Convention and Exhibition Centres as Temporary Emergency Facilities
Dear colleagues;

This is the second guide to facility management under pandemic conditions to be produced by AIPC and UFI within a few weeks. As a result of the professionalism, generosity and expertise of AIPC and UFI members – particularly those who are members of the Safety and Security Task Force – it incorporates some of the very latest front-line insights that have been and will continue to be gained in the midst of the crisis itself.

Many of our colleagues around the world are seeing their venues repurposed to serve key roles in dealing with the fallout from COVID-19. Many others will inevitably follow. Yet the experience of conversion to emergency use – and the re-commissioning once the crisis has passed – is currently limited to those convention and exhibition centres that have already faced such demands, generally in the context of a natural disaster. The rationale for this guide is therefore to help all member venues prepare for and perform in an exceptional role – a role that they were not specifically designed for but are increasingly being asked or forced to play as temporary emergency facilities.

As the reasons for having to become a temporary emergency facility (TEF) vary, ranging from pandemics to natural disasters, so does the purpose of the conversion. From emergency hospital to shelter to aid distribution center, this guidance has been collected, assembled and presented with multiple possible TEF purposes in mind. As challenging as such conversions may be, they will inevitably result in enhanced overall capabilities over the long term. They will add a range of new experiences and capabilities that will broaden knowledge and add expertise and protocols. These will leave such centres and venues even better prepared to meet the evolving expectations of clients once the current situation has been resolved and business restored.

As with previous guides in this series, the information and guidance contained in this publication are not definitive but will continue to evolve with the benefit of further experiences gained and lessons learned as we move forward through the stages of the current situation. We call on you to share with us any relevant information you may have in this regard, and we will make sure it is incorporated into future releases of materials, guidance and updates.

We can all be proud of the diverse roles members are taking on in providing emergency capabilities for their respective communities and confident that these actions will only further enhance the respect and support of those communities as we move forward into recovery.

Aloysius Arlando AIPC President
Mary Larkin UFI President
This AIPC and UFI guidance aims to help convention and exhibition centres prepare for and perform in an exceptional role they were not designed for but are increasingly being asked or forced to perform: as Temporary Emergency Facilities.

As the reasons for having to become a temporary emergency facility or TEF for short vary, from pandemics to natural disasters, the function of a TEF may vary, from emergency hospital to shelter to aid distribution centre, this guidance has been collected, assembled and presented with multiple possible TEF purposes in mind. The immediate worldwide concern and context for this guidance is the COVID-19 pandemic. The outbreak is placing overwhelming pressure on healthcare infrastructures across the planet. Since early 2020, swiftly and on a massive scale, convention and exhibition centres have become part of the frontline in fighting the disease, from serving as ICU hospitals to conducting thousands of tests a day. Many AIPC and UFI members are leading this unprecedented effort to save lives.

Health, safety, security and operations experts and managers of the International Association of Convention Centres (AIPC) and the Global Association of the Exhibition Industry (UFI) worked together over early April 2020 via the AIPC-UFI Safety & Security Task Force to create this good practice guidance. While the information is applicable to all kinds of TEF uses, its main emphasis is on the use of TEFs as emergency hospitals.

Convention and exhibition centres have been used in an emergency capacity across the world many times in recent decades, sometimes for weeks and sometimes for months on end. TEFs are most often set up in the wake of major natural disasters that damage or destroy large amounts of infrastructure, like the 2004 Tsunami and Hurricane Katrina in 2005. Time and again they have proven crucial to community survival: as a care centre, a shelter, a hub of aid distribution, and for other emergency purposes.

As military planners, emergency medical facility experts and staff and management have played a critical role in running such sites, the truth is that convention and exhibition centres have become part of the frontline in fighting the disease, from serving as ICU hospitals to conducting thousands of tests a day. Many AIPC and UFI members are leading this unprecedented effort to save lives.

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While many chronicles of the operation of TEFs highlight the fact that it is government agencies that most often run such sites, the truth is that convention and exhibition staff and management have played a critical role in preparing and operating nearly all TEFs.

As military planners, emergency medical facility experts and architects repeatedly note in research and academic literature on the topic, convention and exhibition centres have numerous advantages compared to other structures for being used in a TEF role. These include a lot of space; extensive, advanced infrastructure, particularly when it comes to electricity, AV and IT; high-quality safety features; standard security features; big kitchens; loading docks; large-vehicle ramps and parking areas; good accessibility; and, often, a central location surrounded by other, useful infrastructure.

This guidance aims to capture and offer a range of ideas, measures, insights, plans, procedures, and good practices from both past experience and recently developed material to facilitate the conversion of convention and exhibition centres into a TEF. While not a manual, this guidance does aim to offer something close to it: readily useable, structured information, much at the detail level, to help guide the process.

The information stems principally from joint AIPC-UFI Task Force members specialized in health, safety, security and operations. Task Force members are:

- Carlos Moreno Clemente | Head of Mobility, Fira Barcelona
- Sunil Govind | Senior Director Facility Management & Operations, Bangalore International Exhibition Centre
- Rik Hoogendoorn | Manager Safety & Security, RAI Amsterdam
- Darren Horne | Senior Manager Security & Safety, Melbourne Convention Exhibition Centre
- Sethu Menon | Senior Vice President Operations, DWC Dubai
- Mark Laidlaw | Operations Director, Scottish Event Campus
- Michiel Middendorf | General Manager, World Forum
- Robert Noonan | Chief Information Security Officer, Boston Convention & Exhibition Centre | Massachusetts Convention Centre Authority
- Tomas von Tourchtaninoff | Head of Unit, Safety, Security, Stockholmsmassan
- Muhammad Yusril | Manager Venue Security, Crime Prevention and Operations, SingEx

In addition, special assistance was received from other AIPC and UFI members, notably:

- Enrico Pazzali | President, Fiera Milano
- Enrica Baccini | Chief Research and Development Officer, Fiera Milano
- Corinna Häsele | Director Research & Strategy, Reed Messe Wien, Vienna
- Philip Holzman | Director of Marketing and Development, Espacio Riesco Santiago
- Mandy Luk | Director of Business Development, Asia World Expo Hong Kong
- Ian Taylor | Managing Director, National Exhibition Centre Birmingham

Coordination of the collection, vetting, writing, and formatting of this information was performed by Glenn Schoen of Boardroom@Crisis BV, based in The Hague. Research assistance was provided by Madeleine Eichorn.

