

TECHNICAL GUIDELINES

STATUS 10. JUNE 2020





Content

1.	Preliminary notes				
	1.1 House rules / excerpt from the house rules				
	1.2 Opening times	1			
	1.2.1 Setup and clearance times	1			
	1.2.2 Event run term	1			
2.	Traffic in the exhibition ground, escape routes and security systems	2			
	2.1 Traffic ordering				
	2.2 Escape routes	2			
	2.2.1 Fire department movement zones, fire-hydrants	2			
	2.2.2 Emergency exits, emergency descents and hall aisles	2			
	2.3 Security systems				
	2.4 Guarding				
	2.5 Emergency-case clearance				
3.	Technical data and equipment of the halls and the open area				
	3.1 Hall data				
	3.1.1 General lighting, type of current and voltage				
	3.1.2 Compressed air, electrics and water supply	3			
	3.1.3 Communication facilities				
	3.1.4 Sprinkler systems				
	3.1.5 Heating and ventilation				
	3.1.6 Faults				
	3.2 Open area				
4	3.3 Clearance heights Stand construction stipulations				
4.					
	 4.1 Stand safety 4.2 Stand construction permit 				
	4.2.1 Check and approval of authorization-mandatory constructions				
4.2.2 Vehicles and containers					
4.2.3 Change of component parts not according to specifications					
	4.2.4 Check scope				
	4.3 Construction heights				
	4.4 Fire protection and security determinations	5			
	4.4.1 Fire protection				
	4.4.1.1 Stand construction and decorative materials	6			
	4.4.1.2 Exhibition of vehicles	6			
	4.4.1.3 Explosion-hazardous materials and ammunition	6			
	4.4.1.4 Pyrotechnology	6			
	4.4.1.5 Balloons and flying objects	6			
	4.4.1.6 Fog-generation machines	6			
	4.4.1.7 Ash containers, ash trays and smoking prohibition	7			
	4.4.1.8 Waste, recyclable-material and residual-material containers	7			
4.4.1.9 Spray guns, solvents					
	4.4.1.10 Cutting-grinding work and all work with open flame				
4.4.1.11 Empty containers					
4.4.1.12 Fire extinguishers					
	4.4.2 Stand covering				
	4.4.3 Glass and acrylic glass				
4.4.4 Recreation rooms and auditoriums					
	4.5 Exits, escape routes and doors				
	4.5.1 Exits and escape routes				
	4.5.2 Doors				
	4.6 Platforms, ladders, descents, stairs and cross-pieces				
	4.7 Stand structuring				
	4.7.1 Barrier-free building	9			



4.7.2	Check of the rental area	9
4.7.3	Interventions in the building substance	
4.7.4	Hall floors	
4.7.5	Suspensions from the hall ceiling	
4.7.6	Stand boundary walls	10
4.7.7	Advertising resources and presentations	
4.7.8	Appearance	
	en area	
4.8.1	Structure	11
4.8.2	Dismantling	11
4.9 Tw	o-level construction design	
4.9.1	Construction inquiry	
4.9.2	Conditions for the stand area over-construction, security margin distances,	
	of the stand interior compartments	11
4.9.3	Working loads and load assumptions	
4.9.4	Escape routes and stairs	12
4.9.5	Building materials	12
4.9.6	Upper floor	
	onal security, technical security regulations, technical regulations and technica	
	es	
	neral specifications	
5.1.1	Damage	
	ployment of working resources	
	ctrical installation	
5.3.1	Connections	
5.3.2	Stand installation	
5.3.3	Installation and operational specifications	
5.3.4	Safety measures	
5.3.5	Emergency lighting	
5.3.6	Use of radio frequencies	
	ter and waste-water installation	
	npressed air and gas installation	
5.5.1	Compressed air	
5.5.2	Gas	
	chines, pressure vessels and exhaust gas systems	
5.6.1	Machine noises	
5.6.2		
5.6.2		
5.6.2		
5.6.2		
5.6.3	Pressure vessels	
5.6.3		
5.6.3	•	
5.6.3		
	4 Monitoring	
5.6.4	Exhaust gases and vapors	
5.6.5	Exhaust gas systems	
	lization of pressurized gases, liquefied gases and inflammable liquids	
5.7.1	Pressure and liquefied-gas systems	
5.7.1		
5.7.1.		
5.7.1. <u>3</u> 5.7.2	Inflammable liquids	
5.7.2.		
5.7.2.		
5.7.2.	3 Storage tank	17



	5.7.2.4	Storage location	
	5.7.2.5	Storage location Conditions for operation	
	5.7.2.6	Filling the liquids	
	5.7.2.7	Empty containers	
		s and other dangerous materials	
		photographic, television demonstrations, scene areas and other	
	presentations.		
	5.10 Radia	tion protection	
	5.10.1 Rac	dioactive materials	
		ay systems and interference emitters	
	5.10.3 Las	er systems	
	5.11 Radio-fr	requency devices, radio systems, electromagnetic compatibility and	1 harmonic
	-		
	5.12 Cranes,	forklifts and empty containers	
	5.13 Musical	reproductions	
	5.14 Distribu	ition of food and drinks	
6.	Environmen	Ital protection	
	6.1 Wastern	nanagement	
	6.1.1 Wa	ste particularly requiring monitoring	20
	6.1.2 Bro	ought-in waste	20
	6.2 Water, v	waste water and ground protection	
	6.2.1 Oil	and grease separator	20
		aning work and cleaning agents	
		mental damage	



1. Preliminary notes

Estrel Berlin, referred to as Estrel in the following text, has issued directives for the upcoming events with the objective of giving all exhibitors/event organizers optimum opportunity to present their exhibits and to address their visitors and prospective customers. They are binding for all exhibitors and event organizers. The technical directives are a component part of the contracts which Estrel concludes with its exhibitors, event organizers, service companies and service providers. These exhibitors, event organizers, service companies and service providers vouch for the fact that all their contract partners who are active on the event grounds, or who remain there, comply with these technical directives. Estrel can demand compliance with the technical directives from everyone who is active on the event grounds or remains there. In case of trade fairs, exhibitions and other events which an event organizer other than Estrel aligns, as well as Estrel, the event organizer is entitled and obliged to demand compliance with the technical directives from his customers and contract partners.

At the same time, these directives include security regulations which, in the interests of the exhibitors and visitors, should offer a maximum of security with the technical and structural equipment of the event.

The building regulation, fire protection and other security regulations are coordinated with the responsible government authorities of the State of Berlin. Estrel reserves the right to check compliance with these determinations. In addition, the legal stipulations in the valid version in each case, in particular the current assembly-place ordinance (VStaettVO), the operational facility ordinance, as well as the state building ordinance of the State of Berlin, are to be considered.

The implementation of an event / the operational startup of a exhibition stand can be prohibited in the interests of all event participants if any defects which are uncovered have not been eliminated by the beginning of the event, in spite of a request to do so. Further requirements relating to security and to the stand construction which should additionally result remain reserved.

Building law is federal state law. The State of Berlin stipulates for us, as an operator, a processing notice period of 8 to 12 weeks according to type of authorization. As a result of this, and due to different structural conditions of the individual trade fair centers, the respective implementation stipulations are different. In addition, Estrel reserves the right to changes. The German text is binding.

1.1 House rules / excerpt from the house rules

The grounds are private grounds. Estrel, as well as the respective event organizer, exercise domiciliary rights. As an extension, the house and operation ordinance, which is posted on the grounds and which is a component part of the rental contract, is referred to.

1.2 Opening times

1.2.1 Setup and clearance times

During the general setup and clearance times, work can be carried out in the corresponding contractually arranged time.

1.2.2 Event run term

During the event run term, the halls are opened for exhibitors, their trade fair builders and service companies, according to the contractual rental term, before the beginning of the trade fair and closed after the trade fair end, provided other times are not stipulated in the special participation conditions.



