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 hurricanes and volcanic eruptions, and 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 front line 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 cause 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.

While many chronicles of the operation of TEFs highlight the fact that it is government agencies that most often are asked or forced to perform: as a TEF, there is no readily useable, structured guidance on legal and compliance rules that might apply. In some cases, the use of TEFs has been mandated by law. 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.

This AIPC and UFI 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, DWTC 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 Tourtchaninoff | 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.

How to Use This Guide

The good practice information in this document is divided into five chapters:

1. Initial Considerations
2. Setting up as a TEF
3. Operating as a TEF
4. Standing down as a TEF
5. Select Resources

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.

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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.

Where documents or other resources are mentioned in the text, these should, in most cases, be directly retrievable via the ‘live’ link provided or otherwise by using an Internet search. All documents from AIPC and UFI member organizations shown are used with their explicit permission for the betterment of membership and the industry.

A NOTE ON TERMINOLOGY: Readers are asked to exercise a measure of flexibility when it comes to terms used in this document in that many people use different terms for the same thing. For example: health and safety vs. public safety, measures vs. controls, large outbreaks vs. pandemic, Coronavirus vs. COVID-19, and so on. Please apply this flexibility when reading the guidance.
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**
- **As an emergency housing site**
- **As an emergency medical facility**
- **As a mortuary to collect, store and process bodies**
- **As an emergency hospital or shelter**
- **As a hotel, convention or exhibition centre as emergency hospital and housing facility**

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 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.

The vast majority of convention and exhibition centres used as a TEF resemble normal operations at some point though a few have been lost for good, particularly already damaged sites that saw emergency use during floods and in the wake of hurricanes. These were later demolished rather than repaired or rebuilt. In all known cases, the reason for ultimately tearing them down related to damage sustained in a disaster, not to any reasons related to their use as a TEF.

2020 saw the advent of at least two major new TEF developments:

1. **The first ever widespread use of convention and exhibition centres as emergency hospital and housing TEFs to help manage a global pandemic.**

2. **The first widespread use of TEFs as a place where drive-through virus testing is performed, initially principally in South Korea and the United States.**

In capacity, driveways, ramps and parking areas are used 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. 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.

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Emergency medical uses of convention and exhibition centres extends beyond hospital use, to include places where test specimens are collected, vaccines are distributed, and drive-through tests are conducted (such as for COVID-19 in South Korea and the United States).

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.

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 to it, is discuss with authorities. Be prepared, at the same time, in worst case situations for authorities to simply requisition your facility and leave you no choice.
In some countries, it is not. Address it from the start. In building an organization that you are being asked to deal with risks appropriately. Risks are always present. How you manage and communicate the potential impact of these risks varies significantly. When authorities want to use your facility as a TEF, it is almost certain that regular staff and management were involved in preparing the site for its emergency use, and in most cases, many stayed on to help and serve in its operation. Knowing the facility intimately, they were and are crucial to its functioning in an emergency situation. Related, it is almost certain that regular staff and management will be directly involved in setting up their facility as a TEF.

The engagement process of authorities and convention centre management to establish a TEF differs per country but normally entails the following:

- Notification of facility owners and operators of the decision to use site as a TEF
- Engagement between officials and site managers to set a meeting agenda
- Notification of key third parties about plans to use the site as a TEF
- Activation of joint first steps in the planning and preparation process
- Notification of the public that planning for TEF use is underway
- Initiation of detailed planning and preparations

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.
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 will it be used for)
2 | Laying out the site (what will go where more specifically)
3 | Fitting out the site (building it to fulfil its function)
4 | Equipping the site (putting 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,’ 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
2 | Any critical planning and preparation will be done 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 work will be and which 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 adjunct 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 put in place. This allows you to maintain your own position 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 for the mention 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 as we mention, 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 drawdowns 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 any special circumstances that need 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 infrastructures 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. For as 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 Ladlow of the Scottish Events Campus: “We are still responsible for our 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).

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.