These five chapters are meant to structure the information collected as logically as possible, and cover the three main phases of repurposing or conversion of a facility: setting things up, running an operation, and afterwards, closing things back down in preparation for a return to normal. Most chapters are further subdivided into sections. It is recognized not all of the information provided can be clearly placed into one chapter or section as there will by necessity be some overlap.

As the circumstances for taking a convention or exhibition centre into use as a TEF will vary widely, indeed sometimes dramatically so, and centres themselves vary considerably in size, make-up, location and services, the advisability, applicability and proportionality of steps/plans/procedures/measures should be taken into account when considering their use. So should the legal and compliance rules and frameworks that might apply. In some cases, the government may simply confiscate a facility for TEF use; in others, management might draw up a proper contract.

AIPC and UFI management hope that the information provided in this guidance will contribute to the improved preparedness, operation and recovery of convention and exhibition centres when put to use as a temporary emergency facility.
The TEF in Context
The circumstances in which a convention or exhibition centre will be taken into use as a temporary emergency facility (TEF) can vary widely. The kinds of (big) emergencies to prompt creation of a TEF vary considerably, though most are natural disaster related:
- Airplane Crashes
- Avalanches
- Building Collapses
- Cyclones/Hurricanes/Typhoons
- Earthquakes
- Floods
- Hazardous Materials Releases/Spills
- Landslides
- Pandemics
- Shipwrecks
- Terrorist Incidents
- Tornadoes
- Tsunamis/Storm Surges
- Volcanic Eruptions
- Wildfires

Based on precedent, the most likely purposes of a TEF are:
- As an emergency medical facility
- As an emergency shelter/housing site
- As an emergency aid distribution centre e.g. food, water, first aid packages
- As an emergency services staging area e.g. military and Search & Rescue base
- As a mortuary to collect, store and process disaster victims’ remains
- A combination of the above

In the case of major large-area disasters like pandemics, hurricanes and spread-out wildfires, convention and exhibition centres often serve as a TEF alongside other types of facilities. This may include hotels, resorts, sports arenas, schools, museums, meeting halls and warehouses. In such situations, they often become part of a larger emergency supply and logistical train, with the military serving as the backbone of the operation.

A number of countries like Japan, the US and UK have official designations for a few different types of TEF. Names vary from Alternate Care Facilities, Emergency Medical Stations, Temporary Housing Shelters, Surge Facilities, and Temporary Civil Defense Sites to Nightingale Hospitals.

The US Army Corps of Engineers has 4 standard designs for realizing emergency facilities in pandemic situations (see bottom right), one of them specifically for convention and exhibition centres.

A few international organizations also have specific terms for types of temporary emergency sites, like the UN WHO’s typology for Field Hospitals (in categories 1-4). As part of Cold War civil defense plans, many countries from Sweden to Russia to China pre-designated TEFs for medical, evacuation and emergency shelter purposes.

Many other nations developed similar, increasingly standardized plans for a different reason than the 1950s and 1960s forward, namely natural disaster preparedness. This includes nations subject to annual storm seasons like typhoons and hurricanes, or ones situated in active seismic and volcanic activity zones. In a significant number of these countries ranging from the Bahamas and the US to Japan and the Philippines, convention and exhibition centres have actually been used for emergency purposes following storms and natural disasters, sometimes repeatedly so.

A quick scan of experiences worldwide prior to 2020 indicates that most TEFs are set up and taken into use between two and ten days, and operate anywhere from several weeks to several months. In extreme cases, use is more prolonged. This is particularly true in areas where the TEF is the principal or only facility of its kind (such as on an island) and where area infrastructure has been badly damaged in a natural disaster. There are other factors that can contribute to ‘TEF longevity.’ In particular, centres that include a hotel are often gauged as more suitable than those without one. A hotel can be converted into a makeshift hospital or shelter, and if necessary a large group of people like medical personnel can stay on-site at the TEF without having to travel home to rest – a particularly challenging problem in areas hit by natural disasters.

Most of the first widespread use of convention and exhibition centres used as a TEF is to create ‘speed lanes’ for the swift, safe processing of a large number of test subjects, while the buildings and other site infrastructure are hardly used.

In practice, a TEF often sees some level of dual use. As a hospital, it may also have a room for medical staff to stay and sleep, for instance, or an attached hotel where homeless people stay.

Initial Considerations on Serving as a TEF
Interviews with convention and exhibition centre owners and operators performed for this guidance yielded the following good practices on considering functioning as a TEF:

1. Realize your facility may be able to assist in an emergency even if there are no immediate emergency conditions in effect near your facility. To assist local health authorities with the COVID-19 pandemic, for instance, the AsiaWorld-Expo (AWE) Hong Kong in March 2020 first facilitated the opening of a triage site for the Hospital Authority and then the opening of a separate Specimen Collection Centre for the Department of Health. The AWE, otherwise closed, could operate normally with standard event checklists but in this way also help its community and the government with a larger emergency situation.

2. Ensure there is evident need for your facility at that moment for that purpose. In some historic crises, officials simply ‘went for’ a facility and put into use a facility they knew was available or thought would be easiest to use. There was no consideration of options in using the site: the circumstances forced the issue. These situations aside, if there is time and your management has a say in it, consider what authorities want to use your venue for and if there is better choices to be made. If roads will be inaccessible due to floods in a few days and cut you off from surrounding areas, does it make sense to become inaccessible for a few days? And if there are better choices to be made, if roads will be inaccessible due to floods in a few days and cut you off from surrounding areas, does it make sense to become inaccessible for a few days?

Experience indicates it is extremely difficult to repurpose your site a second time in the middle of a crisis, for instance trying to turn your emergency shelter into an emergency hospital. If at all possible, you only want to commit to a crisis role once. So try to ensure from your own perspective that the use of your facility for a specific TEF purpose like a hospital or shelter makes good sense and is not impractical or wasteful. If you use it, you do, so is the use of your facility for a specific TEF purpose like a hospital or shelter makes good sense and is not impractical or wasteful. If you use it, you do, so it is the use of your facility for a specific TEF purpose like a hospital or shelter makes good sense and is not impractical or wasteful.

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“There is no specific playbook for this.”
Ian Taylor | Managing Director National Exhibition Centre
UK (Repurposed into NHS Nightingale Birmingham)

6 | Establish clarity about the likely costs as to who will pay for what. A growing number of countries have standard mechanisms so government agencies can finance the emergency use of privately owned facilities. An example is the United States, where the Federal Emergency Management Agency (FEMA) can assist states by facilitating access to a range of federal, state and national financing and compensation packages. In this manner, they helped convention centres from San Diego to Chicago to New York prepare for their role in the fight against COVID-19. A substantial number of countries by contrast do not have such existing arrangements, or they are incomplete. In crisis situations where there is no other choice and decisions are made at the spur of the moment, addressing questions about financing may be literally impossible or seem irrelevant. Many situations like pandemics do leave time to consider costs including such matters as terms of use, tenancy period and critically what returning to normal means and who’s responsible beforehand, however, and good practice dictates attention be paid to this.

“In discussions with authorities about making your facility available in a crisis,” notes General Manager Michel Middleendorf of the World Forum in The Hague, “it is important to be forthright about financial issues. What are the expectations? How will expenses be covered? Who will pay for what, using what funds?” He observes that “it is great that you want to serve your community. But if you just plunge ahead and after a week you run out of supplies and money to pay your staff, contractors and utility bills, you’ve got a big problem. Resolving the issue of money at the start lets everyone know where they stand, enables planning, prevents fights and stress, and generally helps ensure things will go well. In the end, it’s about ensuring good process and preempting problems.”

7 | Apply a tough mindset. Ian Taylor, Managing Director of the National Exhibition Centre (NEC) in Birmingham, England observes that “in suddenly becoming an emergency facility in unusual times, you have to prepare for a tough time. It’s difficult, it’s stressful, it can be challenging in the extreme. There is no specific playbook for this. While everyone is greatly motivated and working with tremendous energy and purpose and unity to serve their community and their country, things can get very hard. There will be frustrations, exhaustion. Whoever tried to build a massive hospital while you have to keep six feet apart at all times, and with part of your staff working from home? In these circumstances, you have to quickly develop and apply a tough mindset to continue to perform properly.”

Key Areas Requiring Attention
Convention and exhibition centres focused on good practice have found there are a number of functional areas that require attention in preparation for becoming a TEF. While there are multiple models for this and in some acute situations these areas are hard to properly address, as circumstances allow, attention should be focused on:

- Command and Control (Leadership/Management)
- Communication (Internal and External)
- Safety and Security
- Secondary Requirement Increases (ability to handle a workload surge)
- Continuity of Essential Services
- Human Resources
- Logistics and Supply Management

Good practice guidance from the World Health Organization (WHO) in Europe exists to operationalize the aforementioned areas of attention. While this guidance was developed for hospitals, virtually all of the checklists are applicable for use for setting up a hospital TEF as well. Many checklists and items on them can be used when setting up a TEF for other purposes as well. See Appendix 1 for two sample checklists from the guidance on the topic of Human Resources and on Safety and Security.
A similarly useful good practice guidance document is the Mega Shelter Planning Guide from the International Association of Venue Managers and the Red Cross. Its key areas focus is broader than that of the WHO guidance, and focused on housing TEFs rather than medical TEFs, but similar to the WHO guidance it is highly practical. In contrast to the WHO guidance, it is more extensive, and offers more background and context information beyond the ‘how to’ and checklist content.


Steps to Set Up a TEF

Evolving good practice on the steps required to plan and prepare a TEF shows the following key phases apply:

1 | Scoping out the requirements in relation to the site (what work will be used for)
2 | Laying out the site (what will go where more specifically)
3 | Fitting out the site (building it to fulfill its function)
4 | Equipping the site (getting the right equipment in the right place to use it)

The UK National Health Service for its emergency Nightingale hospitals based in convention or exhibition centres calls this process ‘Scope Out, Lay Out, Fit Out and Kit Out’. (See further for more details.) Military Corps of Engineers troops from Brazil to the United Kingdom to Indonesia to the United States have similar ‘one, two, three, four’ descriptions of facility planning and preparation phases. Find out what your local health and military authorities use, and align with them by adopting the same steps and terms.

In entering into and following these phases, evolving good practice around planning and preparing for a convention or exhibition centre to become a temporary emergency facility or TEF calls for the following, as applicable and as circumstances allow:

1 | When first engaging with authorities to become a TEF, gain clarity on what kind of TEF it will be and who will be in charge of planning, preparing and running the site, and what will be used in various government agencies, national, regional and local, working in parallel. They are themselves inventing and figuring out who should be doing what, and leading what. It may take several days to establish what kind of TEF is to be prepared, and who the ultimate authority is. This initial what will it be and who will be in charge ‘scrum’ is normal in situations where different agencies who may not have worked together before are moving into unchartered territory in a crisis situation. It is important, however, that a centre’s management gets clarity on these matters fast so they can scope, organize, and direct questions appropriately and effectively.

