

## COVID-19

### THE WILL TO NOT STOP: ACTIONS AND INDICATIONS

*Results of the GA<sup>e</sup> Engineering Safety Management Team in the period from February 23<sup>rd</sup> to March 23<sup>rd</sup>, focused on a single goal: providing a 360 degree approach to safety and security to the COVID-19 health emergency*

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**Abstract:** The GA<sup>e</sup> Safety Management Team of GA<sup>e</sup> Engineering describe their activities for managing and implementing containment measures for the COVID-19 epidemiological emergency in the Milan offices and private residences of the Porta Nuova Garibaldi district while working, themselves, via Smart Working.

#### PREAMBLE

The mission of the **GA<sup>e</sup> Safety Management Team** was established in 2013, the year in which Giuseppe Amaro of GA<sup>e</sup> Engineering accepted the role of **Safety Manager** for the new Porta Nuova complex in Milan. Their mission consists of defining, implementing and promoting a "safety culture" within the context of multi-functional properties with various stakeholders (owners, tenants, and suppliers) whose activities must adhere to and be coordinated within a single and integrated management system, the **Safety Management Plan**.

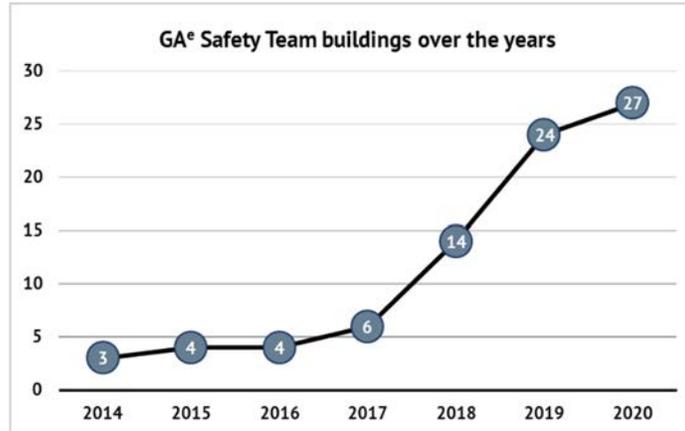
These objectives, set forth in the Legislative Decree 81/08, define the specific requirements to be followed and the elements needed to be addressed in the risk assessments present as part of the Safety Management Plan. The regulations require daily monitoring of the adherence to the measures, procedures, and instruments in place to prevent, limit or reduce the number of accidents or near-misses with the goal being "Incident Free". The Safety Management Plan identifies the best operational strategies to guarantee public and private safety and security, assessing the risks, and taking corrective actions according to the virtuous PDCA (Plan, Do, Check, Approve) cycle.

With this approach, the Safety Management Plan is something more than a standard that is used for any property. It is, instead, a strategic, customized, and integrated "Health & Safety System", a living document that is able to respond promptly to the real-time emergence of new needs. It is only due to the implementation of such a system that the GA<sup>e</sup> Safety Management Team can responsibly manage the safety of properties with different functions, both public and private, and which are varied in terms of specific needs and stakeholders [**Figure 1**].



