

Critical Services Testing and Back-up Plan

Plan / template | FAC-PLN-001

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Title	Critical Services Testing and Back-up Plan
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Prepared by	{{roles.quality_lead.name}}, Quality lead
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Effective date	{{document.effective_date}}
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Replaces	None (new document)
Standards and criteria supported	Standard 2B, criterion 2B.9 (non-negotiable)
Evidence basis	E-009
Status of this document	Recommended best-practice model. A hospital may adopt, adapt or replace it with an equivalent that meets the same criteria.

At a glance: what to do

1. List the critical services: power, water, medical gases, ventilation and clinical information systems.
2. For each, set the test schedule and the back-up arrangement.
3. Test each service on schedule and record the result.
4. Start a failure log for every fault, with its cause and the change made.
5. Review the log every quarter.

Stop and get help straight away if: a critical service has no back-up arrangement, or a failure is not logged.

1. Purpose

To prevent failures of critical services through planned testing and back-up, and to learn from each failure so it is not repeated [EC].

2. Scope

Applies to	Facilities, engineering, IT, and clinical leads who depend on these services
Locations	The whole facility
When	Continuously; testing on schedule; review quarterly
Does not apply to	Routine maintenance of individual devices, covered by EQP-SOP-001

3. Definitions and abbreviations

Term	Meaning in this SOP
Critical service	A service whose failure would put patients at immediate risk
Back-up	An alternative supply or system that keeps the service running until restored
Failure log	The record of every failure, its cause and the change made

4. Background and rationale

Most failures in hospital services are predictable from testing and avoidable by back-up. Criterion 2B.9 requires planned prevention and analysis, not only repair after the event.

5. Responsibilities

Role	Duties in this SOP	Competence needed
Facilities manager	Owens the plan; runs testing; keeps the failure log	Facilities engineering
IT lead	Owens the information system back-up and downtime plan (SOP-074)	IT competence
Clinical leads	Know the back-up for their area; report failures at once	Clinical management

6. Equipment, materials and resources

Item	Specification or standard	Check before use
Testing schedule	Current; test dates per service	Visible to facilities
Back-up equipment (generator, UPS, gas cylinders, stored water)	Tested at the set interval	Working and in date
Failure log (FAC-REG-002)	Current	Updated at each failure

7. Safety and infection prevention

- Do not bypass a safety device to keep a service running.
- Test back-up systems under controlled conditions only.

8. Before you start

- Check the testing schedule and the back-up status for the day.

9. Procedure

Follow the steps in order. Where a step says "If", take the action for the case that applies. Do not skip a step. If a step cannot be done, use section 11 and section 12.

Step	Action	How to do it	Key point
1	List the critical services.	- List power, water, medical gases, ventilation and clinical information systems. - For each, record the areas it supports and the risk if it fails.	A service left off the list is never tested.
2	Set the testing and back-up.	- Set a test schedule for each service at the interval the manufacturer and the committee set (EC). - Set the back-up arrangement, its capacity, and its test interval.	Back-up that has never been tested may not work when needed.
3	Test on schedule.	- Carry out the tests and record the date, result and the tester. - Test back-up systems under load where the plan allows.	A test is the only evidence the back-up works.
4	Log every failure.	- Record each failure on FAC-REG-002: date, service, cause, duration, impact, and how it was restored. - Find the cause, not only the symptom. - Record the change that prevents recurrence.	A failure without a cause and a change will return.
5	Review quarterly.	- Review the log and the test results each quarter. - Look for repeated failures and ageing equipment. - Report to the governing body.	Patterns in the log show where to invest.

Decision points

- If a critical service fails and back-up does not work, follow the downtime and emergency plans, and inform the chief executive at once.

10. Special situations

Situation	What to do
Planned shutdown	Inform clinical leads in advance, use the back-up plan, and record the shutdown.

11. Problems and escalation

- Any failure affecting patient care is reported as an incident (INC-POL-001) and to the chief executive at once.

12. Monitoring and compliance

What is checked	Target	How often	Who	If the target is missed
Critical services tested on schedule	100%	Monthly	Facilities manager	Escalate to chief executive
Failures logged with cause and change	100%	Each event	Facilities manager	Review of the event
Back-up tested on schedule	100%	Monthly	Facilities manager	Escalate

13. Records

Record	Where it is kept	Kept for
Testing schedule and results	Facilities file	{{facility.records_retention_years}} years
FAC-REG-002 Failure Log	Facilities file	{{facility.records_retention_years}} years

14. Training and competence

- Facilities and clinical leads are briefed on the plan and their part at induction and yearly (EC).

15. Related documents

ID	Title	Relationship
FAC-REG-002	Failure Log	Used in step 4
FAC-SOP-002	Failure Logging and Analysis	Procedure for the log
SOP-074	System Downtime Procedure (generic)	IT downtime
EQP-SOP-001	Medical Equipment Maintenance	Device maintenance

16. Evidence

ID	Source and status
E-009	ASF Expert Committee consensus. Test intervals and back-up capacity to be set against manufacturer instructions and national rules.

EC = ASF Expert Committee consensus. Items marked EC are reviewed by the Committee each year.

17. Change history

Version	Date	What changed	Approver and signature
1.0	{{document.effective_date}}	First version	Approved by the ASF Expert Committee
1.1	{{document.effective_date}}	Internal quality review: corrected cross-references, status wording and document control	Approved by the ASF Expert Committee