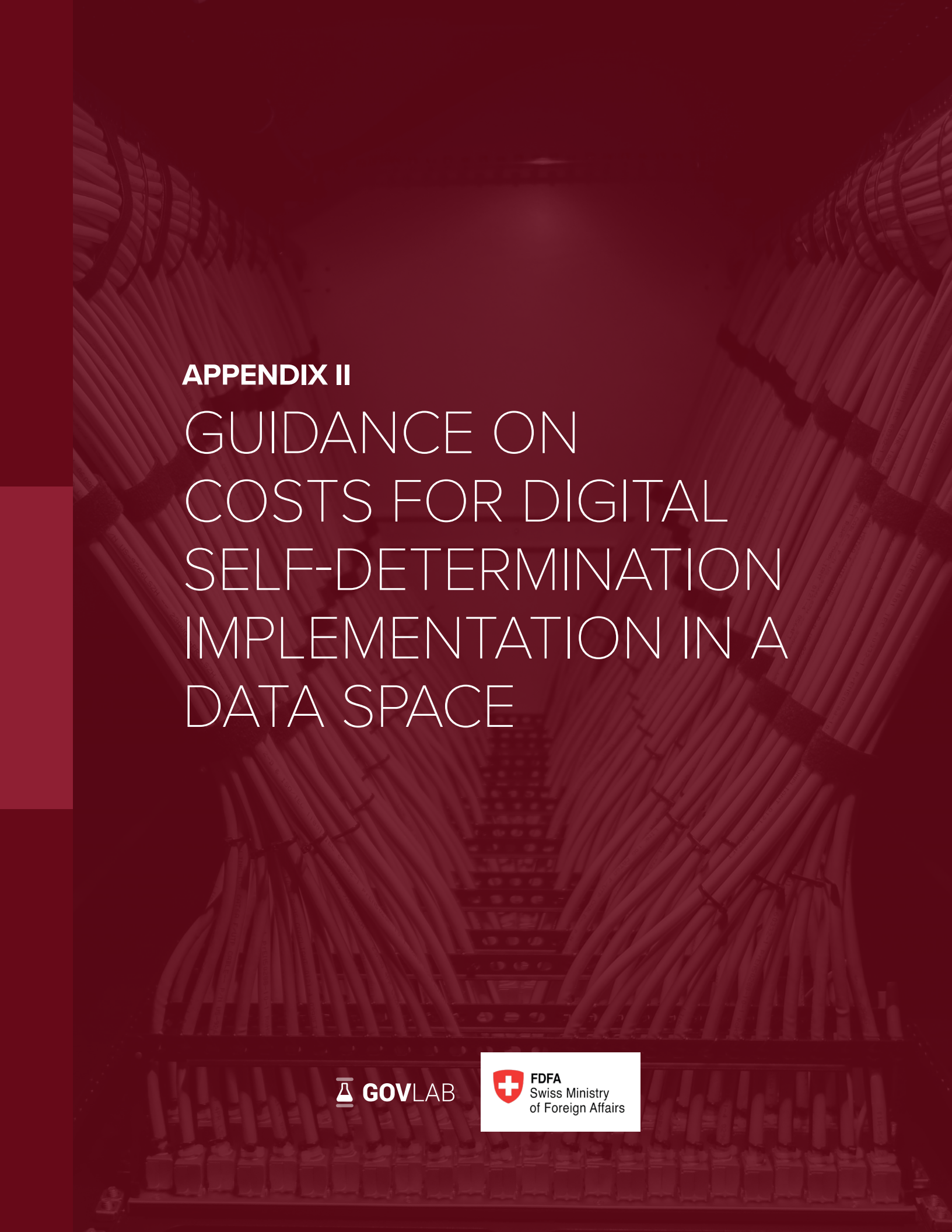

APPENDIX II

GUIDANCE ON COSTS FOR DIGITAL SELF-DETERMINATION IMPLEMENTATION IN A DATA SPACE

GOVLAB

FDFA
Swiss Ministry
of Foreign Affairs

APPENDIX II

Guidance on Costs for Digital Self-Determination Implementation in a Data Space

Purpose

This guidance explains how to scope, structure, and govern the costs required to implement Digital Self-Determination in a data space.

Implementation costing for DSD inside data spaces has, in practice, not yet been systematized: There is no settled "costing canon" that treats DSD as a lifecycle-wide governance investment with stable benchmarks. In that sense, data space operators are operating in a new space: the first defensible costing exercises will be those that (i) make DSD "budgetable" by decomposing it into the four governance capacities from Phase 1, Section 1.3, and (ii) attach those costs to a sustainability logic (multi-year, fundable, auditable, and resilient).

Participatory governance examples can be useful only as *intuition* for volatility, not as a reference point for DSD-in-data-spaces costing. For example, the Scottish Government's FOI release on citizens' assembly costs illustrates this variability: It records costs, including £1,966,776.76 (and notes that it does not include indirect staff costs).[1] Separately, Involve (a major UK participation practitioner) states that citizens' assemblies typically require £150,000–£750,000, with price driven by size, format, deliberation time, delivery modality, and the "creativity/support" and communication/follow-up wrapped around the process.[2] Those numbers show that "participation" is not a neat line item; it scales nonlinearly with design choices.

Crucially, however, DSD costing cannot be reduced to participation alone. The DSD model explicitly embeds enforceability, contestability/redress, and continuous assurance as ongoing operational capacities, meaning the cost structure is distributed across implementation and steady-state operations rather than concentrated in a single deliberative event.

The guidance below, therefore, starts from the idea that DSD is a **governance infrastructure**. It should be costed like infrastructure: with named owners, recurring operations, toolchains and processes, and clear evidence that the investment is sufficient to sustain legitimacy over time.

Making DSD "budgetable": one cost structure, four capacities

Costing DSD begins by treating the four core capacities as the top-level budget headings. These headings are designed to be stable across use cases and domains, while still allowing cost differences to be expressed through concrete design choices and operational scale.

- **Participation and Preference Expression**: the sustained ability of individuals and affected communities to articulate expectations, boundaries, and concerns about data use.
- **Translation into Enforceable Governance**: the conversion of social expectations into binding rules and enforceable technical controls across organizations and systems.
- **Transparency, Contestability, and Redress**: the accountability infrastructure that enables explanation, challenge, correction, and remedy.
- **Ongoing DSD Assurance**: the adaptive capacity to stress test governance, measure performance, revise rules, and keep governance aligned with changing technology and societal expectations.

For each capacity, DSD costs should be recorded explicitly across three cost types: people/roles, processes/operations, and systems/tooling (technical and documentary). This avoids a common failure mode in governance costing where roles are funded but processes are not operationalized, or tooling is purchased without staffing and cadence to run it.

From capacities to budget lines: why volume drivers matter

To move from a conceptual cost structure to a defensible budget, each capacity must be translated into budget lines tied to concrete volume drivers—the measurable quantities that determine workload and cost. Without volume drivers, the model remains descriptive rather than estimative.

For ***Participation and Preference Expression***, the main cost drivers are the *size and cadence* of engagement, not the mere fact of engagement. The relevant questions are how many stakeholder groups and publics are in scope; how often engagement cycles occur; how many participants are involved per cycle; what language and accessibility requirements apply; and what level of traceability is expected between input and decision ("you said → we did"). These drivers determine staffing (facilitation, community liaison, accessibility support), operational overhead (onboarding, representation mechanisms, recurring deliberation), and tooling (feedback capture, traceability, and—where relevant—preference interfaces).

For ***Translation into Enforceable Governance***, cost is driven by the number of governance artefacts and how often they change across a federated system: the number of policy/rule

sets; the revision cadence; the number of domains and systems that must implement controls; the number of contractual instruments (e.g., data sharing agreements) negotiated or updated; and the volume of exceptions/waivers. These drivers determine legal and policy drafting effort, technical control implementation (including configuration management and assurance), and the coordination overhead of cross-entity alignment.

For ***Transparency, Contestability, and Redress***, the key cost drivers are case volume and service levels. A data space must plan for expected inquiries and complaints, escalation rates, time-to-resolution targets, the volume of decision logging and audit activity, and what must be explainable to whom and when. These drivers determine staffing for support and review, the operational design of contestation workflows, and tooling for logging, audit trails, case management, evidence handling, and disclosure.

For ***Ongoing DSD Assurance***, cost is driven by the intensity and cadence of monitoring and adaptation: the number of KPIs, reporting frequency across domains, the number of audits/evaluations per year (internal and independent), the frequency of stress tests or tabletop exercises, and the governance revision cycle (review ➔ update ➔ re-adopt). These drivers determine evaluation spend, measurement and analytics support, monitoring dashboards, and the operational cost of iterative governance change management.

In practice, a robust DSD budget makes these drivers explicit because they serve as the defensible bridge between “what good governance requires” and “what it costs.”

Governing DSD costs: using the Financial & Operational Sustainability rubric as a gate

Once the cost structure exists, it should be assessed through a sustainability lens. Use the Appendix I Assessment for Data Space Governance, Section 3. Processes, guiding questions on Financial and Operational Sustainability as a **governance gate** to ensure the DSD cost structure is fundable, understandable, and resilient.

1) GATE 1 — ALLOCATION OF RESOURCES TO GOVERNANCE OPERATIONS

Question: *How will resources be allocated to support governance operations?*

- ☐ **3 points :** A **well-specified budget** describes allocations in **clear, understandable language** and is supported by evidence showing funding is **sufficient and sustainable** for governance functions.
- ☐ **2 points:** A budget exists but lacks detail and/or is overly technical; **sufficiency and long-term sustainability are unclear**, but short-term operations are possible.
- ☐ **1 point:** The budget is **insufficient**, with major gaps/contradictions; resources cannot credibly support short- or long-term activity.

DSD INTERPRETATION

A credible DSD budget must explicitly cover all four core capacities (A–D) with:

- Named owners
- Recurrence (monthly/quarterly/annual)
- “Run” vs “change” separation (ongoing operations vs evolution)

2) GATE 2 — LONG-TERM FUNDING MODEL(S)

Question: *What funding models will sustain governance in the long term (public funding, membership fees, blended finance, value-sharing mechanisms)?*

- ☐ **3 Points:** The funding model matches the context and can clearly be sustained in the long-term, giving all stakeholders confidence that the data space can be sustained as long as needed.
- ☐ **2 Points:** A funding model exists, though it may rely on short-term arrangements or be ill-fitting to the context. The data space will need to develop new systems to operate in the future.
- ☐ **1 Point:** There is no funding beyond initial seed funding. It is not clear that the data space can sustain itself beyond the initial launch.

DSD INTERPRETATION

Funding must cover **legitimacy operations** (participation, redress, evaluation) as first-class operational costs, not only technical platform operation.

3) GATE 3 — RISKS AND DEPENDENCIES MITIGATION

Question: *How will risks and dependencies be mitigated?*

- ☐ **3 Points:** The data space operators have proactively mapped all possible risks to the longevity of the data space and developed mitigation and contingency plans to counter these within reason.
- ☐ **2 Points:** The data space operators have identified several major risks to the longevity of the data space but this mapping is not comprehensive. The efforts to mitigate these risks may be incomplete or ill-defined, requiring further refinement.
- ☐ **1 Point:** The data space operators have not tried to meaningfully identify risks to their activities. There is no plan if a major risk or crisis emerges.

DSD INTERPRETATION

Include **political/legitimacy risks** (loss of trust, contestation, withdrawal) alongside financial, technical, vendor, and governance risks.

2) Evidence requirements (what to show to justify 3/2/1 ratings)

This section converts the rubric into concrete documentation expectations.

2.1 EVIDENCE FOR GATE 1 (BUDGET ALLOCATION)

To score **3**, maintain:

- A **budget narrative** readable by non-specialists (what is funded and why)
  - A **line-item table** mapped to capacities A–D, with:
    owner (role/body)
    recurrence
    cost type (people/process/system)
    baseline vs growth assumptions

- Evidence of **sufficiency and sustainability** (multi-year view; commitments; unit-cost logic; staffing plan)

To score **2**, typical gaps include:

- unclear mapping to A–D
- missing owners/cadence
- insufficient multi-year sustainability logic

To score **1**, typical failures include:

- absent funding for key DSD operations (e.g., contestability/redress, evaluation)
- contradictions between objectives and resourcing

2.2 EVIDENCE FOR GATE 2 (FUNDING MODEL)

To score **3**, maintain:

- A documented funding architecture (public funding, membership, blended, value-sharing)
- Justification of fit to context and stakeholder incentives
- Multi-year sustainability assumptions and triggers for adjustment

To score **2**, typical gaps include:

- reliance on short-term grants
- unclear allocation rules between participants
- no plan for scaling operations

To score **1**, typical failures include:

- “seed-only” funding with no operational runway

2.3 EVIDENCE FOR GATE 3 (RISKS & DEPENDENCIES)

To score **3**, maintain:

- A comprehensive risk register including political/legitimacy risks
- Mitigation owners and contingency plans
- Scenario testing cadence and escalation thresholds

To score **2**, typical gaps include:

- partial risk coverage
- mitigations not operationalized

To score **1**, typical failures include:

- no risk register, no contingencies

3) Decision rule (readiness to implement and scale)

Use the rubric as a gate for implementation readiness.

- If **any gate scores 1** → treat as **not ready to scale**. Proceed only with a remedy plan and the limited-scope pilot.
- If all gates score **≥2** → allow pilot/initial operation with a time-bound plan to reach 3.
- Target **3/3/3** before broad onboarding, expansion to high-stakes use cases, or significant participant growth.

4) Minimal "DSD Cost Governance Pack" (deliverables)

A data space implementing DSD should maintain, at a minimum:

DSD Cost Structure

- Capacities A–D; line items; owners; recurrence; people/process/system split; run vs change.

Financial & Operational Sustainability Scorecard

- 3/2/1 ratings for the three Appendix I questions, with evidence links.

Risk & Dependency Register

- Including legitimacy risks and contingency plans.

Governance Operations Calendar

- Participation cycles, policy revision cycles, audits/evaluations and reporting.

The Case of the Swiss Health Data Space (SwissHDS)

This guidance should be applicable—and likely useful—to SwissHDS because SwissHDS is defined as a virtual health data space spanning the processes and IT systems of specialized domains and actors, designed for secure, legally compliant, standardized exchange, with a stated timetable (initialization until 2026; implementation from 2026) and federal sponsorship via FOPH.[3] Federated and virtual designs predictably amplify governance cost drivers: more boundary crossings (organizations, domains, infrastructures),[4] greater heterogeneity (rules, cultures, maturity),[5] and more points where legitimacy can fail (opacity, perceived unfairness, limited redress).[6] Feasibility is therefore not constrained by the framework (which is intentionally generic) but by whether SwissHDS can provide the minimum inputs required to translate the four capacities into budget lines and to score sustainability with evidence.

In advance, SwissHDS would need to clarify scope and boundaries (which specialized domains, actor groups, and use cases are in scope in the next 12–24 months versus later, and what is centrally delivered versus domain-owned), operating model and decision rights (who owns and approves rulebooks/policies, who runs complaints/redress, who commissions audits/evaluations, and where enforcement sits), the financial envelope and funding mechanics (central versus co-funded components, CAPEX versus OPEX, build versus run, and what happens after initial program funding), and an operational risk and dependency view (including legitimacy risks such as contestation, loss of trust, and withdrawal of participation). With those inputs, our four core governance capacities model can be populated with volume drivers and translated into a credible multi-year cost structure.

ANNEX A

Working template (capacity × cost line item table)

Use this table structure to operationalize costing.

DSD capacity	Line item	Cost type *(people/ process/ system)*	Owner *(role/body)*	Recurrence	Evidence for sufficiency	Funding source	Notes
Participation & Preference Expression							
Translation into Enforceable Governance							
Transparency, Contestability & Redress							
Ongoing DSD Assurance							

ANNEX B

Scorecard (Appendix I rubric)

Question	Score (1/2/3)	Rationale	Evidence references	Remediation actions
Budget allocation How will resources be allocated to support governance operations?				
Funding model What funding models will sustain governance in the long term?				
Risks & dependencies How will risks and dependencies be mitigated?				

Endnotes

1 Scottish Government. (2023, February 6). *Freedom of Information release: Citizens' Assembly of Scotland costs and Ministerial papers*. https://www.gov.scot/publications/foi-202200334314/

2 Involve. (n.d.). *How much does a citizens' assembly cost?* https://www.involve.org.uk/resources/knowledge-base/how-much-do-participatory-processes-cost/how-much-does-citizens-assembly

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4 Williamson, O. E. (1979). Transaction-cost economics: The governance of contractual relations. *Journal of Law and Economics, 22*(2), 233–261. https://doi.org/10.1086/466942

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