**Fig. 1** – Various functions and user types managed by the GA<sup>e</sup> Safety Management Team





**Fig. 2** – Growth in the number of sites managed by the GAe Safety Management Team

**COVID-19: PROVIDING CONTINUITY BASED ON EXPERIENCE**

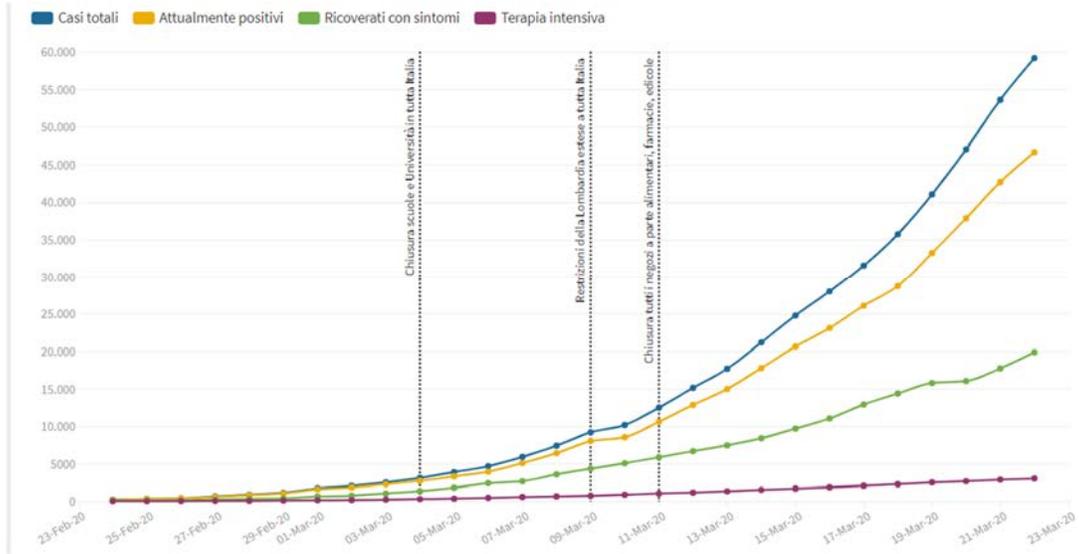
The OMS deemed COVID-19 a pandemic on March 13<sup>th</sup>, 2020. Clearly such an attack on the safety of the people occupying and residing the buildings we service had to be addressed within the strategies set forth in the Safety Management Plan of the GAe Safety Management Team. In fact, the Coronavirus constitutes a safety attack whose full potential is not yet known. As such, it has caused us to approach the emergency with even greater reflection and prudence.

As Safety Manager for many buildings (GAe Safety & Security Buildings (SSb) group) and public events (GAe Safety & Security Events (SSE) group) located in the areas most affected by COVID-19, within the Lombardy region as well as other regions including cities such as Turin, Ivrea and Venice, we promptly and attentively responded to the measures prepared by the Italian Government since the emergency began. Fine tuning the requirements for each location we are responsible for - from single buildings to entire urban districts, as in the case of the Porta Nuova complex in Milan, we initiated site specific procedures. Similarly, as of February 23<sup>rd</sup>, every event including the traditional events such as the Carnival festivals, were halted.

The sites we oversee are extensive and unique, therefore the actions implemented to date within each site's Safety Management Plan varied due to the functions and user types present. Furthermore, in relation to the Italian regulatory provisions which are continuously updated as the government responds to the data they receive, the GAe Safety Management Team oversees real-time actions and records responses to confirm the updates are adhered to.

**Figure 3** shows the parallel evolution of the number of contagion cases throughout Italy and the collaboration of the GAe Safety Management Team with all the stakeholders present on each site in accordance with the different levels of responsibility: owners, surveillance services, tenants, property and facility management, suppliers, etc.

To track receipt, acknowledgment, and understanding of the government directives, a **virtual participation process** was initiated to monitor and identify the best preventive and containment real-time measures to be adopted focused on achieving a single goal: guarantee the safety and health of anyone present.



**Fig. 3 – Contagion trend in Italy**  
(Cf. <https://tg24.sky.it/cronaca/2020/03/06/mappa-coronavirus-italia.html>)

Each activity undertaken as part of the virtual participation process is recorded daily in a **Logbook** [Figure 4], which is a trace of all the official communications of the Safety Manager, of the meetings held on the Coronavirus theme, of the feedback obtained by the stakeholders involved in the implementation of the new health and safety measures.

