Water Resilience Assessment

for CNI Data Centres

TRICEL
GENERATIONS OF INNOVATION

Assessment Information

Site Name:

Assessment Date:

Assessed By:

Next Review Date:

1. Current Water Demand - Cooling

- [ ] Document cooling system type
- [ ] Measure daily water consumption (m^3/day)
- [ ] Calculate peak water consumption
- [ ] Identify makeup water requirements
- [ ] Record seasonal variation
- [ ] Determine cooling load as % of power

Fire Suppression

- [ ] Calculate fire suppression volume per BS EN 12845
- [ ] Identify sprinkler flow rate (litres/min)
- [ ] Document hydrant system requirements
- [ ] Verify fire water quality standards
- [ ] Confirm separation between systems

2. Supply Infrastructure

- [ ] Identify water supplier and service area
- [ ] Document mains pipe size, material, age
- [ ] Obtain supply reliability data
- [ ] Review historical supply failures
- [ ] Identify maintenance schedules
- [ ] Determine distance to alternative connection
- [ ] Verify supply pressure and flow rate

3. Storage Capacity Requirements

- [ ] Define required autonomy period by tier
- [ ] Calculate: Daily consumption × Duration
- [ ] Add 10-20% contingency
- [ ] Account for seasonal variation
- [ ] Include system refill requirements
- [ ] Calculate fire suppression storage
- [ ] Sum total storage requirement

4. Existing Storage Evaluation

- ☐ Document total installed capacity (m³)
- ☐ Identify tank type and material
- ☐ Measure usable capacity
- ☐ Calculate current autonomy duration
- ☐ Inspect structure for damage/corrosion
- ☐ Check lining integrity
- ☐ Assess remaining service life

5. Regulatory Compliance

- ☐ Verify WRAS approval for fittings
- ☐ Confirm backflow prevention per BS EN 1717
- ☐ Review Legionella risk assessment (HSE L8)
- ☐ Verify treatment regime
- ☐ Check testing frequency (quarterly)
- ☐ Confirm BS 8558:2015 compliance
- ☐ Verify fire system BS EN 12845 compliance

Notes / Key Findings: