

Sovereign Compute Offtake: Contracting National AI Demand for Project Finance

A Public-Demand, Service-Contract and Bankability Framework for AI Infrastructure

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Abstract

National AI strategies increasingly combine domestic compute capacity, public research access, industrial adoption, secure workloads and private infrastructure investment. A policy objective, funding announcement or allocation programme can create demand signals. Project finance requires a narrower form of evidence: an authorised counterparty, an enforceable payment obligation, a measurable service, a credible budget route, acceptance criteria, bounded deductions and a durable remedy framework.

This paper develops a board framework for converting national AI demand into a financeable sovereign compute offtake. It distinguishes grants, access subsidies, public supercomputing, capacity reservations, government-pays availability structures and aggregated agency demand. It then translates public objectives into contracted service units, tests payment authority and appropriations, defines security and data boundaries, allocates technology and utilisation risk, and connects acceptance to construction draws and debt service.

The evidence base spans the United Kingdom's AI Research Resource, European High Performance Computing Joint Undertaking AI Factories, the IndiaAI Compute Portal, Canada's Sovereign AI Compute Strategy, the UAE-US advanced-technology framework, Abu Dhabi's sovereign-cloud agreement, Saudi Arabia's HUMAIN platform and World Bank public-private partnership guidance. These sources demonstrate different public-compute and infrastructure models. They do not establish a procurement award, sovereign guarantee, credit rating, utilisation level, project return or financeable offtake for a particular facility.

Six original figures and six implementation tables support an evidence ladder, demand architecture, tariff design, contract risk map, capex release gates and downside debt-service model. Every capacity, price, utilisation, capex, operating cost, debt, schedule and valuation value in the worked case is a management assumption created solely to demonstrate the method. It is not a government commitment, market quote, procurement forecast, financing offer or investment recommendation. Live projects require current procurement, public-finance, legal, security, export-control, technical, environmental, tax, accounting, insurance and financing advice.

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1. Define sovereign offtake as a payment obligation

Sovereign compute can describe several different arrangements. A government can own a supercomputer, fund private capacity, subsidise eligible users, reserve cloud services, procure a secure platform or anchor a commercial data centre. Each model can advance national policy. Only some create cash flows that a project company can assign, forecast and use for debt service.

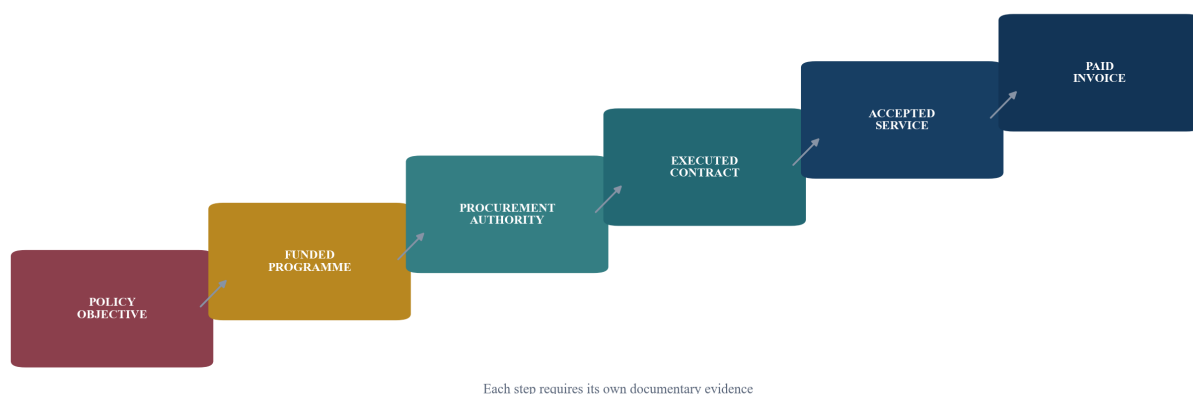
The board should begin with the payment obligation. It should identify the contracting entity, its legal authority, the service purchased, the unit of payment, budget route, term, currency, conditions, deductions, termination rights and dispute process. A national strategy, ministerial speech, memorandum of understanding or announced investment is valuable context. It is not a substitute for an executed contract with an authorised payer.