Attività per Emergenza Coronavirus			
	Data	Commessa	Descrizione Attività Svolta
1	23/02/2020	Transversal activity for different sites	Internal coordination meeting Decision of the strategies to be implemented for the management of the Coronavirus emergency
2	23/02/2020	Transversal activity for different sites	Safety Manager communication Transmission of prescriptions for common areas to Tenants
3	23/02/2020	Transversal activity for different sites	Safety Manager communication Request for indication from tenants Competent Doctor and RSPP and transmission of prescriptions suggested by the SM
4	23/02/2020	Transversal activity for different sites	Safety Manager communication Transmission of preventive measures to Suppliers, with risks of transmission to the relative subcontracts
5	23/02/2020	Transversal activity for different sites	Safety Manager communication Weekly Coordination Meeting Cancellation
6	24/02/2020	Transversal activity for different sites	Tenant feedback analysis Archiving Tenant and Supplier Feedbacks
7	24/02/2020	Transversal activity for different sites	Tenant feedback analysis Synoptic of Tenant and Supplier feedback
8	24/02/2020	Transversal activity for different sites	Internal coordination meeting Internal update on strategies in place for the management of the Coronavirus emergency
9	24/02/2020	Transversal activity for different sites	Safety Manager communication Transmission of the summary synoptic to the Properties
10	24/02/2020	Transversal activity for different sites	Safety Manager communication Reminder   Transmission of prescriptions for common areas to Tenants

**[Fig. 4 – Logbook extract, registering the activities carried out on February 23<sup>th</sup>-24<sup>th</sup>]**

### A DYNAMIC APPROACH

To respond in real-time to the daily regulatory provisions issued by regional, national and international authorities, and to assess these directives in the context of the existing Safety Management Plan, a **dynamic approach** is required. Each government indication received is carefully analyzed, extrapolated, and interpreted to subsequently determine the measures to adopt and the documentation to prepare for each stakeholder group to ensure the safety of each and every person within the complex.

The following diagram shows the chronology of events and activities implemented by the Safety Management Team.

## Standards and regulations by the Italian Government

## Actions by Safety Management Team



23<sup>rd</sup> February 2020

### Decree-Law n.6/2020

"Urgent measures for the containment and management of the epidemiological emergency of COVID-19"



### Prime Ministerial Decree 23.02.2020

Implementing measures of Decree-Law 6/2020

Isolation of 10 municipalities affected by the epidemic in the Lodi area and in the municipality of Vò (PD)



25<sup>th</sup> February 2020

### Prime Ministerial Decree 25.02.2020

Extension of the measures previously envisaged for Emilia-Romagna, Friuli Venezia-Giulia, Lombardy, Veneto, Piedmont and Liguria



1<sup>st</sup> March 2020

### Prime Ministerial Decree 01.03.2020

Extension of previous measures and implementation of new measures, differentiated according to the severity of the outbreak among the whole national territory



4<sup>th</sup> March 2020

### Prime Ministerial Decree 04.03.2020

Suspension of educational activities up to 15<sup>th</sup> March 2020



8<sup>th</sup> March 2020

### Prime Ministerial Decree 08.03.2020

Red areas abolished; severe restrictions imposed on Lombardy and 14 provinces of central and northern Italy

The Decrees of 1<sup>st</sup> and 4<sup>th</sup> March cease to produce effects



9<sup>th</sup> March 2020

### Prime Ministerial Decree 09.03.2020

Extension of the measures of the previous Prime Ministerial Decree to the whole national territory until 3<sup>rd</sup> March 2020



11<sup>th</sup> March 2020

### Prime Ministerial Decree 11.03.2020

Closure of all retail sales activities, excluding those who sell essential items



14<sup>th</sup> March 2020

### Protocol about workplaces

Shared protocol for regulating measures for contrasting and maintaining the spread of the COVID-19 virus in workplaces

23<sup>rd</sup> February 2020

### 1. Communication to Tenants and Suppliers

Sending information about prevention from COVID-19 for the use of common spaces and for carrying out activities by suppliers

