



HELLMUTH-SANDER-CONSULTING

HSC stands for experienced project stabilizers—with strong leadership and lean DNA

Critical Infrastructure Logistics Stress Test

Rapid scan or core analysis: single points of failure, spare parts strategies, mobilization, and resilience – for energy, IT, and transport. When critical infrastructure fails, it is not only technology that matters, but above all logistics: spare parts, access, personnel, approvals, transportability, prioritization, and leadership in the event of an incident. The HSC Stress Test makes your supply chains, warehouse logic, and mobilization capabilities visible, testable, and resilient – before an incident causes real damage.

Who the stress test is intended for

- Operators and service providers in energy (grid, substations, generation, storage)
- IT/telecommunications (data centers, networks, critical components)
- Transport & traffic (rail, road, hubs, terminals, ports/airports)
- Municipal/regional critical infrastructure managers and project organizations

What we test (the hard points that matter in an emergency)

1) Single points of failure (SPOF)

We identify technical and logistical single points that can cause a failure:

- Critical components with long procurement times
- Dependence on individual suppliers/transport routes
- Bottlenecks in special equipment, permits, access
- Know-how bottlenecks (few people, rare qualifications)

Result: A clear list of real risk levers – not just “perceived risks.”

2) Spare parts and inventory strategy

Not all inventory is good – but a lack of inventory is expensive in a crisis.

We check:

- Critical spare parts (A parts) and their availability
- Storage locations, access, inventory security, responsibilities
- Minimum stocks, rotation logic, obsolescence
- Alternatives: repairability, second source, interchangeability

Result: A spare parts strategy that neatly balances costs and resilience.

3) Mobilization & deployment logistics

In the event of an incident, the decisive question is: How quickly can people, materials, and equipment be got to the right place?

We evaluate:

- Alarm and mobilization procedures
- Transportability (routes, closures, heavy loads, access)
- Operational resources, special equipment, service provider contracts
- Shift and endurance capability (72 hours/7 days depending on the scenario)

Result: Realistic mobilization times and a robust plan for shortening them.

4) Resilience: “Keep going despite disruption”

Resilience is not “everything in duplicate,” but rather continued operability:

- Prioritization: What needs to be up and running again first?
- Emergency operation logic: Workarounds, temporary solutions, redundancies
- Decision-making processes: Who decides what, when, and with what data?
- Communication and situation assessment (internal/external, service providers, authorities)

Result: Clear ability to act instead of hectic activity in a state of emergency.

Rapid scan vs. core analysis (two packages – one goal)

Rapid scan (fast, focused)

For organizations that need clarity quickly:

- Document and interview-based quick check
- Identification of the biggest SPOFs
- Initial assessment of spare parts & mobilization
- Prioritized list of top measures

Result: An actionable plan for the next 30–60 days.

Core analysis (in-depth, resilient)

For operators with high criticality or complex structures:

- Detailed process and data analysis
- Scenario-based runs (e.g., hub failure/delivery stoppage/cyber event knock-on effects)
- Resilient target strategy for spare parts, suppliers, mobilization
- Implementation mapping including roles, KPI set, and governance

Result: A complete resilience and logistics blueprint with implementation path.