Traffic in the exhibition ground, escape routes and security systems Traffic ordering

In order to enable the assurance of a smooth traffic flow during the setup and clearance time and the event duration, it is absolutely necessary that regulations and directions concerning traffic are considered. The instructions of the personnel of Estrel, or their representatives instructed with the routing and directing of traffic, are to be complied with absolutely and the corresponding information items are to be considered. In the entire event area and on the parking spaces in the grounds, the determinations of the Road Traffic Act apply. The top speed authorized on the event grounds is 10 km/h. The parking duration in the trade fair and exhibition grounds for unloading and loading is limited. Estrel reserves the right to demand a security deposit, which is paid back fully in case of exit within the time stipulated, to ensure compliance with this arrangement. Otherwise this security deposit lapses without being remunerated. Illegally parked vehicles, semi-trailers, containers, tanks and empties of every type can be removed at the expense and risk of the owner. Overnight accommodation, both in vehicles on the event grounds and in the event areas, is not permitted.

For security reasons, during the setup and clearance time in the halls and in the exhibition area in the open air, the remaining of persons - in particular of minors - who do not pursue any insurance-mandatory occupation is prohibited.

2.2 Escape routes

2.2.1 Fire department movement zones, fire-hydrants

The entry paths and movement zones for the fire department, which are necessary and identified through stop-prohibition signs, must be kept free at all times, also during setup and clearance time. Vehicles and objects which are parked on the escape routes and the security areas are removed at the expense and risk of the owner. Fire-protection technical devices, such as fire-hydrants and their identification in the halls and in the open air, may not be built over, made unidentifiable or inaccessible.

2.2.2 Emergency exits, emergency descents and hall aisles

The escape routes are to be kept free at all times. The doors and gates in escape routes must be kept free inside and outside, and they must be capable of being opened easily from the inside in full width. The escape route doors and emergency exits and their identification may not be built over, built onto, blocked, draped over or made normally unidentifiable.

The aisles in the halls may not be used for parking/storage or be constricted by objects protruding out into the aisle. They serve as escape routes in the emergency case!

2.3 Security systems

Sprinkler systems, fire alarms, fire-extinguishing systems, smoke detectors, close-off units of the bay doors and other security systems, their direction signs and the green emergency-exit identifications, must be accessible and visible at all times; they may not be blocked or closed off with constructions.

2.4 Guarding

The general guarding of the exhibition halls and the open area during the runtime of the event is not implemented by Estrel. During the setup and clearance times, no general supervision exists. Any separate guarding must be ordered over Estrel. However, Estrel does not assume responsibility for any devices and objects brought in or delivered by exhibitors and third parties acting under their instructions. The security personnel appointed by Estrel are not authorized to directly follow orders of any type issued by the exhibitor. Estrel is entitled to implement measures necessary for control and guarding. If necessary, the exhibitor himself must organize a guarding of the stand and the objects brought in by the exhibitor. Stand guards in this case may be put in place only by the security service instructed by Estrel. The exhibitors are explicitly referred to the fact that, during the setup and clearance times, increased risks exist for the exhibit and other objects brought in by the exhibitor. Valuable and/or easily movable objects



should always be placed under lock and key at night. For security reasons, events and celebrations (stand parties) at the stand cannot take place outside of the opening times except with prior written special permission from Estrel. Within opening times, they generally require prior written approval from Estrel.

2.5 Emergency-case clearance

For security reasons, the closing of rooms or buildings and their clearance can be arranged by Estrel and/or the event organizer. The persons who are present there have to comply with the requests and make their way to the respective collection points in the open air. Exhibitors have to inform their employees about this process. It is your responsibility to ensure that your stand is cleared.

3. Technical data and equipment of the halls and the open area

3.1 Hall data

Hall data are to be requested from the technical department.

Composition of the ground:

Information about the composition of the ground is to be requested from the technical department. Suspensions are possible in the convention halls. Information about suspension possibilities are to be requested from the technical department.

3.1.1 General lighting, type of current and voltage

Existing type of current and voltage on the exhibition ground: Alternating current 230 V (+/-10%/ according to local utility company) / 50 Hz three-phase AC current 3x 400 V (% +/-10 according to local utility company) / 50 Hz Tolerance values according to DIN EN 50160

Tolerance values according to DIN EN 50100

3.1.2 Compressed air, electrics and water supply

Information about the electrics and water supply is to be requested from the technical department.

3.1.3 Communication facilities

The supply of the stands with telephone, fax, and data connections is implemented on the event grounds by the internal IT department.

3.1.4 Sprinkler systems

The halls are equipped with sprinkler systems. The effect of the sprinkler systems may not be impaired by attachments and mounted equipment or suspensions in the hall. If necessary, corresponding stands are to be sprinkled separately. It is to be noted that an activation of the sprinkler system can occur as a result of the generation of temperature and from fire.

3.1.5 Heating and ventilation

Estrel provides for the general heating and ventilation. The halls can be air-conditioned.

3.1.6 Faults

In case of faults of the technical utility supply, Estrel is to be informed immediately.

3.2 Open area

The type of the use of the open area is to be coordinated with the technical department.

3.3 Clearance heights

The clearance height below the rotunda is approx. 3.95 m. The passage clearance height of Gate 2 is approx. 4.10 m.



4. Stand construction stipulations4.1 Stand safety

Exhibition stands, including devices and exhibits as well as advertising media, are to be constructed stable enough so that public safety and order, in particular life and health, are not endangered. The exhibitor is responsible for the static security and is obliged to provide proof as appropriate. For the stability of stand constructions, a horizontal replacement surface load (dynamic pressure) of 0.125 KN/m² is to be applied for the achievement of sufficient tilt and slide security. Deviations are possible in reasonable individual cases, where a more precise verification is to be provided. Stabilization against adjacent stands and/or existing building substance is not permissible. For statically-supporting stand constructions, chipboard according to DIN EN 312-1 P1, P2 or P3 is not permissible. In the same way, an assurance of stability through suspensions from the hall ceiling is not permissible.

Estrel reserves the right to have a verification of the stability carried out, subject to liability to pay costs, in reasonable cases on site through a static calculations engineer.

4.2 Stand construction permit

Assuming that the technical directives are adhered to in case of the structuring and implementation of the stand, in case of one-level stand constructions, provided they are not higher than 3.5 m and have a base area of not more than 30 m², it is not necessary to submit drawings for authorization. In Hall 1 under the gallery, authorization is not required up to a height of 3.0 m and a base area of not more than 30 m². See also Item 4.4.2.

On request, Estrel offers the exhibitor or event organizer to check stand construction plans submitted in digital form in single copy or in paper form in triplicate (notice of 8 weeks). In case of stand construction permits which are received by Estrel after the closing day, a post-processing charge is basically charged. From the beginning of construction, no more stand construction permits will be checked or authorized. A static test is no longer possible after this time.

In addition, all other stand constructions, mobile stands, stand constructions with closed ceilings, special structures and constructions, are authorization-mandatory. All authorizations apply for the respective event only.

4.2.1 Check and approval of authorization-mandatory constructions

Dimensioned stand plans with ground layout plans and views must be submitted to the event organizer for authorization, at the latest by the designated deadline, in paper form or in digital form. The specimens of the stand plans are returned to the exhibitor / stand builder after verification with a note of approval. Only with the note of approval is the stand construction approved.

For the authorization of:

- Multiple-floor-level constructions
- Movie theater or spectator rooms
- Constructions in the open area
- Special designs

the following documents are required in the German language with Estrel, at the latest, 8 weeks before erection beginning:

a) Building specification

- b) Dimensioned stand construction drawings (ground layout plans, views, sections), structural details in larger scale.
- c) In case of presentation of an inspection log / type test, Items a) and b) can be dispensed with. For the construction of multiple levels, a proof of structural stability is to be maintained.