2 | Operate a small, agile, consistent management team of your own to keep control on your end. You and your convention or exhibition centre team are likely to be overwhelmed by what comes next as all sorts of organizations, people and activity and supply flows get underway. There may be a tendency to just ‘go serve’ and become an adjutant to an official put in charge of your facility. Experience indicates that it is generally useful to maintain your own management team, and function much as a crisis team does, which you effectively but informally appoint (what will it be used for). This allows you to maintain your own positioning and influence matters, particularly when it comes to the use of your own staff, contractors, and other resources. Notes Fiera Milano President Enrico Pazzali: “Maintaining our own management position was strenuous at the start but valuable. You have to understand, when the regional government of Lombardy asked us to set up a COVID-19 ICU hospital from scratch, we started with just the two of us. Three days later, I had over 600 people on site and dozens of companies and agencies involved. It proved really important that we didn’t leave all decisions to the government, particularly as they needed us to see the process almost as much as we needed them. Directing our own staff and contractors was key to our success.”

3 | Call in all available staff and managers and brief them on what is about to happen. If you cannot do it in person, do it remotely. Inform them of what will likely take place and what the potential risks and implications for them and their families are; ask them to consider whether the circumstances allow them to assist, and how; ask them for their commitment if they are willing to assist; and ask if there are any special circumstances that need to be taken into account (health, financial, home situation, transport etc.). While the, often, important is what we need to know (unless directed otherwise it is useful to use your standard event process workflow). “When authorities approached us about constructing an emergency hospital in the spring of 2020,” notes RAI Amsterdam Safety and Security Manager Rik Hoogendoorn, “we found using our normal approach to event planning worked best. Everyone knew the drill, what their place and role was, and how to work efficiently to accomplish the mission. Using regular in crisis time, where feasible, is an effectiveness multiplier.” As soon as you can, find clear role setting in your team: who is coordinating, who are the decision makers, who will issue directions and plans, who will prepare NDAs, who will compile costs, who will form a communications plan, and so on.

4 | Inform all of your key contractors who might be assisting with the effort, and check on their willingness, preparedness and capability to help. Seek to ascertain if there are specific conditions to be met. For instance, they might inform you that “we are willing to help with X number of people but we need help with transporting and housing them,” or “we will assist with the electro-technical installations but cannot access our own equipment.”

5 | Inform your other key stakeholders including key customers that you will be used as a TEF, so they are not surprised when they hear this, they are assisted with their own planning and expectations, and so they can support you in turn.

6 | From the start, keep security and safety front and centre. Security on site may be controlled by others but keep a team of your own. Your own interests are best known to you and you are best placed to have these covered. Don’t assume others will do this for you. A security-minded focus should remain during the busy period of the build. For example, many site drawings of layouts and critical infrastructure are requested by many people. In normal circumstances, such things as detailed plans of your facility and the inner workings of your WiFi network are protected information and would not be provided easily. An NDA should be presented before any drawings or plans are released and a disposal / destroy protocol agreed at the end. You want to make sure you have done all you can to prevent your critical drawings reaching further than they need to. As for safety, people like the military often work in a very different way, with different risk factors than you are used to at your facility. Notes Operations Director Mark Laidlaw of the Scottish Events Campus: “We are still responsible for our people. Take the time to assess risk, even in the busy times. Do not charge ahead. Safety First. Be prepared to make strong safety decisions even when speed seems the most important thing. Set the tone around safety.” And where, for instance in pandemic situations, this is called for, consider social distancing, such as for briefings and eating breakfast, lunch and dinner.

7 | If there is clear lack of security, address it first. If you are in a natural disaster situation marked by breakdown in law and order, or where this is likely to occur, arrange for security first. It is all good and well to start planning and preparing your site for emergency use but if groups of looting criminals are about to attack or your staff and contractors cannot safely reach your facility because of crime or civil unrest, things simply will not work. Basic security—like basic safety—is a fundamental requirement to prepare your site for TEF use, so if you as an organization cannot provide it, first ask for immediate help from the authorities. Particularly if there are recurrent incidents, ask for a permanent security presence, like armed policemen, civil guards, or soldiers at the entrance(s).

8 | Realize you may be in a fight for resources when it comes to contractors and supplies. Market demand for skilled workers from electrical work to construction and IT installation can jump quickly if multiple big facilities near you are vying for the same services. So can demand for things like exhibit floor partitions, electrical cables, generators, pumps, tools, working lights and hundreds of other items. Consider your position, consider your needs, and move quickly. In a situation of joint solidarity and with a little flexibility as regards time, resources might be shared. If not, you may have to act fast on your own, or just with the authorities as a partner, who may have scarce resources available as well.

9 | Consider whether or not you might want to ask for donations if time and circumstance allow. This could be a request for money, food, supplies, or other means. In times of need, the support provided can be overwhelming and very helpful. An example is the Fiera Milano in Italy, which when preparing to become a COVID-19 emergency hospital in late March 2020 asked for financial donations to
help defray costs, and received overwhelming community support, starting with 23 million Euros in direct donations. “Funneling public support in this manner was not only highly helpful, constructively and unifying as many people finally had a focus to direct all of their emotion and contributions towards, but it meant we in one fell swoop did not have to waste any time or energy on financing.”

10 | Engage authorities on communications early, and inform the press and public you will become a TEF. Check on whether authorities will put a Non-Disclosure Agreement (NDA) in place, or whether you might want to put one in place yourself for third parties like contractors coming to help who have never worked at your centre, this to protect sensitive and privacy-sensitive information and information flows. Because your staff may suddenly be working with a range of officials they do not know and be given access to all manner of sensitive information they would not normally receive (who is ill, who died, casualty counts, shortages, other problems), government agencies often look to control this. They typically seek to do so by assigning staff to your facility who are already government screened, or trained, and by using some form of a NDA.