Project finance also requires separation between public demand and public credit support. A ministry can sponsor a programme while an agency, university, state-owned enterprise or procurement vehicle signs the service agreement. The credit, appropriation route and enforcement position can differ materially. The project company should underwrite the actual obligor and support package.

The central objective is a durable service contract that preserves public value. Government should buy measurable capacity and outcomes under transparent procurement and fiscal controls. The provider should accept construction, operating and technology risks it can manage. Lenders should size debt to enforceable base-case cash flows after deductions, operating costs, lifecycle refresh and reserves.

Figure 1. Sovereign-demand evidence ladder

NATIONAL AMBITION BECOMES CASH FLOW THROUGH AN EVIDENCE CHAIN



Policy intent becomes financeable only after authority, procurement, contract, acceptance and payment evidence are complete.

2. Separate five public-compute models

Public supercomputing places infrastructure under public ownership or control and allocates access through programme rules. The United Kingdom's AI Research Resource provides access through Isambard-AI and Dawn. Its published routes cover academia, industry and smaller organisations. This model demonstrates public allocation and national research capacity. The allocation rules do not create private-project revenue unless a separate procurement or service contract does so.

An access-subsidy model supports users who purchase services from approved providers. The IndiaAI Compute Portal publishes eligibility, approval, provider and pricing mechanisms. Users apply for compute and can seek subsidies; the programme distinguishes smaller requests and committee-approved larger requests. This can aggregate demand across users, although provider revenue still depends on programme terms, actual orders, subsidy settlement and user payment.

An AI Factory model combines infrastructure, access and expert support. EuroHPC's published access modes include limited playground access, fast-lane allocations and large-scale access for different needs. Eligible SMEs can receive free innovation access, while other industrial applications can use commercial access. A project should therefore separate publicly funded allocation from commercial pay-per-use demand.

A co-investment model uses public capital to mobilise private infrastructure. Canada's Sovereign AI Compute Strategy separates support for commercial data-centre capacity, public supercomputing and an access fund. This is a useful portfolio architecture. A contribution agreement, access fund and customer contract have different risk and cash-flow characteristics.

A sovereign platform or anchor-customer model can integrate data centres, cloud, models and applications. Saudi Arabia's Public Investment Fund describes HUMAIN as operating across the AI value chain. Abu Dhabi's Department of Government Enablement describes a multi-year sovereign-cloud agreement with Microsoft and Core42. These disclosures show strategic platform and service relationships. Public descriptions do not disclose the complete payment, termination, security or financing terms.

Table 1. Public-compute models and finance evidence

Model	Public objective	Provider revenue route	Finance evidence required
public supercomputer	research and strategic capacity	public capex or operating budget	awarded procurement, appropriations and acceptance
access subsidy	affordable access for eligible users	user bill plus public subsidy	provider terms, eligible orders and settlement rules
AI Factory	infrastructure, access and technical support	funded allocation and commercial use	allocation budget, tariff and eligible demand
co-investment	crowd in domestic infrastructure	grant, contribution or matched capital	executed funding agreement and conditions
anchor service contract	secure capacity for government workloads	reservation, usage or availability payment	authorised multi-year service agreement
aggregated demand	combine ministry, research and industry needs	master contract and call-off orders	binding minimums, agency access and payment waterfall

3. Build a national demand register

A financeable contract starts with workloads rather than a headline quantity of GPUs. The demand register should identify the sponsoring entity, end user, use case, data classification, model type, accelerator requirements, storage, network, availability, location, support and start date. Training, fine-tuning, inference, scientific simulation and secure government workloads can require different infrastructure.

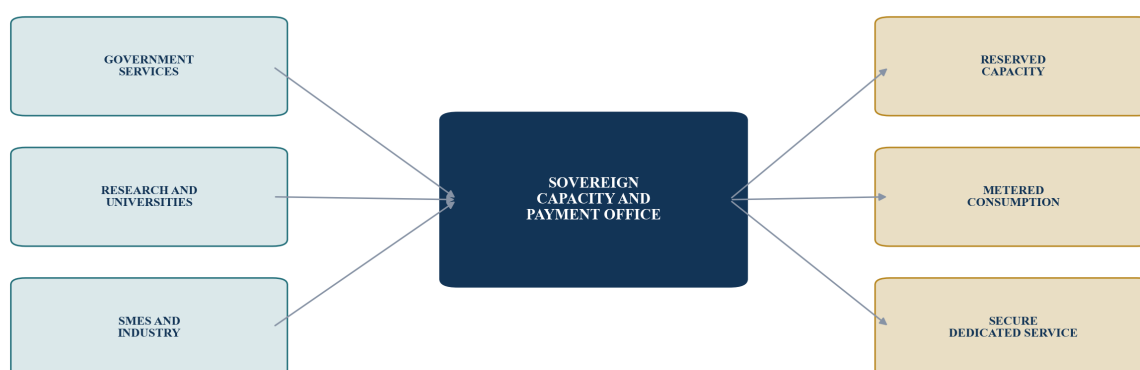
Public demand carries several certainty levels. Existing workloads with budget history provide stronger evidence than policy targets. Approved programmes with named users and implementation budgets can support a ramp. Applications from eligible users reveal interest but do not guarantee consumption. Strategic use-case lists and national aspirations belong in upside cases until contracted.

The register should state whether a workload is movable. Some users can shift across time, regions or hardware. Others require dedicated clusters, protected data, specific software, low latency or a national security boundary. The contract should charge for resources that must remain reserved even when utilisation is low.

Demand aggregation needs governance. A central buyer can reserve capacity and permit authorised agencies to use it. The agreement should identify who can issue an order, how consumption is attributed, whether unused allocations transfer, which entity pays, and whether a user dispute affects the provider's master payment.

Figure 2. Sovereign compute demand architecture

AGGREGATE WORKLOADS; PRESERVE SERVICE AND PAYMENT ACCOUNTABILITY



The master offtake should reconcile diverse public workloads with one controlled capacity and payment system.

4. Define the compute service unit

The payment unit should match the service purchased. A GPU-hour can be useful for metered consumption. It can be incomplete for a dedicated cluster because interconnect, storage, network, orchestration, security, software, support, electricity and cooling also determine service. A nominal accelerator count does not establish useful compute output.

The service schedule should state hardware class or performance envelope, cluster topology, memory, storage, network, software environment, data location, security controls, support, planned maintenance and measurement. It should define whether the provider can substitute hardware and how equivalent performance will be tested.

Capacity progresses through states. Ordered equipment is not available service. Installed capacity requires integration. Commissioned capacity has passed defined tests. Accepted capacity has met customer criteria. Available capacity remains ready under the service agreement. Consumed capacity records actual authorised use. The tariff and construction draws should refer to the correct state.

Performance metrics should remain auditable. They can include reserved accelerator equivalents, successful job completion, cluster availability, queue time, storage throughput, network performance, response latency or service credits. The metric boundary, clock, exclusions, data source, retention and dispute process should be stated.

5. Construct a bankable tariff

A tariff can combine reservation, consumption and service charges. The reservation charge pays for accepted capacity held available to the sovereign buyer. It should cover fixed operating cost, lifecycle reserve and an appropriate contribution to debt service. The consumption charge follows measured use and variable electricity, cooling, network or licence costs. Managed services can carry a separate scope and fee.

The contract can include a minimum annual commitment, take-or-pay quantity or availability payment. Each structure has fiscal and procurement implications. World Bank PPP guidance describes government-pays structures in which remuneration can depend on a service being available at a contractually defined quality. The specific legal and public-finance treatment depends on the jurisdiction and contract.

Indexation needs boundaries. Electricity, foreign exchange, imported hardware, software and inflation can move differently. The tariff should identify the index, base date, frequency, cap, floor, sharing mechanism and treatment of taxes or change in law. A pass-through without audit rights can weaken budget control. A fixed price without relief can leave the provider unable to maintain the service.

Deductions should follow measurable failures. A deduction matrix can address unavailable capacity, performance below the accepted envelope, security incidents, delayed restoration and reporting failure. Aggregate deductions should align with the severity and controllability of the failure. Persistent default can trigger cure, replacement, step-in or termination.

