

Global Logistics Greenfield Technology Infrastructure Program

I designed the end-to-end technology program for a greenfield cargo examination facility operated by a global logistics provider. The program takes an empty building shell to a commissioned, secure, and resilient operation, and it packages every standard so the next site starts from a proven template.

ENVIRONMENT

A 100,000+ square-foot bonded cargo facility hosting the operator, federal inspection agency tenants, carriers, and contractors under one roof.

MY ROLE

Authored the program plan, the executive and board level execution package, and the integrated program workbook, and structured the on-site program lead role that coordinates contractors, vendors, carriers, and agencies.

PROGRAM STATUS

The sample presents the program design and its governance model. The facility is in pre-implementation, so the sample makes no claims about delivery outcomes.

66

pages in the program plan

7

program phases from mobilization to handoff

5

segmented network zones, including agency controlled segments

1

repeatable site template for future facilities

PROGRAM SCOPE AT A GLANCE

Infrastructure

Cabling, MDF and IDF rooms, network, wireless, and power

Security

Access control, video, intrusion detection, and visitor management

Resilience

Diverse carriers, redundant core, and backed-up power

Operations systems

Warehouse management, RF scanning, and label printing

Stakeholder coordination

Contractors, vendors, carriers, and agency tenants

Commissioning and handoff

Evidence based readiness and steady state support

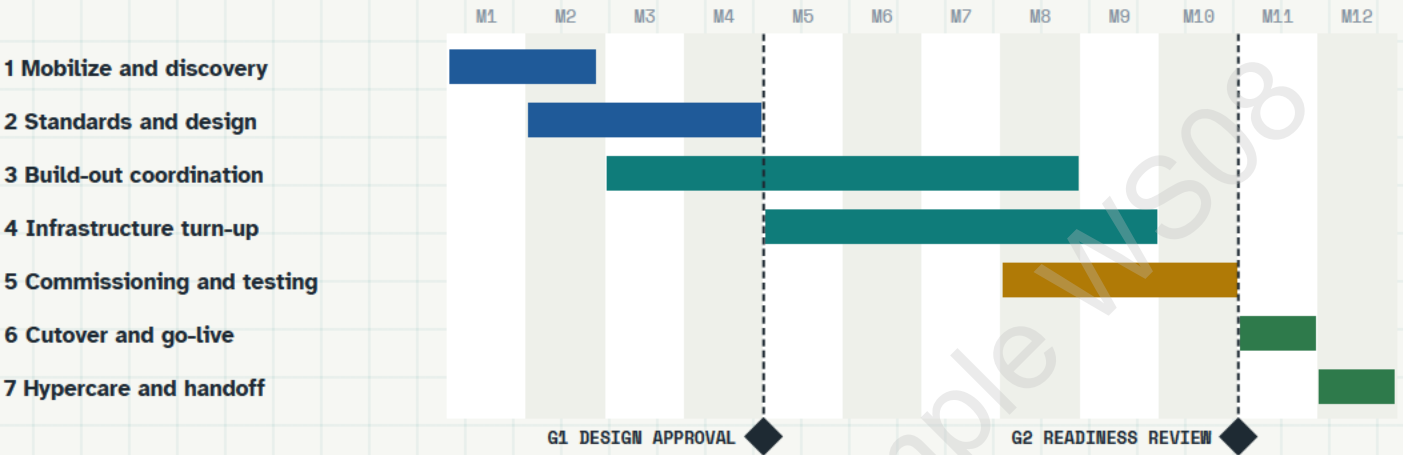
DESIGN COMMITMENTS

- + Corporate IT standards govern every technical decision.
- + Every critical service has a designed failure response.
- + Commissioning proves readiness with evidence before go live.
- + Every standard is captured once and reused at the next site.

Program Architecture and Governance

Seven phases move the site from mobilization to steady-state handoff. Two gates protect quality: design approval before infrastructure turn-up begins, and a readiness review before cutover.

PHASE SEQUENCE



Relative sequencing shown in months. Durations adjust to construction milestones and agency requirements.

DECISION RIGHTS

Corporate IT Owns architecture, standards, vendor selection, and final technical decisions	On-Site Program Lead Coordinates contractors, vendors, carriers, and agencies, and escalates through the decision register	Site Operations Defines operational requirements and accepts the site at handoff	Agency Tenants Specify and control their own network segments and systems
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GATE CRITERIA