Usually, committing to such an NDA is good and necessary, but ensure, if possible, that you as an organization retain some leeway to communicate on your own, both with the public and your key stakeholders, like suppliers, contractors and customers. Ask for an official OK to announce you will be used as a TEF, and at the appropriate moment, inform the press and public about this. An example of this is usually a statement on your website, but some sites go much further, like setting up a specific Wikipedia page. But one good reason to do this kind of proactive communication is to prevent unnecessary calls and visits to your facility by people unaware you are busy helping your community.

11 | Plan regular daily meetings with government officials who are helping prepare and will operate your facility. You are in this together, and need to optimize cooperation. This way everyone knows when the next set moment will come to share information and table, discuss and resolve problems. This can be a call-in or an in-person meeting, for instance scheduled for every 3, 6 or 12 hours. “This regularity was a key success factor for us in building an emergency hospital in record time, notes Corinna Häsele of hospital you are to become, exactly then have medical experts in hospital operations in those exact fields take the lead and help you set things up. “This was a big learning for us,” observes Enrica Baccini of the Fiera Milano. “Everyone is doing their very best but confusion at the start is the order of the day as layout configuration possibilities are gauged and requirements change. In the 10 days we had to become an ICU COVID-19 treatment facility, the layout design changed no less than 14 times. Let the medical experts apply their expertise first and foremost, and then, be flexible. For certain, things will change before it’s all done.”

12 | If you are going to build an emergency hospital, involve medical experts from the very start, and be prepared for a lot of layout configuration changes. This may sound evident, but experience shows it is not always the case. In a lot of past situations it has been people other than medical specialists who with all good intentions got going first: generalists, crisis managers, soldiers, civil defense workers, contractors: everybody but the medical specialists. And then things all had to be changed around again. Even medical specialists often change their minds or get conflicting orders about exactly what the facility is supposed to do when completed, or how it is to function. Virus cases or not? Critical ones or recovery? ICUs? Operating tables? Emergency dental care? Dialysis machine ward? To the extent you can, figure out what kind of hospital you are to become, exactly then have medical experts in hospital operations in those exact fields take the lead and help you set things up.

13 | If you do not have one already, form a WhatsApp Group or use a similar App or virtual mini-communication network that links all the main people involved in on-site preparations, planning and execution. Ensure this links key convention or exhibition staff/managers with key government/other officials so they can communicate directly. Other means can be used, including handing out walkie-talkies and the like, but as team participation changes and expands, fast and easy – an App – often works best. Similarly, there are free, easy to download services for secure communications if extra sensitive matters need to be discussed, like Signal. Stress upon everyone to keep communications short and to the point.

14 | Beyond voice communications, think efficiency of information collecting, sharing and storage. Create a central filing system. Make this the only point of collection and progress needs to be. Related, create a speedy communications procedure to get key information to key people. The site may become different, or be new to people. The site may become different, or be new to people. The site may become different, or be new to people. The site may become different, or be new to people.
15 | See what emergency plans and procedures you already have that you can use or adapt and share with officials for preparing your facility to serve as a TEF. Among the plans facilities use as the basis for helping themselves and authorities are (see next chapter for procedures):
- Pandemic Response Plan
- Health & Safety Plan
- Business Continuity Plan
- Continuity Activity Plan
- Crisis Management Plan
- Communications Plan
- Utility – Building Systems Plan

16 | Make copies of maps of facilities to share with incoming officials, contractors and first responders. If already fixed or known, identify key operational locations on these maps, e.g. location of security operations, crisis management meeting room, building management systems control room, IT room. Similarly, when maps for planning purposes showing the newly intended layout of your facility are produced, distribute these. They can help people visualize where things have to go, or ought to go, and sometimes help sequence preparation steps, like what larger structural materials need to be moved or brought in a hall first, from where, in what order. Remember to control or destroy sensitive documents at the end.

17 | Make copies of key documents on paper and electronically to share. Pay particular emphasis to the functioning and particulars of key systems, e.g. building management, water, electricity, air, WiFi, etc. so these can be shared for assessing, planning and executing on requirements. Remember to control or destroy sensitive documents at the end.

18 | If at all possible, engage the military for help with planning and logistics. While it is often local, regional or national authorities who can or will call in the military, as an organization it is often the most capable and best positioned entity to help with large scale emergency assistance projects. Both on the planning and requirements side and on the actual movement of supplies and equipment logistical side, military units are often uniquely qualified and qualified to do the heavy lifting. This includes preparations for helicopter landing and lifting operations, both for people and for supply and equipment transport. Also in a growing number of COVID-19 emergency hospital settings such as for example at the Stockholmssmassan convention centre in Sweden are helicopter operations becoming an integral part of operations.

An example of a map showing the detailed emergency hospital layout of the Vienna convention centre (Reed Nossa Wien) | April 2020

19 | Perform a quick baseline supply inventory to check exactly what you have available in terms of supplies and materials. This should be electronically logged and if possible captured with photos as evidence of what you began with, as many supplies will be likely be put to use or distributed. To the extent your staff will be responsible for particular supplies, institute a regular inventory control check to keep track of usage rates and replacement requirements. Unsecured, unsecured supplies may spoil, become damaged, lost or stolen.

20 | As a general rule, take on only what you are good at. You may typically offer a service to clients, but ask yourself if you are best placed to provide this same service to realizing a TEF. There may be various reason not to, such as your workload, the size of your resource pool versus speed of delivery, and being unfamiliar with medical standards and different service levels. In line with this, be prepared to change typical responsibilities and reporting lines to get the right people in the right place. You may be seeking the right skill and temperament or added experience rather than a typical job function. Some convention and exhibition centres being prepared as a TEF chose to make one of their larger contractors the main point of contact and coordination for all our other contractors. This was to reduce workload, streamline the response plan and make medical or housing standards and service levels consistent to one design, across the whole contractor base.