Table 2. Compute tariff building blocks

Charge	Economic purpose	Measurement	Principal diligence
reservation	hold accepted capacity available	reserved unit and availability clock	minimum term, acceptance and deductions
consumption	recover variable service cost	metered authorised usage	meter boundary, tariff index and audit
managed service	operate software and support layer	service scope and response levels	staffing, licences and subcontractors
secure environment	fund dedicated controls and isolation	accepted security service	accreditation, incident and change control
lifecycle reserve	fund planned hardware refresh	periodic funded reserve	ownership, release and residual assets
termination amount	allocate early-exit value	defined formula by event	debt, break cost, assets and mitigation

The payment mechanism should reward service readiness, efficient use and accountable performance.

6. Test legal authority and procurement

The contracting entity should have authority to procure the service, commit funds for the term, own or licence required data, and accept dispute and termination provisions. The project should obtain current legal confirmation. Authority can depend on enabling legislation, procurement rules, delegation, budget approval and the status of the entity.

Procurement strategy affects bankability. A competitive process can select a provider, tariff and risk allocation. A direct award can require a valid exception and documented value. A memorandum of understanding can frame cooperation while leaving procurement and contract formation outstanding. The financing case should use executed documents rather than expected awards.

The scope should support output-based competition. Government can define security, capacity, availability, location, sustainability and performance requirements while allowing bidders to propose technology. Prescribing one accelerator or architecture too early can reduce competition and increase obsolescence exposure.

Evaluation should examine complete lifecycle value. Criteria can include deliverability, power and cooling readiness, security, data governance, technology refresh, service performance, local capability, environmental impact, finance certainty and price. Bid assumptions should pass into the final contract and financial model.

7. Underwrite appropriation and sovereign credit

An executed government contract can still face appropriation, budget, payment-administration and set-off risks. The diligence should identify whether the obligation is a direct liability, contingent liability, annual operating expense, capital commitment or another category under the applicable public-finance framework.

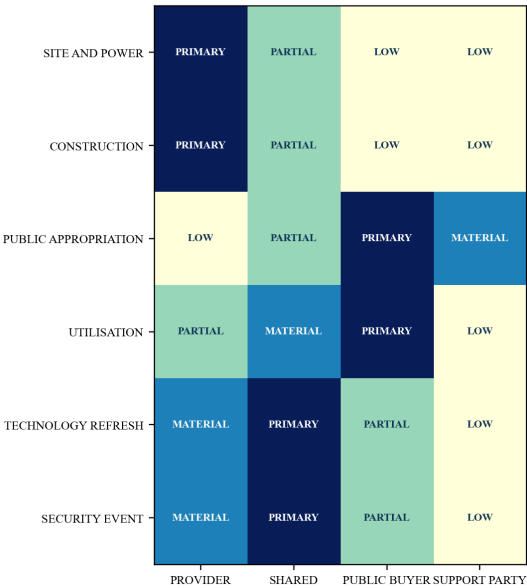
World Bank guidance notes that long-term government payment commitments can conflict with annual budget cycles. A project should confirm the approved budget route, medium-term treatment, payment process, invoice approval, dispute escalation and any statutory limitation. It

should not assume that sovereign ownership or policy importance removes appropriation risk.

Credit support can include a central-government guarantee, ministry support agreement, escrow, funded reserve, letter of credit, multilateral guarantee or termination-payment protection. Each support instrument requires legal authority and enforceability. A comfort letter or public statement should not be modelled as a guarantee.

Lenders also examine currency and transfer. Imported equipment and debt can be denominated differently from the service tariff. The contract should allocate convertibility, transfer, withholding, tax and indexation. The financing should carry reserves or hedging supported by executable terms.

Figure 3. Contract and credit risk allocation map
ILLUSTRATIVE RISK OWNERSHIP FOR A SOVEREIGN COMPUTE CONTRACT



Risk should sit with the party able to control or absorb it at the lowest credible cost.

8. Allocate demand and utilisation risk

Government can reserve capacity for strategic reasons before utilisation develops. The provider incurs fixed costs to hold the service ready. Assigning all utilisation risk to the provider can make the project difficult to finance or increase the tariff. Assigning all demand risk to government can create poor value and idle capacity.

A balanced structure can combine a smaller firm reservation with metered usage and periodic capacity releases. Government receives expansion options supported by notice and deposits. The provider can remarket unused capacity subject to data, security and priority rules. The contract can define how third-party revenue offsets public payments.

