire Brigades firefighting devices to be foreseen within the scope of fire protection services prescribed by current regulation in compliance with the provisions of Ministerial Decree n. 261 of 1996. (Reference is made to Italian regulatory framework).
  - It is highlighted that the number and the type of Fire Brgades trucks must take into account the intervention time of the teams (if less or more than 15').

# SECTION 7 – Emergency management, evacuation, and emergency plan

#### All risk categories

Planning of the procedures to be adopted in case of emergency taking into account the site characteristics and the extent of the event.

In relation to the outcome of the risk assessment, the person responsible for organizing the event must draw up an emergency plan that must report:

- The identification of a member of the organization's team responsible for the security of the event;
- the actions to be implemented in the event of an emergency, taking into account the incidental events to be assumed in the risk assessment;
- the procedures for evacuation from the place of the event;
- the procedures to request the intervention of the first aid and rescue bodies and provide the necessary information aimed at the successful completion of the activities carried out by the aforementioned entities:
- specific measures for assistance to people with disabilities

The possible accident scenarios will be classified by levels within each of which the competence in the field of intervention will have to be identified.

Communication to the public on the elements of the emergency plan is of fundamental importance. In particular, by resorting to audio and video messaging, information on the distances, on the operating procedures set up for the event and on the figures that play an active role in the management of possible emergency must be provided in advance. In the hypothesis of an accident, it should also be possible to communicate, in real time, with the spectators, to provide indications on the behaviour to be adopted aimed at overcoming the criticality.

In this regard, for events with a "LOW" risk profile, a sound system must also be provided with portable megaphone instruments, while for the events falling within the other direct profiles the sound diffusion system must be of the loudspeaker type powered by a dedicated line safety.

For events with a "HIGH" risk profile and overcrowding of up to 20,000 spectators, an integrated safety management system can be envisaged for the event, while for those with over 20,000 people, this type of operational management must be compulsorily arranged.

## **SECTION 8 – Security operators**

Security operators must have attended the "High level" fire risk training course and obtained a certificate of technical suitability in Article 3 of the Law of 28 November 1996, n. 609 (reference to Italian regulatory framework)

For events falling within the scope of the D.M. 261 of 22.02.1996 and for those characterized by a high turnout as established by Legislative Decree 139/2006, the fire protection service must be requested from the Provincial Fire Brigade Command.

This surveillance service must also be provided when a demonstration is established for the event - "integrated event security management system".

#### Event with low risk profile

#### Crowds up to 200 people

• Four safety operators are expected to take part in the event, with training for "High level" fire risk.

#### Crowds between 200 and 1.000 people

Six safety operators are expected to take part in the event, with training for "High level" fire risk.

#### Event with medium and high risk profile

- The "safety services" must be carried out by personnel trained for "high level" fire risk, on the basis of one unit for every 250 people. Every twenty employees a Coordinator must be foreseen.
- This without prejudice to the possibility of the Public Safety Authority to provide for a "stewarding" service for events with high risk profile to supplement or replace the organizer security personnel.