21 | In planning, pay particular attention to waste disposal. Different kinds of emergencies can generate different kinds of waste challenges. A temporary shelter for 20,000 hungry, sick people including lots of infants without fresh diapers will see a different but possibly equally vexing waste problem as an emergency hospital producing tons of COVID-19 toxic waste. Where and how will waste be collected, where will it go? Does recycling plastic bottles and refilling them with water make sense? Where possible, draw on available expertise to design an appropriate and safe waste disposal process, and do not forget to estimate the likely high volume of waste you will be processing.

22 | In planning, pay particular attention to fire safety, especially when becoming an emergency hospital. Becoming a TEF means a lot of activity and a lot of people will be taking place or present at your site. This by itself requires extra safety vigilance. A lot of equipment brought in during emergency situations can pose extra hazards, and these should be identified and addressed as best as possible. Consider, for instance, the best placement of fire safety measures for large oxygen canisters for hospital ICU use, of large compressed gas bottles to drive machinery, and of fuel bladders used to run helicopters.

23 | If time allows, conduct exercises and pre-planning sessions with emergency services to better prepare for what is coming. If a slow-moving major disaster like a pandemic or still far-off hurricane is creeping its way to your country, and time allows, exercise. Prior familiarity with the emergency services you will be working with is found to have a high payoff. Belgian, Dutch, Brazilian, UK, US and German officials contacted for this guidance who collaborated with convention and exhibition centres in exercises in previous years indicate this was beneficial in helping them prepare to set up TEFs. Centre managers for their part indicate the same. Observes Ian Taylor of the National Exhibition Centre Birmingham: “joint training and crisis management exercises proved invaluable. Knowing certain people and how they work and what they can bring to the table was a key factor in making certain things go better and faster in setting up NHS
Detailed Checklists and Guidance for Setting Up a TEF

For detailed planning and preparing your TEF for use, see the following documents:

- Good practice European WHO guidance on realizing emergency ICU hospital. Detailed slide-deck style document offering insight on all different aspects, facts and figures regarding the COVID-19 ICU facility inside downtown Milan’s Mica. The contents includes key lessons learned (most used in this guidance).

- Good practice Fiera Milano guidance on setting up an emergency ICU hospital. Detailed slide-deck style document offering insight on all different aspects, facts and figures regarding the COVID-19 ICU facility inside downtown Milan’s Mica. The contents includes key lessons learned (most used in this guidance).

- Good practice WHO Health Programme Severe Acute Respiratory Infection (SARI) Treatment Facility Design – Module 2: Designing Screening and Treatment Area. WHO SARI-FACILITIES_MODULE-2.pdf

- Good practice WHO Health Programme Severe Acute Respiratory Infection (SARI) Treatment Facility Design – Module 3: Repurposing an Existing Building into a SARI Treatment Centre. WHO SARI-FACILITIES_MODULE-3.pdf

- Good practice American Institute of Architects guidance on all manner of building and structural issues in relation to emergency preparedness. This includes a number of checklists. This document and in particular its Appendix B constitutes one of the world’s largest online comprehensions of its kind, from anti-high wind to anti-earthquake and anti-tsunami design.

- Good practice Joint Commission Resources guidance on setting up a Surge Hospital. Prepared in response to challenges around hurricane relief efforts in the United States and considered a key resource for COVID-19 operations.

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Good Practice: Operating as a TEF

Evolving good practice around operating a convention or exhibition centre as a temporary emergency facility or TEF calls for the following, as applicable and as circumstances allow:

1. Log key developments in a daily log. Keep track of key developments to help track planning requirements, offer overview on measures taken to be monitored, and to have a record of all that was done for insurance, compliance, and legal purposes. Such a log record can also be used for eventual investigative purposes.

2. Enforce routines when it comes to regular staff briefings and communication. Try to enforce a regular schedule of staff briefings to keep all hands apprised of developments and up to date on unfolding plans. Make sure to include staff working from home or otherwise remotely.

3. Keep your ‘work from home’ staff close. Certain disasters including pandemic can witness a lot of staff members supporting efforts at a TEF from home. It is important to keep them well-informed and engaged, also for mental health reasons, and to ensure longer-term good practice. The effectiveness up remote support for a crisis operation often stands in direct relation to their level of engagement.

4. Monitor who comes in and out. Access control, depending of what a TEF is used for, can be crucial. The presence of unwanted or ill persons can disrupt TEF operations, and an appropriate entry protocol – if at all feasible supported by credentialing like badges or passes – with guards at entryways can help guard against this. In the case of a pandemic, a form of health screening may be required. Where possible, this should be done right away and seal these areas before outside parties come in and ‘confiscate’ such areas by taking them into use without permission, or use them for personal purposes, like sleeping, smoking, or just relaxing to get a break. This cuts down on the number of rooms and areas that need to be secured, checked, patrolled, and supplied with electricity. If you are in use as an emergency shelter, whether for a particular group like the homeless or for the general public, this is a particularly important point to pay attention to.

5. Alert your staff to the presence of journalists so they can assist appropriately. During a crisis, many journalists seek to educate the public and generate unity and support for TEF works by highlighting their efforts. For instance, a TV crew follows a nurse or a doctor around as he or she enters and exits an ICU, or a news photographer takes pictures of a staff member feeding a needy, physically challenged homeless person. So too, staff members might decide to themselves engage the public or particular media platforms via social media, by sending out messages or stickers, flyers, handouts or static images. This to help convey the core message(s) better and faster, short, clear, and visually supported by bold graphics.