The test engineer instructed for this must basically originate from Berlin. In exceptional cases a testing stress engineer who is instructed with a statics test can also originate from a state other than Berlin. The acceptance on site is then implemented by a test engineer authorized in Berlin and must be verified by same with a certificate. This certificate must be held readily available at the stand. The locally instructed static calculations engineer is to be designated by the exhibitor / trade fair builder. The determinations of VStättVo of Berlin, in the respective version with multiple-level construction design, are to be considered and complied with by the exhibitor.

4.2.2 Vehicles and containers

Vehicles and containers as exhibition stands in the halls must be authorized by Estrel. Demonstrations of motorized vehicles are to be authorized by Estrel.

4.2.3 Change of component parts not according to specifications

Stand constructions which are not authorized and which do not correspond to the technical directives or the regulatory works, must possibly be changed or removed. In case of implementation which is not within the time stipulated, Estrel is entitled to have these changes carried out at the expense of the exhibitor.

4.2.4 Check scope

The employee instructed by Estrel with the monitoring of the security measures checks, before and during construction, as well as during the event, whether the above stand stipulations are adhered to. Provided that this is not the case, Estrel is authorized to carry out the corresponding changes or to have the stand removed at the expense of the exhibitor or event organizer, provided that the exhibitor does not immediately remedy the situation.

4.3 Construction heights

Structural restrictions can be existing hall-specific. Detailed information is to be requested from the technical department.

UK = lower edge. All measurements are to be checked on site.

A construction height up to 3.0 m under the gallery in Hall 1 is authorization-free. In the remaining areas and halls, a construction height up to 3.5 m is possible without authorization (the structural condition is to be checked in advance). Deviations from this require prior written approval from Estrel, however, where the exhibitor has to always guarantee, and possibly must take the required measures to ensure, that the effect of the sprinkler system is not impaired in the hall ceiling areas. Also in case of authorized exceeding of the construction height, the structuring of the additional surfaces is to be carried out neutrally with respect to adjacent stands. The attachment of advertising lettering or logos requires the explicit, prior written approval of the event organizer.

In the open area, the permissible construction and use height is determined exclusively for the respective individual case according to the written instructions of Estrel, based on the sketches submitted by the exhibitor.

4.4 Fire protection and security determinations4.4.1 Fire protection

The halls are equipped with fire-alarm and fire-extinguishing systems. See also Item 3.1.4.

Security systems, such as fire extinguishers, fire alarms, fire-hydrants, etc. and signs on security systems may not be closed off or concealed. The same applies for distribution cabinets of electrical and telephone connections and ventilation devices.



4.4.1.1 Stand construction and decorative materials

Materials which are easily-flammable, which drip when burning or which form toxic gases and a lot of smoke, such as polystyrene non-plasticized foam (styropor) or similar, may not be employed.

Special requirements can be placed on supporting constructional units on an individual basis for reasons of safety (e.g. non-flammable). Decorative materials must have low inflammability according to DIN 4102 minimum B1 or according to EN 13501-1 minimum Class Cfl-s1. This must be confirmed by means of a test certificate held readily available at the stand. (Submission notice for testing 4 weeks before erection beginning). Provided that this is not the case, Estrel is authorized to remove the corresponding decoration or have it removed at the expense of the exhibitor, provided that the exhibitor does not remedy the situation immediately or carry out organizational measures at the expense of the exhibitor/ event organizer (e.g. compensation measure through fire security guards).

In part sections, normally-inflammable decorative materials may be employed if these are sufficiently protected against ignition by the installation.

Floor coverings must correspond to DIN 4102 B1 or EN 13501-1, Class Cfl-s1, they must be bonded professionally and laid joint-sealed. Floor coverings not in accordance with DIN 4102 of the fire rating B1 or EN 13501-1, CLASS CFL-S1 may not be used as wall paneling.

Foliage and conifers may be employed only with moist roots. Bamboo, reet, hay, straw, cattle mulch, peat or similar materials generally do not satisfy the above-designated requirements. The employment of plastic materials (cable ties, belts of plastic woven fabric etc.) for the fixing of statically-stressed parts is not permitted.

4.4.1.2 Exhibition of vehicles

Vehicles with combustion engines may be exhibited in the halls only with a fuel tank which is to a large extent empty (fire-load minimization < 5 liters). The fuel tank must be closed off. The fuel tanks are to be filled with nitrogen before bringing into the halls. In case of vehicles with gas-operated engines, the gas tank must be emptied and inerted before bringing into the halls. In case of hybrid vehicles, the fuel tank must be additionally empty to a large extent as described above. See Item 5.7 regarding the pressure vessel (see also 4.2.2 and 5.6). Protection mats are to be placed under the vehicles for absorbing liquids. Car batteries are to be disconnected. The vehicles are to be provided with an external power supply if necessary.

4.4.1.3 Explosion-hazardous materials and ammunition

Explosion-hazardous materials are subject to the law governing explosives and may not be exhibited at trade fairs and exhibitions. This also applies for ammunition as specified by the gun control law.

4.4.1.4 Pyrotechnology

Pyrotechnic demonstrations have to be reported to and coordinated with Estrel.

4.4.1.5 Balloons and flying objects

Balloons may be filled only with air. The utilization of remote-controlled flying objects in the halls can be authorized by the manager of the event under certain conditions.

Pursuant to § 16 Sect. 2 of the Air Traffic Ordinance, it is prohibited to allow kites or Chinese lanterns to rise up in the open area due to the regulations on the airport-protection area. Captive balloons or other balloons, as well as flight models of all type, may be taken into operation only with written permission from the corresponding government authority

4.4.1.6 Fog-generation machines

The employment of fog and haze-generation machines is to be coordinated as mandatory with Estrel. An authorization of Estrel is necessary for their operation. It is to be checked whether



smoke detectors have been switched off before the operational startup of fog and hazegeneration machines. Under certain circumstances, a compensation measure is to be realized by the use of fire security guards.

4.4.1.7 Ash containers, ash trays and smoking prohibition

A smoking prohibition exists in the halls and thus also in the stands.

4.4.1.8 Waste, recyclable-material and residual-material containers

In the stands only self-extinguishing recyclable material and residue containers of nonflammable material with closed covers may be set up. These containers in the stands are to be provided for waste disposal regularly every evening, at the latest by trade fair end. If larger quantities of inflammable waste result, these are to be disposed of repeatedly over the day. Easily-inflammable materials, such as wood shavings, wood residue, sawdust and the like are to be put in locked, non-flammable containers.

4.4.1.9 Spray guns, solvents

The use of spray guns, as well as the utilization of solvent-content materials and paints, is prohibited.

4.4.1.10 Cutting-grinding work and all work with open flame

Welding, cutting, soldering, thawing and cutting by grinding work must be reported as soon as possible before work commencement and applied for in writing to the parties of Estrel instructed with fire protection. The authorization of the work is issued by Estrel with the permit. In case of the work, the environment is to be sufficiently screened against hazards. Extinguishing media are to be kept ready in direct proximity ready for action. Functional demonstrations of welding, cutting, soldering, thawing and cutting by grinding work require special authorization by Estrel. It is to be checked whether the smoke detectors have been switched off before the designated work. Under certain circumstances, a compensation measure is to be realized by the use of fire security guards.

4.4.1.11 Empty containers

The storage of empty containers of any type on the stands, in and around the halls, is prohibited. Any empty containers occurring are to be transferred immediately to the planned storage area for empty containers (fire-load-free), or provided for waste disposal. Estrel is entitled to remove illegally stored empty containers at the expense and risk of the exhibitor.

4.4.1.12 Fire extinguishers

Above a stand area of 50 m², a suitable fire extinguisher, corresponding to the specifications with at least 6 extinguishing media units (LE), is to be held ready at the stand. Within the stand, the location of the fire extinguisher is to be indicated according to the specifications of the Accident Prevention Specification DGUV A8. In case of exhibition stands with increased fire load, a separate calculation is to be implemented according to BGR 133 and Appendix 2 Pt. 2.2 ArbStaettV. In special cases, the employment of suitable fire extinguishers on the stand can be required.