Suggestion of prevention measures for Corporate Prevention Managers

### 2. Start of feedback monitoring

### 3. Suspension of public events in progress

Suspension of the Venice Carnival, Ivrea Carnival and all the events scheduled in the public squares

24<sup>th</sup> February 2020

### 4. "Smart" coordination meetings

Communication of the conduct of all coordination meetings for the management of interferences by conference call

### 5. Sharing feedback from monitoring

Evaluation of the findings in collaboration with the customer

### 6. Cancellation of evacuation tests

27<sup>th</sup> February 2020

### 7. Survey on the occupancy status

Census of crowding data for each tenant of each building/complex in the first week of health emergency

3<sup>rd</sup> March 2020

### 8. Sharing feedback from survey

Communication of the results of the investigations to Property Manager for the definition of the subsequent actions to be implemented

4<sup>th</sup> March 2020

### 9. Risk management in places opened to the public

Adoption of a document containing the COVID-19 biological risk assessment and the consequent specific provisions to be carried out in spaces open to the public (e.g. museums)

8<sup>th</sup> March 2020

### 10. Communication to Tenants

Request of the measures adopted with reference to the Prime Ministerial Decree of 08.03.2020

### 11. Communication to Suppliers

Request for feedback regarding continuity of service and transmission of formal authorization by the Employer

### 12. Start of feedback monitoring

18<sup>th</sup> March 2020

### 13. Adoption of the document "Emergency management for biological risk of COVID-19"

Adoption for all sites managing the document that implements the provisions of the Protocol 14.03.2020 and contains the measures to be implemented ordinarily and in the management of a possible emergency

Transmission of the document to all stakeholders

The measures and actions chronology refers to the activities of GAe Engineering's Building (SSb) and Event Safety (SSE) groups, but similar procedures were activated for the Construction Site Safety group (CS). As of March 24<sup>th</sup>, the construction sites have been closed and placed in **safe lockdown**, with only coordination and planning meetings ongoing to ensure the sites will be ready to start up again on the reopening date to be defined by the National and Regional Authorities.

### **PRIMARY ACTION STEPS**

On February 23, 2020, the first Italian regulatory provision, the Decree Law 6/2020 "*Urgent Measures for Containment and Management of the COVID-19 Epidemiological Emergency*" was published. After an immediate discussion with the Property and Facility Managers of the various properties the Safety Manager, Giuseppe Amaro, sent out the first official communication on the subject, respectively addressed to the users of the common areas; the Safety Prevention Managers ("RSPP" in Italy); the Medical Coordinators for the various tenants; and the suppliers operating on the various properties (*Safety Management Team (SMT) Actions n.1-2*). Furthermore, for all public events currently underway, the Safety Manager suspended all activities related to the Carnivals in progress (*SMT Action n.3*).

Concurrent with the transmission of these communications, any previously scheduled evacuation tests and in person weekly coordination meetings with suppliers, tenants, and event management companies were changed to on-line meetings to avoid physical gatherings of people. Moving seamlessly to a **Smart Working** scenario utilizing electronic communications (*SMT Actions n.4-6*), the protocols put in place were and continue to be:

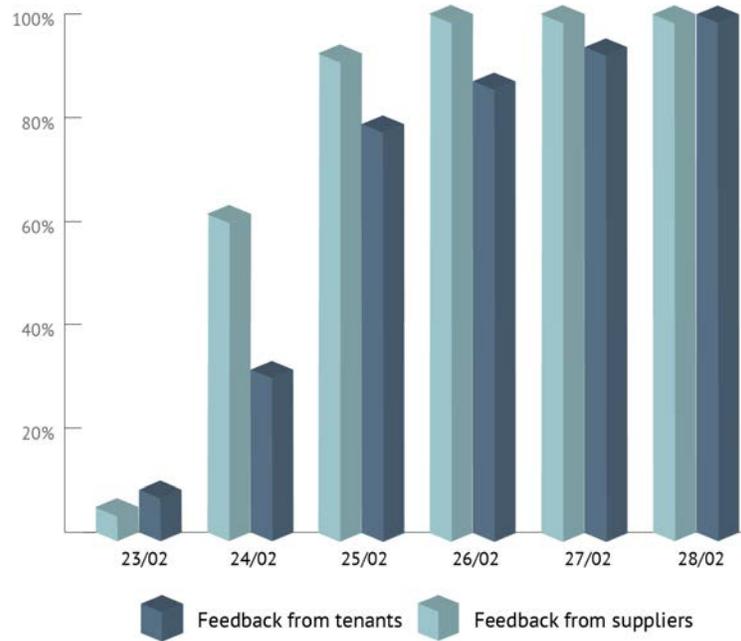
- Internal coordination meetings to establish how to implement strategic decisions between the parties;
- Official Safety Manager communications to property tenants and suppliers, for a total of 16 communications to 147 Tenants and 124 Suppliers in the first two weeks of the emergency;
- Regular update meetings with Property and Facility Management representatives of the properties including issuing 20 executive summary documents providing the feedback obtained from the various Stakeholders;
- Regular update meetings with the representatives of the various security services responsible for monitoring the occupation status in the various buildings and verifying adherence to the adopted safety prevention measures;
- Conference calls with tenants and/or supply companies to respond to specific questions or concerns, for a total of approximately 13 calls.

For the 27 properties under GA<sup>e</sup> Engineering's safety management, there were a total of 61 meetings and calls undertaken in these first two weeks, managed by five members of the GAe Safety Management Team dedicated solely to the Coronavirus emergency.

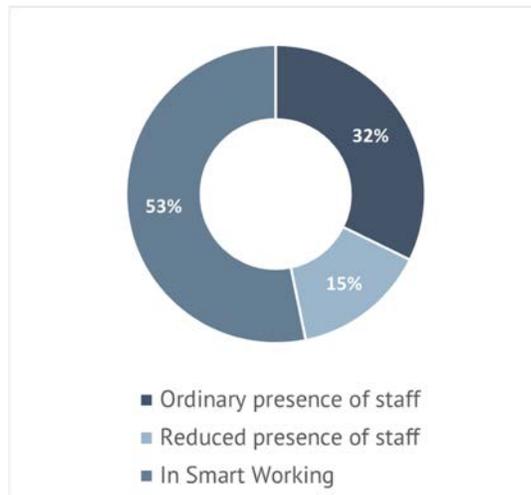
One of the most critical aspects was to guarantee the communication to all of the Stakeholders, therefore from the beginning, the replies confirming receipt of the safety instructions were monitored from both a qualitative and a quantitative point of view and analyzed over time, according to the evolution of the national health emergency [Figure 5].

In addition to receiving written acknowledgment of the safety instructions, with the help of each tenant, from February 24<sup>th</sup> to 28<sup>th</sup> the total crowding of each building was monitored in the first week of implementing the safety prevention measures [Figure 6]. The crowding data of each tenant space was therefore recorded, in order to monitor the progressive adherence of closing the retail and office spaces. The GAe Safety Team also provided encouragement and further information for those who would need, for the first time, to adopt to Smart Working from home. The data was shared daily with each Property Manager, in order to be able to evaluate further actions to be taken in the common areas, such as, for example, the reduction of sanitation activities due to the reduced occupancy (*SMT Actions n. 7-8*).