6. Consider operating a hotline or special ‘lifeline’ contact number for clients, vendors or other stakeholders so they can continue to contact you even as the entire focus of your operations is on serving as a TEF. This also so they can (continue to) support you.

7. As you start operations, determine which parts of the complex will definitely not be used and can be closed down. Where possible, do this right away and seal these areas before outside parties come in and ‘confiscate’ such areas by taking them into use without permission, or use them for personal purposes, like sleeping, smoking, or just relaxing to get a break. This cuts down on the number of rooms and areas that need to be secured, checked, patrolled, and supplied with electricity. If you are in use as an emergency shelter, whether for a particular group like the homeless or for the general public, this is a particularly important point to pay attention to.

8. Alert your staff to the presence of journalists so they can assist appropriately. During a crisis, many journalists seek to educate the public and generate unity and support for TEF workers by highlighting their efforts. For instance, a TV crew follows a nurse or a doctor around as he or she enters and exits an ICU, or a news photographer takes pictures of a staff member feeding a needy, physically challenged homeless person. So too, staff members might decide to themselves engage the public or particular media platforms via social media, by sending out messages or images. It is considered good practice to monitor and guide all such activity, so that appropriate standards are maintained. This relates both to legal constraints like personal privacy rules and simple decency and bad taste: no one really wants a photograph of a pile of dead bodies with the logo of your centre behind it snapped in the emergency hospital morgue.

9. Keep your written procedures updated, add as needed, and distribute widely. This so that others not familiar with how you do things – extra help, volunteers, replacements, soldiers – who come in at the start but later in the process, after you have already opened as a TEF, can perform at least basic tasks to your standards and requirements.

Among procedures widely and actively used in TEFs in the past are:

- All safety procedures, notably:
  - Managing suspected virus incident response
  - Waste handling and disposal procedures
  - Inventory control and security of supply procedures
  - Increased/expanded hygiene and disinfection cleaning regime
  - Procedure to conduct health screening of people entering the facility
  - Procedure to report and help in case of illness among staff working from home
  - Protocol for handling the deceased including possible storage of remains
  - Mental health / helpline and suicide prevention procedures
  - All security procedures
  - All crisis management procedures
  - All procedures dealing with Building Management Systems
  - All logistics, supply and transportation procedures
  - All Internal and external communications procedures

For examples of different procedures, see among others:

- Chapter ‘Concept of Operations’ and Appendices in ‘Building Emergency Mega Shelters’
- Chapter 2 ‘Good Practice: Procedures’ in ‘AIPC and UFI Good Guidance on Covid-19 Challenges’

10. Where possible and appropriate, display procedures in printed or graphic form openly as much as possible for ease of use and understanding, for instance on walls, doors, bulletin boards. This may be most appropriate in TEFs where everyone inside is working on the same mission and there is no general public present, like at sites caring for patients, serving as mortuaries or sorting and distributing aid packages.

11. Personal good hygiene guidance should similarly be prominently displayed. Such guidance is preferably short, clear, and visually supported by bold graphics. This to help convey the core message(s) better and faster, particularly in a multi-lingual community. If available, use electronic messaging boards alongside any posters, stickers, flyers, handouts or static images.

12. In addition to safety, pay particular attention to security operations. Offering a secure environment inside a TEF is an important aspect of maintaining effective operations over the longer term. Particularly in emergency shelter TEFs, or on case of shortages, tensions can flare. If you keep large stores, or an improvised pharmacy, drug addicts might target you. Similarly, if you are an improvised aid distribution centre, for instance one used by authorities to distribute tons of goods in a flood zone or earthquake impact area, you may be of interest to gangs seeking to profit from black marketeering.

Examples of graphics used by the Australian government and WHO.

Two good practice examples of Spanish-language procedures from the Santiago Espacio Riesgo en Chile (earthquake zone risk) to be wall-mounted in emergencies.
A lot of TEFs have to rely on their own security while up and running. Among good practice efforts exercised in TEFs in the past when it comes to security are:

- Conduct regular patrols of all interior and exterior areas, preferably by two people at a time, particularly if you are operating an emergency shelter site
- Maintain strict inventory controls, and keep supplies locked and if need be, under guard
- Perform regular patrols of all locked-down, closed-off areas not being used
- Exercise security coverage of any still working ATM money machines
- Check parked vehicles and parking areas on a regular basis
- Check basement areas on a regular basis
- Check roof areas on a regular basis

Be aware that a significant number of companies provide crisis security support services, including emergency evacuations and sending armed or unarmed guard teams to help secure a facility under crisis conditions. These teams usually operate in a self-sufficient manner (carrying emergency rations, medical kits, communication sets, sleeping bags and the like) and are frequently staffed by experienced security veterans able to operate in harsh conditions with a high degree of independence. Contracting such a team can significantly boost a site’s security capability, mitigate specific threats, and relieve regular staff. Some teams can deploy with their own doctor or fully trained nurses, as many teams did during the past 15 years in the United States following hurricanes in South Carolina, Louisiana, Mississippi and Puerto Rico.

Pay attention to your cyber security. Given that a preponderance of any centre's systems are IT-dependent, having your IT team follow news and trends, continuously assess the risks to your operations, and mitigate exposure is important. The cyber threat: prone to increases and shifts during crises. A lack of information for local community members may result in seriously misleading rumors. Arguments, accusations, fights and even looting are but some of the bad results rumors can yield. Increasingly, as major crises occur, governments help monitor for potentially impactful rumors. Tracking this news can be worthwhile.

Evolve good practice closing down a convention or exhibition centre as a temporary emergency facility or TEF and reopening it for regular business calls for the following, as applicable:

1 | Be mentally prepared for a challenging recovery period. Depending on what happened at and to your facility while it served as a TEF, damage could be considerable. Your staff and management team will likely be exhausted and want a long break. Cleaning, maintenance and repairs alone could be extensive and exhaustive (consider cleaning after an outbreak of disease or weeks of flooding); damage may require rebuilding or replacing structural elements; and your hard-earned good image may have suffered for whatever reason, through no fault of your own, because of what happened there. Being tough, united and working together with key stakeholders will likely be vital to getting your convention or exhibition centre back on its feet.

2 | Upon ending operations as a TEF, use industry, national or international business recovery plans to guide your way back to normal. These tend to be academically, practically and government-vetted and build on useful hard-earned experience. Dozens of nations and global associations have developed templates, models, kits and other guidance for business recovery. This includes plans issued in the wake of massive fires, earthquakes, cyclones/hurricanes/typhoons, tornadoes and floods. While some of this guidance is specifically geared towards small business, much of it is organization-size generic, and can be used by convention or exhibition centres as well, including the business impact analysis forms and templates many contain. An example of the kind of practical step-by-step guidance many of these plans contain are the main Recovery Plan Template sheets in the Australian Emergency Management & Recovery Plan included in Appendix 4. They outline steps for reopening for business in parallel with your practical operational, business and financial recovery efforts, work on a marketing plan and marketing strategy suitable to the situation. Take into account what just happened, and what is appropriate: having possibly just lived through a national tragedy, your community may wish you to initially adopt a sober, befitting marketing posture.
sought to help your community in arduous circumstances. Having a remembrance ceremony shared with those people who worked there alongside your own, with those who were victims, or family and friends of those who perished, can help provide closure, funnel emotion, and offer a pathway for goodwill and grace. It can also serve as a fitting close on your chapter as a TEF.

5 | As a later part of your recovery process, consider having a celebratory event to mark the reopening of your facility. A big celebration where your centre marks its festive reopening could be a fitting start towards the future. Having all your key stakeholders present, from contractors to customers to local dignitaries, a big reopening event can be just the kind of media-enhanced send-off your centre can use to ‘get back on the map’ and back on its feet. In the past, many facilities that did duty as a TEF and reopened for business had their ‘restart celebration’ follow shortly after, or coincide with, key local government inspections and re-certifications.

6 | Consider a proactive media communications strategy on past risks in which you engage the local or national media to highlight preparations you are taking to mitigate future risks at your venue. It might also high-light exceptional capabilities acquired to limit the potential for past problems reoccurring. An example of this is the March 2020 press campaign by AsiaWorld-Expo Hong Kong highlighting their new “Cleantech” disinfection installation. At a moment of concern about pandemics, the installation was viewed with interest by the press as a timely, desirable addition to capabilities.

7 | Seek to capture lessons learned. When conditions permit, conduct a series of Lessons learned sessions to capture your experience and its most important learnings. This is not only important for improving your own operations in the future, but you may also hold and have unique, valuable insights for others. Publishing or at least sharing and circulating key learnings, starting amongst your own key stakeholders, carries value for all involved.

8 | Prepare for a repeat. No one enjoys thinking about bad experiences just passed, but it is only proper to prepare for the next version, or other type of challenge, to confront your facility. Seasonal storms come again; pandemics know new outbreaks; accidents occur. Maintain and train your business continuity and crisis management teams, and be prepared.

Select organizations that various AIPC and UFI members consult or may otherwise serve as a useful resource for expertise on the use of a convention of exhibition centre as a temporary emergency facility include:

- American Institute of Architects (AIA)
- ASIS International
- Association of Event Venues (AEV)
- Business Continuity Institute (BCI)
- European Arena Association (EEIA)
- European Exhibition Industry Alliance (EEIA)
- European Major Exhibition Congress Association (EMECA)
- Event Safety Alliance (ESA) (USA – Canada)
- Exhibition and Event Association Australasia (EEAA)
- Exhibition Services & Contractors Association (ECSA) (USA)
- International Association of Exhibitions and Events (IAEE)
- International Association of Venue Managers (IAWM)

Select organizations that various AIPC and UFI members consult or may otherwise serve as a useful resource for expertise on the use of a convention of exhibition centre as a temporary emergency facility include:

- National Arena Association (NAA)
- National Institute of Standards and Technology (NIST)
- Risk and Insurance Management Society (RIMS)
- US Army Corps of Engineers (USACE)
- US Federal Emergency Management Agency (FEMA)
- Venue Management Association (Australia)
APPENDIX 1
Examples of Website Statements on TEF Medical and Emergency Shelter Use
Appendices

APPENDIX 2

Example of Checklists from European WHO Emergency Hospital Guidance

APPENDIX 3

WHO Health Emergency Programme Detailed Facility Guidance
Appendices

APPENDIX 4

Australian Business Emergency Management and Recovery Plan Template

UFI Research: An Overview

Global

Reports

Analysing the global exhibition industry with global comparisons.

Global Barometer –
Bi-annual report on industry developments

World Map of Venues –
Report on trends in venue space and project developments globally.

Economic Impact Study –
Report on the value of exhibitions globally and regionally.

United Nations Sustainable Development Goals –
Report on the economic, social & environmental impacts of a number of exhibition industry projects.

Regional

Regional Reports

Regular market overviews on UFI’s chapter regions.

Euro Fair Statistics – Annual list of certified data for Europe by country.

The Trade Fair Industry in Asia – Annual analysis of market developments for Asia/Pacific by country.

The Exhibition Industry in MEA – Overview of the exhibition market in the MEA region.

The Exhibition Industry in Latin America – The first comprehensive overview by UFI of the exhibition industry Latin America.

Topical

Reports

Focused reports on challenges and developments within the exhibition industry.

Global Visitor Insights &
Global Exhibitor Insights – Data driven research reports on visitor feedback and exhibitor expectations.

Best Practices

Compendiums – Case studies of successful industry developments.

Special Industry Topics –
A wide ranging selection of bespoke reports into specific industry topics.

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UFI Research is available at www.ufi.org/research