4.4.2 Stand covering

In order not to impair the sprinkler protection, stands must be basically open to above in sprinkled halls. Ceilings can be considered as open if not more than 50% of the surface is closed off, with reference to the individual area. For stand coverings with more than 20 m² area, the sprinkler system can be dispensed with if one of the following prerequisites is met:

- Metal grid screen or metal grating ceilings, with a measurement of opening of at least 1 x 1 cm. Considering the light fixtures and similar mounted equipment, the horizontal opening area is at least 50%.
- Textile ceiling coverings which correspond to DIN 4102 B1 or EN 135011, CLASS CFL-S1 and authorized by VdS Schadenverhütung GmbH, for horizontal installation under sprinkler levels. Textile ceiling coverings must be open over a large surface with a temperature of



maximum 70°C using a fusible cut-out. Basically, sprinkler-suitable coverings and covers with fusible cut-out are to be braced sufficiently so that sagging is avoided. If sprinkling in stands up to 100 m² area is not possible for technical reasons, a compensation can be implemented by means of a mobile fire-alarm system (BMA), furthermore, an additional, suitably-small fire-extinguishing unit is to be provided for immediate deployment, in accordance with the specification of the authorization. In case of stands more than 100 m² area, a sprinkler system is to be installed in addition to the BMA and the small fireextinguishing unit. The entire stand manning must be instructed in the handling of the BMA and the small fire-extinguishing unit by the exhibitor / event organizer. Outside of the opening times of the event, a fire guard of Estrel is to be ordered. This individual case decision is the responsibility of the Berlin Fire Department and Estrel.

The verifications

- DIN 4102 B1 or EN 13501-1, CLASS CFL-S1, Test Decision of the German Institute for Structural Engineering (DIBT)
- Authorization by VdS as sprinkler-suitable material or test according to EN20811 and EN29865) to be submitted (see also Item 4.9.2).
- Stand coverings are generally to be implemented, at a minimum, in low-inflammability design (DIN 4102 B1 or EN 13501-1).

4.4.3 Glass and acrylic glass

Suitable security glass may be employed only for the application; overhead glazing with mineral glass must be implemented in VSG. Edges of glass panes must be processed or protected so that any danger of injury is excluded. Component parts completely in glass are to be marked at eye level so that they are easily seen. Glazing in parapets and rails must be implemented according to TRAV, where verification is to be held available at the stand. In case of utilization of overhead glazing and laminated glass, with non-regulated design types the approval is to be obtained on an individual basis according to \$21 Sect. 1 No. 2 LBO Berlin with the State Official Trade Office and submitted with the acceptance.

4.4.4 Recreation rooms and auditoriums

All recreation rooms (conference, office, personnel, lecture rooms etc.) which are enclosed on all sides, also those which are open to above (closed rooms) and which do not have any optical and acoustic connection to the hall, are to be equipped with optical and acoustic warning devices in order to guarantee an alarm on the stand at all times.

In exceptional cases, replacement measures can be authorized.

Auditoriums above a capacity of 200 persons must have at least two exits leading directly onto the aisles of the halls. These exits are to be arranged as far away from each other as possible. Auditoriums require special authorization by Estrel if they have a capacity of more than 200 persons (see Item 4.2.1).

4.5 Exits, escape routes and doors

4.5.1 Exits and escape routes

The distance to an escape route from any point on an exhibition area may not be more than 20 m in a direct line. Recreation rooms with more than 100 m² area must have at least two exits leading onto escape routes, in each case as far from each other as possible and opposite each other. The number and clearance width of escape routes from recreation rooms (exits, stairs, corridors) are to be provided according to the assembly place ordinance: The escape routes are to be identified according to DGUV A8.

4.5.2 Doors

The utilization of swing doors, revolving doors, encoding doors and sliding doors, as well as other access blocks in escape routes, is not admissible. Doors must open out in the escape direction and not have any sills. During the time when persons are in the rooms, the doors must be capable of being opened easily from inside at all times, without any aid resources and in full width.



4.6 Platforms, ladders, descents, stairs and cross-pieces

Generally-accessible surfaces which directly border surfaces at a level lower than 0.20 m are to be protected with parapets. These must be at least 1.10 m high. At least one top boom, one central chord and one lower chord must be provided. VStaett-VO $\int 11$ is to be considered. For a platform, a static verification is to be provided on request by the event organizer. According to use, the floor load must be designed in accordance with DIN 1055 Table 1, [Cat. C1] for at least 3.0 kN/m². Platforms accessible with one step may be at most 0.20 m high. Ladders, stairs and cross-pieces must correspond to the Accident Prevention Specifications BGV D36, stairs to DIN 18065 and BGI 561. The separation distance of the railing parts may not be more than 0.12 m in any direction (MVStaettVO $\int 11$, Clause 2), (see 4.9.6).

DIN 31003 applies for stationary work platforms; for corresponding horizontal load, see 4.9.3.

4.7 Stand structuring

4.7.1 Barrier-free building

With the construction of the stands, attention should be paid to barrier freedom. Stands and their devices should also be accessible and usable for persons with mobility restriction without additional aid.

4.7.2 Check of the rental area

The rental area is identified by the event organizer. Every exhibitor, event organizer and trade fair builder is obliged to become informed on-site about the location, dimensions and possible mounted equipment, such as fire alarms, progress of the supply trenches, ventilation systems and so forth. The stand limits are to be adhered to absolutely.

4.7.3 Interventions in the building substance

Hall parts and technical devices may not be damaged, soiled or changed in any other way (e.g. drilling, nailing, bolting). Also painting, papering and pasting are not permitted. Hall parts and technical devices may not be loaded either by stand structures or by exhibits. Hall columns and hall supports can be encircled with a security margin of min. 5 cm within the platform without damage of same, within the framework of the permissible construction height. The hall supports may not be pasted or painted over under any circumstances, and bores into the hall floor are prohibited. Exceptions require prior written authorization from Estrel. Generally such bores can be implemented by Estrel only.

4.7.4 Hall floors

Carpets and other floor coverings are to be laid accident-secure and may not project beyond the stand limits. Carpets and other floor coverings must correspond to DIN 4102 B1 or EN 13501-1, CLASS CFL-S1 and bonded at the edges for fixing.

All materials employed must be removed free of residues. Substances, such as oil, grease, paint and similar must be removed immediately from the floor. The hall floor may not be either pasted or painted, except for edge fixing with adhesive tape which is removable free of residues.

4.7.5 Suspensions from the hall ceiling

All suspensions, both from the hall ceiling and from raised traversing systems (ground support) and other constructions, are to be implemented according to DGUV C1.

The appropriation and suspension of fastening points, as well as their changes, are implemented only by the responsible service company of Estrel. This also concerns changes to these constructions. Plans are to be enclosed with the order (printed form in the service documentation), in which the required placement of the fastening points is visible, including height information. The maximum loading of the suspension points made available is to be considered (see also Item 3.1). In case of complex systems, a so-called load plan must be submitted, which, as well as the specification of the corresponding weight-distribution of the total load, also represents all individual and line loads. On request, however, a separate (verification-capable) static calculation (incl. exact load distribution, documented weight assumptions, detailed construction drawings etc.) can be required. Costs possibly arising are at



the expense of the exhibitor or orderer. The construction to be suspended may be located only within the stand limits. The utilization of lifting gear (for example chain hoists, motor trains) is absolutely to be coordinated with Estrel. Electrically-conductive parts (standing as well as suspended) are to be included, by means of additional equipotential bonding, in the measures for protection in case of indirect contact. See also 5.3 Electrical installations.

