LEGAL BASIS: PROTECTION-GOAL ORIENTATION & STATE BUILDING CODE (EXAMPLE: BERLIN)

For temporary outdoor events (festivals, open-airs), the classic building regulations for permanent assembly venues usually do not apply directly. Approval is granted primarily under the trade and public-order law of the federal states. The law does not define rigid staffing quotas but protection goals (e.g. ensuring free escape routes). Departing from purely human posts in favor of technical solutions is legally permissible under the principle of deviation – regulated, for example, in **§ 67 para. 1 of the Building Code for Berlin (BauO Bln)**.

Practical example: If the licensing authority requires a fixed, static gate post at an emergency exit to “prevent blockages”, this post can be replaced in the safety concept by NIKOS opening sensors. The protection goal is met equally well or better here (§ 67 BauO Bln), because technical sensors, unlike humans, are not subject to fatigue (vigilance problem) and report unauthorized opening or blocking to the **NIKOS [dispatcher]²** immediately, to the second. The control center then dispatches mobile responders to intervene, who demonstrably act more attentively thanks to the varied patrol work. Visual verification (e.g. via CCTV) can optionally relieve the system but is not mandatory for the legally secure fulfillment of the protection goal through the sensor-based alarm chain.

The practical problem of vigilance & staff shortage: *Static posts demonstrably become dulled by monotony (reduced vigilance). This matrix shows how the targeted and legally secure use of the NIKOS system can reduce staff at monotonous interfaces, increase detection quality and shift staffing capacity to agile intervention patrols (responders). The technical sensors form the primary, seamless alarm chain, while downstream control mechanisms can be scaled flexibly and as needed.*

SCENARIO / POST FUNCTION	TECHNICAL INTEGRATION (NIKOS)	PRACTICAL & LEGAL BENEFIT	OPERATING PREREQUISITES & CONDITIONS	ASSESSMENT & CONCLUSION
1. Gate posts at emergency exits Preventing blockages & unauthorized access	Integration of self-sufficient **opening sensors** on the gate, wired directly to the **NIKOS [dispatcher]²** at the control center. An optional connection of CCTV cameras for visual pre-verification is possible.	Completely eliminates the vigilance problem. Misuse or blockages are reported digitally in real time. Staff are freed up for mobile patrols.	Escape gates must be unlockable from the inside at any time without aids and without harm during operation. Certified construction-fence gate locks with push bar (e.g. from VABEG) make it possible to keep the emergency exit inaccessible from outside and to release it safely from inside immediately in panic situations. Sensors require a stable radio connection.	**PARTIAL SUBSTITUTION** Gate remains mechanically panic-proof. The static post is eliminated through mechanical securing and sensor-based alarm, provided a mobile patrol can intervene within a defined time.

SCENARIO / POST FUNCTION	TECHNICAL INTEGRATION (NIKOS)	PRACTICAL & LEGAL BENEFIT	OPERATING PREREQUISITES & CONDITIONS	ASSESSMENT & CONCLUSION
2. Visitor counting / sectoring Crowd management & infield monitoring	**Digital counting systems** (laser barriers or optional AI cameras) integrated into the NIKOS radio infrastructure. Values are transmitted to the **NIKOS [dispatcher]²**. Automatically generated triggers enable **NIKOS [order]²** to give staff direct, visual instructions to open or close passages.	Precise real-time occupancy instead of error-prone hand clickers. Eliminates the vigilance problem. Automated task assignment ensures error-free, fast and unambiguous communication.	Model example of technology-staff integration: counting, signal triggering and optical signaling are fully automatic, while the physical implementation (e.g. at the infield entrance) is done by one person. This guarantees a situation-appropriate and flexible implementation on site.	**FULLY PERMISSIBLE** Strongly preferred by authorities because it is tamper-proof and seamlessly documented. Saves a great deal of staff at sector boundaries and acts as a smart part of the system.
3. Route marshals at parades Visitor guidance & crisis communication	Fixed, self-sufficient loudspeaker units on poles along the route, centrally controlled via **NIKOS [audio]²**; visual support optionally through **NIKOS [LED]²** or **NIKOS [flash]²**.	Acoustically clear, unambiguous live or pre-recorded announcements. Significantly more effective than the megaphones of exhausted marshals in high ambient noise.	A loudspeaker cannot mechanically stop physical misconduct (e.g. stepping onto the roadway in front of parade floats). Critical bottlenecks still need people.	**SUPPLEMENT** Allows “stretching” the spacing between posts (line of sight instead of bottleneck). Technology takes over acoustic guidance, remaining marshals secure critical axes.
4. Fence watch / perimeter Protection against climbing over and sabotage	**Intelligent fence sensors** or mobile camera towers with optional AI motion analysis (human detection) on the outer ring, connected to the **NIKOS [dispatcher]²**.	Seamless 24/7 monitoring without fatigue, even in darkness. Detection takes place well beyond human visual range.	Physically detaining persons and enforcing house rules on site may only be done by certified personnel (§ 34a GewO, German Trade Regulation Act).	**FULLY PERMISSIBLE** The static “fence stander” is no longer needed. The system reports deviations by radio/GPS to the control center, which dispatches mobile responders to intervene.
5. Evacuation helpers Ensuring evacuation in an emergency	Self-sufficient voice alarm systems (VAS) via **NIKOS [audio]²** in combination with the battery-backed emergency light and guidance system **NIKOS [LED]²** or **NIKOS [flash]²**.	In an emergency, staff themselves often panic. Professional, pre-recorded evacuation instructions demonstrably have a de-escalating effect.	In acute panic situations, people primarily follow the “lead wolf effect” (human guidance). Pure technology should be supported by mobile guidance staff.	**OPTIMIZATION** The protection goal “safe evacuation” is often better met by redundant technology (loud, clear, bright) than by untrained helpers. Staff only guide actively at the assembly points.

Sensible complement of skilled staff and technology • Prepared for strategic safety planning at temporary events and temporary structures (Fliegende Bauten) • Courtesy translation; the German original applies