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, constructive and uniforming 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. A cornerstone of this is usually a statement on your website, but some sites go much further, like setting up a special 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.

Examples of good practice website statements are included in Appendix 2 of this document, as is an example of a general press article where exhibition hall staff helped a journalist frame matters accurately for a leading newspaper article, in this case featuring the convention centre in Vienna, Austria being put to use as an emergency hospital. Such statements should preferably emphasize:

- The facility and its management are seeking to assist the government to serve the local community in times of trouble;
- The situation is temporary;
- The facility will do all it can to resume normal operations and serve its regular clients as soon as possible.

Where feasible and practicable, local news media might be asked or facilitated to amplify the message your facility is being repurposed.

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 in Appendix 2 of this document, as is an example of a journalist frame matters accurately for a leading newspaper article, in this case featuring the convention centre in Vienna, Austria being put to use as an emergency hospital. Such statements should preferably emphasize:

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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.

“This was a big learning for us,” observes Enrica Baccini in Appendix 2 of this document, as is an example of a journalist frame matters accurately for a leading newspaper article, in this case featuring the convention centre in Vienna, Austria being put to use as an emergency hospital. Such statements should preferably emphasize:

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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, sharing and storage.

In a situation like this, not everyone knows what you as a facility intend 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.

“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.” adds Operations Director Mark Laidlaw of the Scottish Events Campus (SEC) in Glasgow. “Find comfort in being the expert for once, but be confident that the expertise you do have is useful. In a situation like this, not everyone knows what you know. Work hard to share your knowledge with those who need it. Make it count.”

TEFs can be large-scale endeavors involving significant distances and spread-out new team members: promote effective team communication and email coordination.
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 facilities, 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 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 into 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 require-ments side and on the actual movement of supplies and equipment logistical side, military units are often uniquely 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.

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. Unchecked, 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...”

An example of a map showing the detailed emergency hospital layout of the Vienna convention centre [Reed Messe Wien] | April 2020

Key learning from the Fiera Milano: plan appropriate fire safety measures when moving, installing and operating very large gas and oxygen tanks.

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 an emergency medical site, with much of the material consisting of checklists also applicable to various different kinds of TEFs.
  www.euro.who.int/__data/assets/pdf_file/0020/148214/e95978.pdf?ua=1.

- Good practice guidance from the International Association of Venue Managers and the American Red Cross on building emergency mega-shelters, with 274 pages of extensive detail on all functions and stages of build-up and operation.

- Good practice NHS guidance on steps to set up an emergency hospital. Developed in concert with contractors from BDS to template the realization of NHS Nightingale Hospital at the ExCel Centre in London.
  www.architectsjournal.co.uk/download?ac=3180222

- 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 Emergency Programme detailed guidance on dimensions and layout of emergency care facilities: See Appendix 3.

- 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 compilations of its kind, from anti-high wind to anti-earthquake and anti-tsunami design.
  content.aia.org/sites/default/files/2017-05/Disaster_Assistance_Handbook_050917.pdf

- The main Manual of the US Army Corps of Engineers, at 930 pages the biggest of its kind publicly available (version 2014) detailing the ‘how to’ details on all types of different engineering activities. Widely used in emergency situations.

- 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.
  www.jointcommission.org/covid-19/?_ga=2.23649297.681515793.1586100244-114768105.1586100244

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**How Milan built a COVID hospital in 10 days**

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**SURGE HOSPITALS:**

*Providing Safe Care in Emergencies*

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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.** Enforce routines when it comes to regular staff briefings 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.

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 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 even photographs. 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 entranceways can help guard against this. In the case of a pandemic, a form of health screening may be required. Where possible, this should include the operation of the neutral or ‘clean zone’ screening may be required. Where possible, this should include the operation of the neutral or ‘clean zone’ so they can (continue to) support you.