G1 DESIGN APPROVAL END OF M4 + The reference architecture and bill of materials are approved. + Vendor scopes of work are signed for every trade. + Agency segment requirements are documented and accepted.	G2 READINESS REVIEW END OF M10 + Failover and acceptance tests pass with recorded evidence. + Operational runbooks and the support model are approved. + Site Operations confirms the cutover plan and rollback path.
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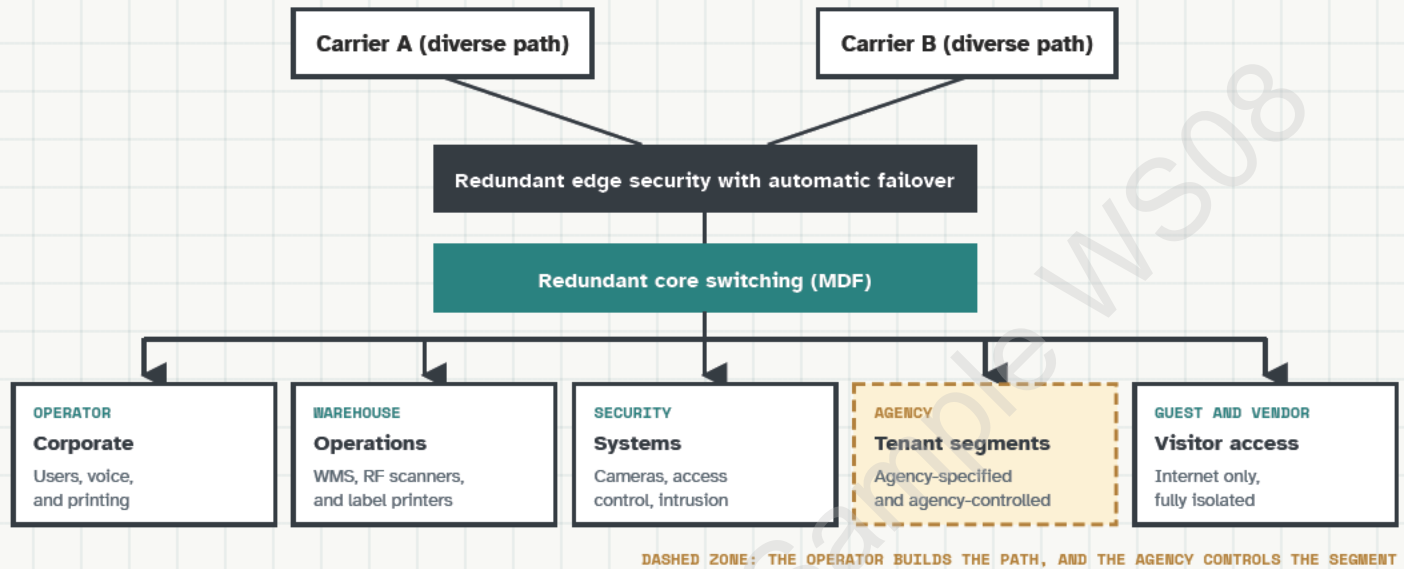
GOVERNANCE INSTRUMENTS

- + A decision register records each open decision, its owner, and its due date.
- + A RAID log tracks risks, assumptions, issues, and dependencies.
- + Weekly site coordination aligns contractors and vendors to the schedule.
- + Executive checkpoints review status, risk, and gate readiness.

Site Infrastructure Design

The reference design places every tenant and system class in its own zone behind redundant edge and core layers. Agency segments run autonomously, protecting the operator and every agency tenant.

NETWORK REFERENCE ARCHITECTURE



AGENCY SEPARATION PRINCIPLES

- + Agencies specify the requirements for their own segments and systems.
- + The operator provides physical space, pathways, and power to agency specifications.
- + Agency segments run with no operator administrative access.
- + The on-site program lead coordinates agency requirements with Corporate IT.

INFRASTRUCTURE DOMAINS

DOMAIN	DESIGN STANDARD
Structured cabling	MDF and IDF rooms sized for growth, with labeled and certified cabling
Wireless	Warehouse grade coverage validated by survey for scanners and mobile devices
Power	UPS protection and generator-backed circuits for critical network and security systems
Operations systems	Warehouse management integration, RF devices, and label printing tested end to end
Monitoring	Centralized monitoring of network, power, and environmental conditions

Resilience and Physical Security

Each failure the site can reasonably face has a designed response. Physical security works in layers, from the yard fence to the data room door.

DESIGNED FAILURE RESPONSES

FAILURE	DESIGNED RESPONSE
Carrier outage	Diverse carriers with automatic failover at the edge
Utility power loss	UPS bridging to generator backed circuits for critical systems
Core or edge device failure	Redundant pairs with no single point of failure
Wireless access point failure	Overlapping coverage that keeps scanners connected
Hosted application outage	Documented degraded mode procedures for receiving, examination, and release
Communications platform outage	Fallback channels and call trees from the communication resilience plan (WS02)

PHYSICAL SECURITY LAYERS

1	Perimeter and yard. Controlled gates, camera coverage of entries and the truck court, and coordinated lighting.
2	Building envelope. Badge access at every entry, intrusion detection, and managed visitor and contractor sign-in.
3	Secured cargo and examination areas. Role-based access to restricted zones with full video coverage.
4	Agency spaces. Access governed by agency requirements and administered under agency control.
5	Technology rooms. Restricted MDF and IDF access with environmental and power monitoring.

COMMISSIONING EVIDENCE

+ Failover tests prove carrier, power, and core-device resilience.	+ Acceptance tests certify the access control and camera systems.
+ Validation surveys confirm wireless coverage across every work zone.	+ End-to-end transaction tests confirm warehouse system readiness.

Repeatability and Program Artifacts

The first site sets the standard. Every design decision, test, and lesson goes into a site template, so later facilities start from proven patterns and log only their variances.

SITE TEMPLATE KIT



MULTISITE SCALING MODEL



PROGRAM ARTIFACTS I AUTHORED

Program plan	A 66-page end-to-end plan covering scope, phases, infrastructure, security, resilience, and handoff
Execution package	A board and senior-executive volume with decisions, risks, and gate criteria
Integrated workbook	Schedule, RAID log, decision register, and roster in one tracked workbook
Forensic audit	A cross-artifact consistency audit that verifies every figure and commitment

MANAGEMENT VALUE

The program gives leadership one coherent plan for turning an empty shell into a secure, resilient operation, with clear decision rights and evidence at every gate. The site template turns a single facility build into a repeatable capability for future sites of any size.