With regard to the attachment of the objects to be suspended, the relevant security regulations, as well as in particular DGUV A1 (basic principles of prevention), DGUV C1 (event and production facilities for scenic representation), BGV D8 (winches, hoisting and traction devices) and the assembly place ordinance (VStaettVO), are to be considered. The sector standards of the VPLT, such as SO P1, "Appropriation and use of traversing systems", SO P2 "Electric chain hoist" and SO Q2 "Competence for event rigging", apply. Basically no suspensions of objects are admissible which are connected with the ground. The minimum separation distance for suspensions to those objects standing on the around and stand constructions is 50 cm in height.

If, for technical or organizational reasons, it should not be possible to remove suspensions from preliminary events or if it is not possible to manufacture suspension points in time for the following event, the exhibitor or trade fair builder must accept that appropriate suspension points are not present above his stand.

4.7.6 Stand boundary walls

Partition walls can be ordered from Estrel.

Own partition walls may be covered or papered only with low-flammable material, in accordance with DIN 4102 B1 or EN 13501-1 CLASS CFL-S1. See also Item 4.4.1.1.

4.7.7 Advertising resources and presentations

Stand and exhibit labeling, company and brand logos may not exceed the prescribed construction height (see Item 4.3). They should provide for an appealing display. Presentations and optical advertising resources which move slowly, as well as acoustic reproductions, are allowed provided that they do not bother the neighboring exhibitor, cause obstruction in the aisles and drown out paging systems of the trade fair itself within the halls. The volume may not exceed the specifications of the LaermVibrationsArbSchV at the stand limit. DIN 15905-5 is to be considered.

The distribution of printed matter and the employment of advertising resources are permissible only on your own platform. Exceptions can be authorized by the event organizer. The storage of the advertising resources and printed matter is admissible only in those amounts necessary for the respective daily requirement.

4.7.8 Appearance

The exhibitor is responsible for the structuring of the stand. The typical exhibition criteria of the event are to be considered here. The stands must be adapted to the overall appearance and overall plan of the respective exhibition. Minimum requirements on the stand structuring are the attachment of a screen with the name of the exhibiting company and product, as well as floor covering and stand walls, provided that the event organizer does not authorize another stand structuring for reasons of design. The event organizer additionally reserves the right to prescribe the frame assembly in the special participation conditions in case of individual events. Devices and demonstrations are to be arranged so that visitor traffic in the aisles is not hindered or endangered. Before active areas, additional, sufficient stowage space is to be provided outside of the traffic routes.

4.8 Open area

The directives for the hall area, provided that they are correspondingly applicable on the open area, also apply in the open area. With the installation of structural systems and devices (advertising systems, etc.), it is to be checked by Estrel whether an approval pursuant to § 15, in



assoc. with § 12 Air Transport Law, is required. The authorization is to be applied for with the responsible Ministry of the Interior, Department Air Transport, the Construction Supervisory Office of the City of Berlin and Estrel, 8 weeks before erection beginning. With the application is to be enclosed a site map excerpt, with a drawing of the structural system and the necessary documents as designated in Item 4.2.1. Furthermore, specifications relating to ground elevation at the location of the structural system in meters above MSL and the highest elevation of the structural system in meters above ground, as well as notification of the time of the erection and dismantling of the structural system, are to be provided. Anchoring systems of advertising bodies, all surface building solidums and systems are necessary because of wind hazard. Structural systems must be provided with constantly-effective, lightning-protection systems if, as a result of location, site or use, flashes of lightning can occur easily or have serious consequences. For lightning-protection systems, a test implemented by one of the VdS recognized experts must be verified. The test report is to be held available. If an effective technical, lightning-protection system cannot be guaranteed, the outside grounds are to be cleared in case of a thunderstorm.

4.8.1 Structure

The rental floor-area is identified by the event organizer. Every exhibitor is obliged to become informed on site about the location, dimensions and possible mounted equipment. Utility supply lines, foundations, distribution boxes and so forth must be accessible at all times. The stand limits are to be adhered to. Bores or anchors in the ground of the open area are prohibited. Exceptions to this require prior written approval from Estrel, which sets as a condition the provision of a security deposit for the costs of removal.

4.8.2 Dismantling

The exhibition areas must be delivered to Estrel in the initial condition. All mounted equipment, such as driven-in piles, lines, etc. are to be removed. Costs for restoration due to damage or structural changes by the exhibitor, event organizer or his representative are billed to the agency responsible.

4.9 Two-level construction design

4.9.1 Construction inquiry

A multiple-floor construction design is possible only with approval from Estrel. The inquiry and the supply connections necessary for this are necessary as early as with registration. The authorization is also dependent on the planned position in the hall and the corresponding base area. The application is to be sent in to Estrel by the deadline designated in the registration form. See also 4.2.1.

4.9.2 Conditions for the stand area over-construction, security margin distances, height of the stand interior compartments

The clearance heights of interior spaces with multiple-floor construction design must be at least 2.30 m on the ground floor and in the upper floor. See also Items 4.4.2 and 4.7.1.

4.9.3 Working loads and load assumptions

For the ceiling of a multiple-floor exhibition stand within an exhibition hall, in accordance with DIN 1055-3, Table 1 [Cat. C], the following are to be considered as vertical working load:

A restricted use through specialist visitors or stand personnel for discussions and customer support, i.e. furnishing with tables and chairs in free arrangement or in partitioned-off conference offices, requires a working load [Cat. C1]: $qk = 3.0 \text{ KN/m}^2$.

An unrestricted use as a freely-accessible exhibition and meeting area or sales area, with or without high-density seating, requires a working load [from Cat. C3]: qk=5.0 kN/m.

Stairs and platforms must always be designed for a working load [Cat. T2]: qk=5.0 $\rm KN/m^2$.



A horizontal load of H=qk/20 (qk = vertical working load) in the uppermost floor level is to be considered for a sufficient longitudinal-transverse stability in case of two-level exhibition stands or platforms. For parapets and railings, a horizontal working load [Cat. C] of qk=2.0 kN/m at stringer height is to be applied.

For the stability of stand constructions, for the achievement of a sufficient tilt and slide security, a horizontal replacement surface load of 0.125 KN/m² is to be applied. Deviations are possible in reasonable individual cases, where a more precise verification is to be provided.

For special designs, DIN 1055 is to be employed. Basically VStaettVo is to be considered in the planning. It is to be verified that the permissible loads on the hall floor e.g. through individual supports, are not exceeded (see Item 3.1. Hall data).

4.9.4 Escape routes and stairs

In the upper level of a multiple-floor exhibition stand, the distance to the hall aisle from every accessible point may be at most 20.00 m in a direct line. The number and clearance width of escape routes (exits, stairs, corridors) are to be provided as follows:

- Below 400 m² : 2 escape routes, each 1.20 m wide

All stairwells are to be implemented in accordance with DIN 18065 and BGI 561. Stairs must have a clearance width of at least 1.20 m. The pitch of the stairs may not be more than 0.20 m, the exit width not less than 0.26 m. The step dimension 63 cm ± 3 cm (step + 2x riser) is to be complied with here. The clearance width of necessary stairs may not be more than 2.40 m. The clearance passage height must be at least 2.20 m. Treads are to be implemented closed. Spiral and newelled staircases are not permissible as required stairs. Hand rails must be grip-secure and are to be implemented in continuous design. As far as possible on both sides, and in case of one-sided installation, to the right on descent. The side distance of the hand rails to adjacent component parts must be at least 0.05 m.

4.9.5 Building materials

In case of two-level stands, the supporting component parts, ceilings of the ground floor and the floor of the upper floor are to be generated with construction materials of non-inflammable materials (in accordance with DIN 4102 A2 or EN 13501-1, CLASS A2-s1, do).

The general stipulations pertaining to building law are to be complied with. Further requirements possibly becoming necessary remain reserved until the acceptance.

4.9.6 Upper floor

In the upper floors, roll-off protections of at least 0.05 m height are to be attached on the floor in the area of the parapets under which persons can be present. Parapets are to be implemented according to Items 4.6 and 4.9.3. Hand rails and parapet close-offs are to be implemented round or half-round. In sprinkled halls, the upper floor must basically be open to above. Otherwise corresponding fire-protection technical measures are necessary. Item 4.4.4 also applies for break or spectator rooms in the upper floor.

5. Operational security, technical security regulations, technical regulations and technical utility supplies

5.1 General specifications

The erection and dismantling work may be implemented only within the framework of the legal work and trade stipulations, subject to compliance with the relevant occupational health and safety regulatory works.

5.1.1 Damage

Every case of damage caused by exhibitors or their representatives in the grounds, whether it involves buildings or devices, is eliminated by Estrel on completion of the event at the expense of the agency responsible.



5.2 Employment of working resources

The use of bolt-firing devices is prohibited. The employment of surface-treatment machines without dust and chip-suction units (cf. 6.1) is not permissible. The employment of lifting platforms, cranes and forklifts may be implemented only by entitled persons.

5.3 Electrical installation

5.3.1 Connections

Connection options for electric current (230/400 V) are available in all halls and at different locations in the open area. Supply lines from the existing connecting points to the exhibition stands may be implemented only by technicians of Estrel. Installations of this type through exhibitors or non-Estrel employee are not admissible.

Every exhibitor is obliged to permit the use of utility supply shafts / bottom tanks for electric current which are located within his station, also for other exhibitors. Laid lines which cross his station may not be removed. The layout drawing, on which the required placement of the connections is visible, is to be enclosed with the orders with form sheet.

5.3.2 Stand installation

Electrical installations within the stands are implemented according to order by the technicians of Estrel. Within the stands, installations can be implemented by electrical specialists of exhibitors or authorized specialist firms according to the VDE specification and specifications applicable in Europe, as well as according to the state of the art. Every device must be approved with a CE identification mark and may be used only according to the applicable regulations (e.g. BGV A₃). Electric current is supplied only for such equipment and systems which correspond to the specifications of VDE and the respective power utility supplier.

5.3.3 Installation and operational specifications

The electrical equipment overall is to be implemented according to the latest safety regulations of the association of electrical engineering (VDE). To be considered in particular are the VDS directives, VDE 0100, DIN VDE 0100-718, DIN VDE 0100-560, DIN EN 50 172, DIN EN 50 107-1 and 2 and DIN VDE 0100-711, DIN VDE 0108 Part 2, DIN VDE 0100 Part 706 Part 708 711, DIN VDE 0128, DIN EN 56950. For plug sockets and light circuits 30 mA RCD (Residual Current Device / fault-current protection) is prescribed. The content of high or low frequencies in the network causing faults may not exceed the values indicated in VDE 0160 and VDE 0838 (EN 50 006 and EN 61000-2-4) (see also Item 5.11). Conductive component parts are to be included in the measures for protection in case of indirect contact (stand grounding). This measure is also to be employed in case of suspended conductive component parts.

In addition, only those lines, such as the types NYM, Ho7RN F, Ho5RR F, with a minimum cross section of 1.5 Cu mm² may be employed. Ribbon cables of every type are inadmissible. In low-voltage systems, exposed electrical conductors and terminals are inadmissible. The secondary lines are to be protected against short-circuit and overload. Flexible lines may not be laid under floor coverings without protection against mechanical loading.

5.3.4 Safety measures

For special protection, all heat-generating and heat-developing electrical appliances (hot plates, refrigerators, projectors, transformers etc.) are to be mounted on non-flammable, heat-resistant, asbestos-free underlays. According to the thermal development, a sufficiently large separation distance to inflammable materials is to be ensured. Light fixtures may not be attached to inflammable decorations or similar.

5.3.5 Emergency lighting

Stands in which the existing general emergency lighting is not effective as a result of the special features of their construction design, require an additional own emergency lighting, in accordance with DIN EN 50 172 and BGR 216. The system is to be designed to ensure that people can find their way to the general escape routes.



5.3.6 Use of radio frequencies

Any use of radio frequencies must be reported to Estrel before operational startup and authorized by Estrel. Furthermore, an approval of use in writing from the federal network government authority for frequency ranges must be kept available on site at all times.

5.4 Water and waste-water installation

Laid lines which cross a station may not be removed. Every stand which should be supplied with water/waste-water removal is provided with one or more connections.

The installation of these connections can be implemented only by Estrel. A layout drawing, on which the required placement of the connections is visible, is to be enclosed with the orders. Line paths in operation for water supply/waste-water removal must remain accessible, since otherwise damage caused by water is excluded from the insurance cover. Water meters, if necessary, must be set up by the exhibitor himself or be ordered from the authorized contract companies of Estrel. All determinations stipulated for energy (electric current and gas) in 5.3.1 and 5.3.2 apply correspondingly for the connection and consumption of water.

The water supply is turned off on the last event day for security reasons, generally at the end of the event.

5.5 Compressed air and gas installation

All determinations stipulated for energy (electric current and gas) in 5.3.1 and 5.3.2 apply correspondingly for the connection and consumption of gas and compressed air. Every exhibitor is obliged to permit the use of line paths for gas and compressed air which are located within its station, also to other exhibitors. Laid lines which cross his station may not be removed.

5.5.1 Compressed air

The supply of the stands with compressed air is implemented exclusively by Estrel.

Own compressors are not allowed (also the employment of small and auxiliary compressors) for reasons of operational security.

Authorization-mandatory exceptions are to be indicated to Estrel 6 weeks before the beginning of the trade fair.

- The compressor is fixed-installed in the machine of the exhibitor and is thus a component part of the machine.
- A connection of a compressor of Estrel can be implemented only with increased financial and constructive expenditure, which makes this connection economically unjustifiable. Exceptions to this are permissible in the following cases only:

The requirement of the exhibitor of special gases which cannot be acquired from Estrel.

- Special pressures are required which cannot be supplied by the compressors of Estrel.
- Manufacturers of compressors.
- The compressor is a component part of the exhibit and is marketed together with the exhibit; the max. power of this compressor may not exceed 50 l/min.

The above exceptions can be made only for compressors which are proven, which are tested and approved, as mandatory, for functional capability and operational security, according to the BetrSichV and TRBS 1203 Part 2 for compressed-air reservoirs valid in each case. See also Item 5.6.3. The noise of the compressors may not bother other exhibitors and visitors. On an individual basis, the operation is to be adapted correspondingly. The testing and approval of the integrated compressed-air devices is subject to payment of costs.

5.5.2 Gas

The above determinations apply accordingly for the manufacture of supply lines and lines within the stands, as well as for the gas consumption under 5.3.1 and 5.3.2.

If the cross-sections of existing gas feed lines should not suffice, any reinforcement required is exclusively at the expense of the exhibitor. The operation of LPG systems is generally excluded, provided that the exhibitor did not obtain special written permission from Estrel beforehand. The application to Estrel for special permission is required, at the latest, 6 weeks before erection beginning. The utilization of gas for lighting and/or heating purposes is not permitted. Gas



burners must be equipped with small actuators or automatic ignition equipment. Firing systems as exhibition objects generally require prior written authorization from Estrel. The application to Estrel is required, at the latest, 6 weeks before erection beginning. The exhibitor has sole responsibility for compliance with the corresponding safety regulations (flame-retarding underlays, flexible metal hoses & sim.).

5.6 Machines, pressure vessels and exhaust gas systems

5.6.1 Machine noises

The operation of noise-generating machines and devices should remain as limited as possible in the interests of all exhibitors and visitors. The noises at the stand boundary may not exceed the specifications of LaermVibrationsArbSchV. DIN 15905, Part 5 (measures to avoid hearing endangerment of the public through high acoustic emissions using electro-acoustic technology) is to be considered and adhered to.

5.6.2 Product safety

All exhibited technical working resources and consumer products must meet the requirements of the Product Safety Law (ProdSG).

Technical working resources and consumer products which do not correspond to these requirements must carry a sign which can be easily seen, which refers to the fact that they do not correspond the requirements of the above law and can be acquired only when agreement with the legal requirements has been established. For technical working resources and consumer products which carry the CE mark, the corresponding Declaration of Conformity of the manufacturer (e.g. ground record documents) must be available at the stand.

In case of demonstrations, the necessary precautions for the protection of persons are to be taken by the stand personnel.

5.6.2.1 Safety devices

Machine and equipment parts may be put into operation only with all safety devices functional. The normal safety devices can be replaced by a secure covering of organic glass or a similarly transparent material, with at least similar equivalence.

If devices are reliably secured against operational startup, the safety devices can be removed in order to make the design type and implementation of the covered parts identifiable to the visitors. The safety devices must then remain visible near the machine. Dangers of injury must be excluded in every case.

5.6.2.2 Test process

The exhibited technical working resources are inspected with regard to their accident protection and safety-technical implementation by the responsible supervisory authority, possibly together with the responsible professional technical committees, and checked for compliance with the safety requirements. For verification of the CE identification code by the government office, it is necessary to keep the EC Declaration of Conformity on the exhibition stand ready for inspection. In cases of doubt, exhibitors should get in touch with the responsible office at an early stage before the beginning of the trade fair.

5.6.2.3 Operation prohibition

In addition, Estrel is entitled to prohibit the operation of machines, equipment and devices at all times if, in their opinion, hazards to persons and property are to be feared through such operation.

5.6.3 Pressure vessels

5.6.3.1 Certificate

Pressure vessels may be operated on the stand only if they are set up and operated in accordance with the determinations of the operational safety ordinance.

The test verification issued concerning this is to be kept at the place of issue near the pressure vessel and submitted on request by the responsible supervisory authority and/or the event organizers or their representative.



5.6.3.2 Testing

The certificate concerning the construction and water-pressure test or comparable test does not suffice. This requirement also applies for foreign or leased containers. In case of registration up to six weeks before the beginning of the trade fair, test-mandatory pressure vessels can be subjected to acceptance checking by the Technical Inspection Association up to one day before the trade fair opening, subject to presentation of the construction and water-pressure test certificate and the provision of a fitter on the exhibition stand.

5.6.3.3 Leased devices

If leased devices are employed at the stand, the above regulations apply accordingly. Attention is also to be paid that the issued test verifications are kept at the place of issue near the pressure vessel and submitted on request to the responsible supervisory authority or Estrel.

5.6.3.4 Monitoring

The necessary certificates are to be readied for the trade supervision during the event.

5.6.4 Exhaust gases and vapors

Vapors and gases released from exhibits and devices, which are inflammable, healthendangering or a harassment to the community, may not be introduced into the halls. They must be removed via corresponding pipes or exhaust gas systems (e.g. fume exhaust hoods with activated charcoal filter), according to the specifications of the Federal Emission Protection Act in the valid version in each case.

5.6.5 Exhaust gas systems

The suction-exhausts of the systems may be implemented only by Estrel. A layout drawing is to be enclosed with the orders with form sheet, on which the required placement of the suction-exhausts is visible.

5.7 Utilization of pressurized gases, liquefied gases and inflammable liquids

5.7.1 Pressure and liquefied-gas systems

The storage and utilization of pressurized and liquid gas in the exhibition halls and in the grounds is prohibited without written authorization from Estrel.

5.7.1.1 Application for authorization for pressurized gas bottles

In case of the utilization of liquefied gas or other inflammable gases in pressurized gas bottles for the presentation of exhibits, authorization in writing must be obtained in accordance with form sheet from the service documentation and in good time. According to the relevant accident prevention specifications, pressurized gas bottles are to be protected against impact, tipping over, access by unauthorized persons, as well as against heating. Furthermore, the approval of the Berlin Fire Department is required.

5.7.1.2 Utilization of liquefied gas

In case of the utilization of liquefied gas, a 10 l pressurized gas bottle with a maximum content up to 11 kg may be set up. The entire system is to be tested by a competent professional, in accordance with BGG 937. The test certificate is to be kept available at the stand.

5.7.1.3 Setup and maintenance

For the setup and maintenance of LPG systems the "Technical regulations of liquefied gas" TRF 1996-1 and 1996-2 (issued by: DVGW Deutscher Verein des Gas- und Wasserfaches e.V (German Association of Gas and Water Specialists) and DVFG Deutscher Verband Flüssiggase e.V. (German Liquid Gas Association)), the accident prevention specification BGV D34 "Utilization of liquefied gas", as well as the "Directives for the utilization of liquefied gas" ZH 1/455 (issued by: Main association of the commercial trades social insurance against occupational accidents), are to be considered. Inflammable, pressurized gases must be equipped with a kick-back guard in



the hose connection. For certain individual cases, a gas alarm system is required. Furthermore, the approval of the Berlin Fire Department is required.

5.7.2 Inflammable liquids

5.7.2.1 Storage and utilization

The storage and utilization of inflammable liquids (see also determinations of the operational safety ordinance in the valid version in each case) in the exhibition halls and on the grounds is prohibited without written authorization. The authorization for storage and utilization of inflammable liquids can be issued only for the operation or the demonstration of exhibits. The containers are to be identified according to GefStoffV. Safety data sheets and operating instructions are to be kept available at the stand.

5.7.2.2 Storage as required

For operation and demonstration, only the amount of inflammable liquid required for one day may be kept at the stand in each case. This required amount is to be designated in the application. In the stand, a fire extinguisher, suitable at a minimum for the fire rating B and authorized to DIN EN 3 - 1, is to be held in readiness.

5.7.2.3 Storage tank

The daily requirement is to be stored clearly visible in closed, authorized and breakproof containers. It must be protected against any access by unauthorized persons. The storage tanks are to be safeguarded by placing them in non-flammable collecting tanks.

5.7.2.4 Storage location

At the storage location there has to be an absolute smoking prohibition within 5 meters radius. Corresponding sign-posting is to be ensured. Suitable portable fire extinguishers must be provided by the exhibitor / event organizer.

5.7.2.5 Conditions for operation

Systems which are operated or demonstrated with inflammable liquids are to be provided with non-flammable collecting tanks at the filling nozzles, as well as at those locations where liquids can escape. Discharged inflammable liquids are to be removed from the containers immediately and eliminated safely because of possible fire or explosion hazard.

5.7.2.6 Filling the liquids

Since a special moment of danger occurs while filling the liquids, the greatest care and caution is to be exercised here. The filling of the exhibits may basically be implemented only in the visitor-free time of the trade fair event. Sources of ignition and static charges are to be avoided in this case.

5.7.2.7 Empty containers

Empty containers in which inflammable liquids were contained may not be kept at the stand or stored in the hall. For devices and systems which are not operated for demonstration, only empty containers without remaining content are permissible. These are to be identified clearly as such.

5.8. Asbestos and other dangerous materials

The employment and utilization of hazardous materials and construction materials containing hazardous substances are to be coordinated with Estrel. The basis for this is the law for protection against dangerous materials (chem. law), BGB1, Part 1, Page 1703, in the valid version in each case, in association with the Chemical Prohibition Ordinance (Chem.Verbots V), as well as the Hazardous Material Ordinance (GefStoff V), in the valid version in each case. Should materials which are declared and/or identified as a hazardous materials be used at the stand or with the setup and dismantling, a material list, as well as the safety data sheets and operating instructions, are to be enclosed with the registration.



5.9 Filmed, photographic, television demonstrations, scene areas and other presentations

See also Items 4.2.1 and 4.4.4. Loudspeaker advertising, film, slide, video and other acoustic or optical demonstrations require prior written approval from Estrel. The same applies for corresponding or similar advertising activities.