6. **Monitor news sources continuously and especially local news about developments effecting your situation.** Emergency broadcasts, topical news, expert podcasts and more general news can contain a wealth of useful information and insights to help secure, improve or sustain your operation. Designate someone as the daily internet, radio and TV news monitor, responsible for checking on news of interest at least several times a day, and if need be, distributing it. Past experience indicates many people in a TEF assume someone else is monitoring the news, or that many are too busy too monitor the news, and that hereby important things sometimes get missed.

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 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 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 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 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 even photographs. 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 entranceways can help guard against this. In the case of a pandemic, a form of health screening may be required. Where possible, this should include the operation of the neutral or ‘clean zone’ so they can (continue to) support you.

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 not 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.
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 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 staffed hospital, as many teams did during the past 15 years in the United States following hurricanes in South Carolina, Louisiana, Mississippi and Puerto Rico.

A lack of information for local community members may result in some people wanting to see for themselves “what is going on” or “what conditions are really like there.” Your own information output in a prolonged, major crisis may only go so far in terms of public acceptance as some sceptics might see it as a biased or overly controlled. Having local government support your centre’s own information stream and validate it can prove important.

The cyber threat: prone to increases and shifts during crises.

![The cyber threat: prone to increases and shifts during crises.](image)

Evolution of 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/hyphoons, 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 points many of these plans contain are the two 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.

Two examples out of the many, widely available disaster recovery guides available: a national one from Australia and a regionally oriented one from the United States. Both offer detailed, practical advice and ‘how to’ steps for restarting business.


3. Search for opportunities to enter into new partnerships to help speed recovery. Past large-scale disaster recovery efforts from Haiti to the Bahamas to Australia witnessed businesses form new, often enduring commercial ties with particular construction, repair, cleaning, design and transportation companies. While a new month-long engagement with a helicopter freight company to ferry roof repair equipment may be a one-time thing, a multi-year win-win relationship with a hardware megastore chain could offer cost-savings and other benefits extending years beyond your business recovery period.

4. Early in your business recovery process, consider conducting a commemorative event. Likely much will have happened in the time you spent as a temporary emergency facility, include a share of drama. People may have suffered or even perished as your facility and staff...
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 highlight 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 a 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.

Press Release | AsiaWorld-Expo deploys the world’s first “Cleantech” disinfection installation.pdf

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 (IAVM)
- 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

Temporary Emergency Hospital

Mecc (Miami Beach Convention Center) will serve as a temporary emergency hospital in the event that Miami Beach becomes overwhelmed by the number of COVID-19 cases. The facility may be required to deal with a sudden surge in the number of infected cases, and the hospital will be prepared to respond quickly to any situation that arises.

ExCis, London to become temporary NHS Nightingale Hospital

The NHS has announced that a new hospital will open at ExCis, to provide support for thousands more patients with COVID-19.

Temporary Shelter

As part of our ongoing response to COVID-19, the San Diego Convention Center will serve as a temporary shelter for our neighbors in need. The plans will create more space to serve people experiencing homelessness and allow for adequate physical distancing within current shelter facilities.

Update 1: March 20, 2020, 10:19 AM

April 3: Convention Center Opens as Temporary Regional Homeless Shelter Amid COVID-19 Pandemic

March 24: Work Begins To Offer More Room For Homeless To Shelter

March 25: Preparations Underway to Open All of Golden Hall, Part of Convention Center to Serve Homeless Individuals

San Francisco Convention Center Statement

On March 23, 2020, the San Francisco Convention Center announced plans to open a temporary shelter for homeless individuals. The shelter will be located in the San Francisco Convention Center and will provide up to 500 beds for those in need.

Chicago Convention Center Statement

On March 25, 2020, the Chicago Convention Center announced plans to open a temporary shelter for homeless individuals. The shelter will be located in the Chicago Convention Center and will provide up to 100 beds for those in need.

Stadt errichtet Notquartier mit 880 Betten in der Messe Wien

Epidemie: Maßnahmen für Patienten mit milden Krankheitsverläufen.


Stadt errichtet Notquartier mit 880 Betten in der Messe Wien

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Epidemie: Maßnahmen für Patienten mit milden Krankheitsverläufen.

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