[Fig. 5 - Trend of tenants and suppliers feedback requested by the Safety Manager from February 23<sup>rd</sup> to 28<sup>th</sup>]



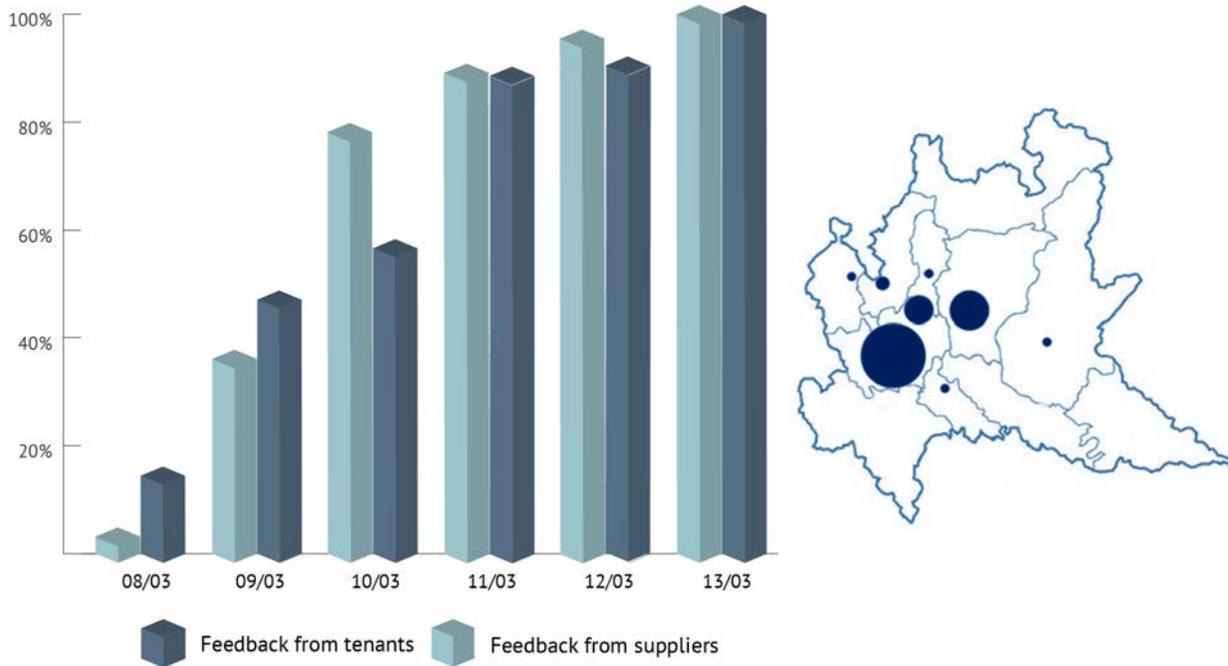
[Fig. 6 – Occupancy status of the sites from February 24<sup>th</sup> to 28<sup>th</sup> ]

As anticipated in the Prime Ministerial Decree of March 4, 2020, an analysis document about Coronavirus biohazard was prepared to supplement the safety documentation in force for spaces open to the public in which the Safety Manager holds the role of Emergency General Coordinator or RSPP (*SMT Action n.9*). This attachment was fundamental to provide order to manage the emergency. It required the participation of the employers, the medical coordinators, and the RSPP of the various properties to ensure communication of the safety indications in accordance

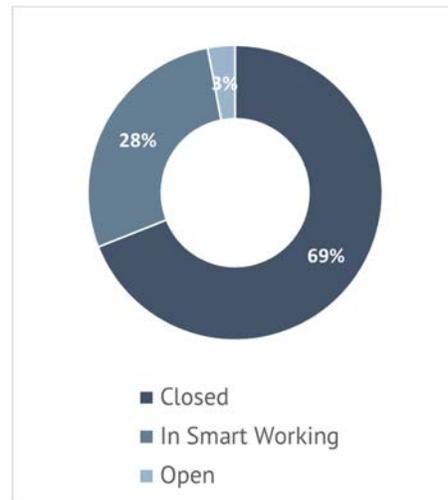
with the different property functions: museums, office buildings, historical buildings, mixed-use buildings, kindergartens, and gyms.

The subsequent Prime Ministerial Decree of 8<sup>th</sup> March 2020 introduced stricter measures for the Lombardy region, and was subsequently extended to all of Italy on March 9<sup>th</sup>, sending a clear signal to the whole population of the seriousness of the emergency. Therefore, new official communications were prepared (*SMT Actions n.10-12*). At this point, it was necessary to monitor the safety measures taken by each company, tenant, or supplier, both to verify the strict adherence to the regulatory provisions and confirm the coordinated effort to respect the safety measures adopted in the common areas and shared meeting places of staff from different companies [Figures 7 and 8].

With the provisions of the Prime Minister's Decree of March 11, 2020, Italy entered into a second phase where all non-essential commercial activities were ordered closed. Many retail stores in the various properties managed by the GAe Safety Management Team fall into this category, therefore verification of the effective immediate suspension of activities, with the appropriate coordination with the security service in the various complexes was undertaken.



[Fig. 7 - Trend of tenants and suppliers feedback requested by the Safety Manager from March 8<sup>th</sup> to 13<sup>th</sup>, with evidence of the supplier's distribution in the Lombardy region]



[Fig. 8 – Occupation status of the properties from March 9<sup>th</sup> to 13<sup>th</sup>]

The main requests and requirements for each user type of the various properties managed by the GAe Safety Management Team necessary to implement the coordinated effort during the first two weeks of the health emergency, were:

- *INDICATIONS FOR USE OF BUILDING COMMON SPACES* - In order to prevent the Coronavirus propagation and to coordinate the measures adopted by the various property owners, the Safety Manager requested the adoption of specific safety measures for the common areas, listed by location, providing the website links with detailed information for each person accessing the space.
- *PREVENTION SUGGESTIONS FOR COMPANY RSPP* - The same safety prevention measures adopted for the common spaces of multiple building complexes have been suggested as a precaution to each individual tenant. The Safety Manager requested the transmission of the indications provided by the various medical coordinators and RSPPs, in order ensure a coordinated effort to guarantee their effectiveness.
- *PREVENTION MEASURES FOR SUPPLIERS* - The Safety Manager asked the various service providers to communicate if any of their workers reside in one of the red areas or neighboring cities, or if any worker had carried out activities or visited any area covered by the quarantine ordinance in the previous 15 days. Any such worker was requested to be suspended immediately and the replaced the following workday. Companies were asked to clarify if the substitution of the worker might create any disruption of service for normal property activities. Finally, the same safety prevention measures adopted for the common spaces of multiple building complexes were suggested in all areas utilized by suppliers as a precaution.
- *IMPLEMENTATION OF DPCM OF 08<sup>th</sup> MARCH 2020 MEASURES: OFFICE, FOOD AND SHOP ACTIVITIES* - The Safety Manager requested urgent and detailed evidence of the measures taken by each tenant to comply with the provisions of DPCM of 8<sup>th</sup> March 2020.
- *IMPLEMENTATION OF DPCM OF 08<sup>th</sup> MARCH 2020 MEASURES: SUPPLIERS* - The Safety Manager requested urgent and detailed evidence of the measures taken by each supplier in order to guarantee the continuity of the services performed, informing of any reorganizations deriving from internal decisions in compliance with the provisions of DPCM of 8<sup>th</sup> March 2020. The request specifically concerned sanitation personnel, Control Room personnel, and any persons responsible for the management and maintenance of alarms, fire-fighting systems, and elevator systems. The Safety Manager requested evidence of the transmission of the

necessary authorization letters or equivalent communications issued to the workers by the various employers.

The signing of the March 14, 2020 Protocol, *Shared Protocol for the Regulation of Measures to Combat and Contain the Diffusion of COVID-19 in the Workplace*, signed by the Government, trade associations, and trade union organizations, has introduced more detailed requirements for the containment of the virus propagation in the workplace, taking into account operating sectors that are unable to adopt Smart Working.

The Safety Management Team immediately accepted and interpreted this provision, authoring a document to be sent to every stakeholder for managing the COVID-19 contagion risk. The objective of the document was to guarantee fulfillment of all the prescriptions provided for by each user of every building, at every level, incorporating the measures undertaken in the previous days in a single document adhering to the latest requirements.