The following advertising activities are also not permissible within the stands:

- Which violate the relevant legal and administrative specifications, the regulations of the technology or good practice
- S Which include illegal, ideological or political motives
- Which cause disturbances to other exhibitors, for example flashing circuits, scrolling texts, public address systems and so forth, dust development, floor dirt accumulation or similar
- Which cause disturbances to the visitor flow; in particular which cause obstructions in the hall aisles and therefore impair the event flows
- Which include the exhibition of live animals provided that the exhibition is not explicitly for that
- Which include external advertising, as well as references to upstream suppliers, customers and other companies
- Which propagate other trade fairs and exhibitions which are considered as competitive events
- S Which offend the against official conditions and order arrangements.

Estrel is entitled, by way of self-help, to remove and suppress advertising attached or implemented in an unauthorized way, without prior notice and at the expense of the exhibitor. In case of disputes about the admissibility of an advertising item, Estrel decides with the exclusion of any legal proceedings.

5.10 Radiation protection

5.10.1 Radioactive materials

The handling of radioactive materials is authorization-mandatory and is to be coordinated with Estrel. According to the regulations for protection against radiation, in the valid version in each case, the authorization is to be applied for from the State of Berlin, as well as the Berlin Fire Department, and submitted to Estrel at least eight weeks before the beginning of the trade fair. Insofar as an authorization is already existing, it is to be verified that the intended handling of radioactive materials on the exhibition grounds is covered legally.

5.10.2 X-ray systems and interference emitters

The operation of X-ray systems and interference emitters is authorization-mandatory and is to be coordinated with Estrel.

The ordinance concerning protection against damage through X-rays (RoeV, BGBI I, in the valid version each case) is to be considered. The operation of X-ray systems and interference emitters is authorization or notification-mandatory pursuant to \$\$ 3, 4, 5, 8 RoeV. The responsible government authority for the place of issue Berlin is the Berlin Regional Administration. Applications for authorization and/or notifications are implemented using a report form. This, and the relevant specification sheet, are available at the Citizen and Order Office, to which the applications or notifications are to be submitted informally / in triplicate at least 4 weeks before beginning of the event.

5.10.3 Laser systems

The operation of laser systems is notification-mandatory and is to be coordinated with Estrel. The operation of laser systems of the Classes 3B, 3R or 4, pursuant to § 6 Accident Prevention specification "Laser irradiation" BGV B₂ / GUV VB₂, is to be notified to the trade supervision office (cf. Item 6.4) and to the trade social insurance against occupational accidents. The written order of a laser protection representative, with name and address, for the operation of the laser equipment, is to be enclosed with the notification. Laser equipment is to be set up and operated subject to observation of BGV B₂, 3B and 4 Laser Irradiation. The operation of laser equipment in



the open area without prior written authorization is prohibited. In case of the issuing of exceptional authorization, the conditions to be guaranteed by the operator are stipulated by Estrel in this. Due to the airport protection area, however, an additional authorization is required from the responsible aviation authorities in case of lasers directed skywards in every case (see 4.4.1.5).

5.11 Radio-frequency devices, radio systems, electromagnetic compatibility and harmonic components

The operation of radio-frequency devices and radio systems is autorization-mandatory through the regulating authority for telecommunications and mail, and is to be coordinated with Estrel. Estrel reserves the domiciliary right to the use of authorized frequencies.

The operation of radio-frequency devices and radio systems is allowed only when they correspond to the determinations of the German Telecommunications Law (TKG), as well as the law about electromagnetic compatibility of devices (EMVG), in the valid version in each case.

If exhibits are presented or stand decorations used where electrical, magnetic or electromagnetic fields are employed, the stipulations of the 26th Ordinance for the implementation of the Federal Emission Protection Act are to be complied with. The electrical installations of the exhibits and the exhibition stands are to be implemented so that inadmissibly-high network residues through current harmonic components in the trade-fair utility-supply network are avoided (see also Item 5.3.3.). Personnel-call systems, microport systems, intercom radio systems and telecontrol radio systems may be operated only with authorization from the regulatory authority for telecommunications and mail, see also law about radio systems and telecommunications installations in the valid version in each case. The operational startup of radio systems (for example WLAN) - independently of authorization through the regulatory authority - requires the approval of Estrel. This authorization is to be applied for with Estrel. Devices which were rented with the "Internet order form (wireless by WLAN)" are authorized and do not require this approval.

5.12 Cranes, forklifts and empty containers

For safety and liability reasons, the operation of cranes, floor-transport vehicles with driver place (forklifts) and lifting platforms is permitted only for the official trade-fair forwarding agents. Estrel does not assume any responsibility for sent or brought-in devices, objects or exhibits. Provided that the transport is implemented with own vehicles, drive-in permits are to be requested from the exhibitor in good time. This also applies in case of delivery through other transport companies. Any liability of Estrel for all risks which can result from the activity of the transport companies is excluded. Item 4.4.1.11 applies for the handling of empty containers.

5.13 Musical reproductions

For musical reproductions of all type, the permission of the association for musical performance and mechanical reproduction law (GEMA) is required, subject to the prerequisite of copyright law, § 15 Copyright Law (BGBI, in the valid version in each case). Musical reproductions which are not registered can result in claims for compensation from GEMA (§ 97 Copyright Law).

5.14 Distribution of food and drinks

The consumption or disposal of food or beverages is not permitted in this area without prior approval by the Estrel.

6. Environmental protection

Estrel is basically obliged to take precautions for the protection of the environment. As a contract partner of the event organizer, the exhibitor is obliged to ensure that all determinations and specifications relevant to environmental protection are complied with as binding, also by his contractors.



6.1 Waste management

The specifications of the Recycling Economy and Waste Law (KrW-/AbfG, in the valid version in each case), the relevant implementation stipulations and ordinances, as well as the "state laws" and "local statutes", form the basis for all the following regulations. The exhibitor is responsible for a waste disposal, which is proper and compatible with the environment, of any waste which results in case of the structuring, running and dismantling of his stand.

The technical handling of the waste disposal for utilization and removal is the sole responsibility of Estrel and/or the contract partners designated by same (see Item 6.4). The waste directives of Estrel are to be considered.

6.1.1 Waste particularly requiring monitoring

According to the basic principles of the recycling economy, waste on trade fair centers is to be avoided in the first place. Exhibitors and their contract partners are obliged to contribute to effectively ensuring this in every phase of the event. This objective must be pursued by all participants as early as during planning and in coordination. Generally, materials are to be used for stand construction and operation as far as possible which are reusable and do not pollute the environment. Materials left behind will be disposed of without any check of their value at the expense of the exhibitor for an increased charge.

6.1.2 Brought-in waste

The exhibitor is obliged to report to Estrel any waste which, according to type, quality or quantity, is health, air or water-endangering to a special degree, is explosive or inflammable (e.g. batteries, paints, solvents, lubricants, dyes etc.), and to initiate its proper waste disposal through Estrel,

Materials and waste which do not arises in connection with the event run term, setup or dismantling, may not be brought onto the grounds.

6.2 Water, waste water and ground protection

6.2.1 Oil and grease separator

Introductions into the sewage mains network may not exceed the usual pollutant quantities for households.

6.2.2 Cleaning work and cleaning agents

Cleaning work is to be implemented, as far as possible application-technically, with biologicallydegradable products. Solvent-content cleaning agents are to be employed in exceptional cases only and according to specification. If products with hazardous-material identification are employed, then Item 5.8 applies. The products may be employed only according to the utilization specification of the manufacturer.

6.3 Environmental damage

Environmental damage/contamination (e.g. through benzene, oil, solvent, paint, rust etc.) is to be avoided. If contamination should nevertheless result, this is to be reported immediately to Estrel. Estrel initiates proper removal at the expense of the agency responsible.