Starting from a single "master document", a detailed analysis was undertaken for the various properties, taking into account the different functions present; the types of surveillance and reception services; and the presence of maintenance operator spaces (*SMT Action n.13*). The document describes the management procedures for ordinary conditions and the management procedures should a suspected positive case of the virus in the complex/building be found, the later requiring an update of both the Risk Assessment and the Coordinated Emergency Plan for each site. The measures aim to protect all employees who necessarily must report for work, because of the nature of the provided service, and who often come into contact with the public. These workers are an active part of the Emergency Management Team, in addition to being responsible for the surveillance of the buildings in which they operate.

The safety protection principles adopted by means of this document primarily concern the management of the Reception Areas and Control Rooms, where limitations have been adopted regarding the personnel authorized to access these spaces, the total number of personnel, and the rotation of personnel. The document specifies the obligation to sanitize all the commonly used devices at every shift change, such as keyboards, mice, and radio equipment.

Reception staff are entrusted with the important function of "filtering" access to the buildings. They must limit access by any external staff, allowing only one person at a time and only for the time necessary to carry out their duties, underlining the need to respect the safety distance of 1 meter from any person present.

Particular attention is paid to the cleaning staff who perform ordinary and extraordinary disinfection services, especially regarding the regulation of access to their dedicated changing rooms.

The issue of natural air recirculation was also investigated. In rooms where air exchange is guaranteed through the AHU system, the air recirculation setting has been eliminated or reduced to a minimum capacity, based on the characteristics of the system and the building.

To facilitate communication and provide a constant reminder of the preventive safety measures in place for all those present in the buildings, the document includes the requirements for the signage to be posted. The document identified the most "strategic" points where each sign type should be placed (i.e. break areas, building lobbies, loading/unloading areas, etc.).

Confined spaces where people might be prone to gather, such as bathrooms and elevators, have been assessed on a case by case basis in the various building. Detailed indications regarding their use and sanitation frequencies are provided. In some cases, specific representative schemes have been developed, to be included on the posted signs.

### **MANAGEMENT OF A COVID-19 CONTAGION (OR POSSIBLE CONTAGION) CASE**

During the work carried out by the GA<sup>e</sup> Engineering Safety Management Team facing the Coronavirus emergency, there were several peculiar cases that had to be evaluated individually:

- Those in direct contact with someone from the Red Zones or to someone who tested positive to COVID-19 (i.e. a relative) both in single-tenant and multi-tenant building;
- Supply contractors from one of the outbreak areas;
- Security or reception staff for offices and residences with flu symptoms.

For each one of these cases, it was essential to quickly establish the measures to be put in place, starting from the evaluation of the extraordinary sanitation procedures; to the tracing of colleagues who came into contact with these persons; to the replacement of staff or of the supply contractors affected; and the immediate evacuation of the spaces prior to sanitization and reopening.

### **CONCLUSIONS**

From the first day, the GA<sup>e</sup> Engineering Safety Management Team set up a targeted and dynamic system to deal with the healthcare emergency, first defining the general intervention lines, then assessing individual cases. From the beginning of the state of emergency until today, all the members of the GA<sup>e</sup> Engineering Safety Management Team have been involved, five of which have been dedicated to managing the risk represented by COVID-19 in the properties overseen by GA<sup>e</sup> Engineering.

The data collected show the increased involvement of each stakeholder present at the various properties, from tenants to individual maintenance operators, in correspondence to the issuing of government measures, starting from the regional to the national and international levels. The same data shows that teamwork between interlocutors has made it possible to effectively realize the measures put in place to respond to the emergency.

Today the GA<sup>e</sup> Engineering Team continues its involvement on the front line, overseeing the safety management procedures for the construction and management of the new Milan Intensive Care Center at Fiera. This honor represents another opportunity to interpret and apply new government provisions and assess the needs arising from individual emergencies into operational reality.