The demand register should be refreshed before each capacity release. Signed agency call-offs, approved research allocations, awarded industrial grants and historical utilisation can support the base case. Pipeline applications, policy use cases and future model demand support scenarios. The investment committee should see both contracted demand and plausible upside.

Utilisation metrics need context. High accelerator occupancy can coexist with low useful output if jobs fail, data pipelines bottleneck or users lack skills. The public buyer can track successful

workloads, research outcomes, commercial adoption and service access while the payment contract focuses on objective capacity and performance.

9. Govern data, security and eligible users

Sovereign compute can contain personal, commercial, research, critical-infrastructure or national-security data. The service agreement should classify permitted workloads, users, locations, access methods, encryption, logging, retention, model artefacts, incident handling and subcontractors. Separate security domains can require separate infrastructure and accreditation.

User eligibility should be operational. The UK AIRR, EuroHPC AI Factories and IndiaAI publish access routes or eligibility concepts for different communities. A project-backed service needs its own approved-user process, identity checks, sanctions and export-control screening, acceptable-use rules, quota management and revocation.

Data residency does not resolve every sovereignty question. Hardware support, remote administration, control-plane services, software licences, model weights and incident response can cross borders. The architecture and contract should map every dependency.

Security obligations should be testable. Required certifications, penetration tests, vulnerability remediation, privileged access, supply-chain controls, audit rights and incident notices should be scheduled. A serious security event can affect service, payment and lender value. Cure, insurance, reserve and termination provisions need alignment.

Table 3. Security and sovereignty evidence schedule

Area	Contract requirement	Acceptance evidence	Continuing control
user identity	authorised entities and roles	verified users and approvals	periodic recertification
data location	permitted storage and processing zones	architecture and test records	configuration monitoring
privileged access	bounded administrator rights	access design and personnel checks	logs and review
supply chain	approved hardware, software and support	bill of materials and suppliers	change approval and patching
incident response	notification, containment and recovery	exercised response plan	reporting and retesting
model and artefacts	ownership, licence and export conditions	rights register	transfer and deletion controls

Location is one control within a wider operating and contractual boundary.

10. Treat export controls as a capacity condition

Advanced accelerators, software and support can be subject to export, re-export, end-user and end-use controls. The applicable position depends on origin, destination, hardware, parties and use. Public bilateral frameworks can support cooperation while imposing security and diversion-prevention commitments.

The UAE Ministry of Foreign Affairs describes a US-UAE framework involving a planned AI cluster and robust security standards. The White House describes technology-protection commitments and investment cooperation. These statements provide policy context. They do not

confirm that a specific project has licences, hardware allocation or unrestricted capacity.

The equipment schedule should identify classification, authorisation, conditions, reporting and transfer restrictions. The contract should state who applies, who bears delay, what substitutions are allowed, how compliance changes affect price, and what happens if permission is denied or withdrawn.

Financing should not rely on equipment that cannot lawfully be delivered, operated, supported or remarketed. Conditions precedent can include required authorisations. Draws can follow delivery and continuing eligibility. The downside case should address delayed equipment, reduced specification and restricted residual value.

11. Allocate technology and refresh risk

AI equipment can lose commercial competitiveness before physical failure. A long sovereign contract therefore needs a refresh architecture. The service can be specified through performance and capacity envelopes with approved substitution. The provider can refresh equipment under an agreed benchmark, acceptance test and lifecycle budget.

Government should avoid paying twice for stranded hardware. The tariff can include a transparent lifecycle reserve, open-book refresh price or periodic market test. Ownership of replaced equipment, data sanitisation, resale rights and proceeds should be defined.

The provider should retain risks it controls: procurement, integration, maintenance, spares and performance within the accepted envelope. The buyer can retain strategic changes in required capability, security or workload. Shared mechanisms can address new mandatory standards or exceptional market discontinuity.

Lenders need visibility over refresh capex. The base model should fund necessary replacements before distributions. A reserve account, vendor financing, sponsor commitment or contracted tariff reset can support the plan. Unfunded refresh is a hidden senior claim on project cash.

12. Connect acceptance to capex releases

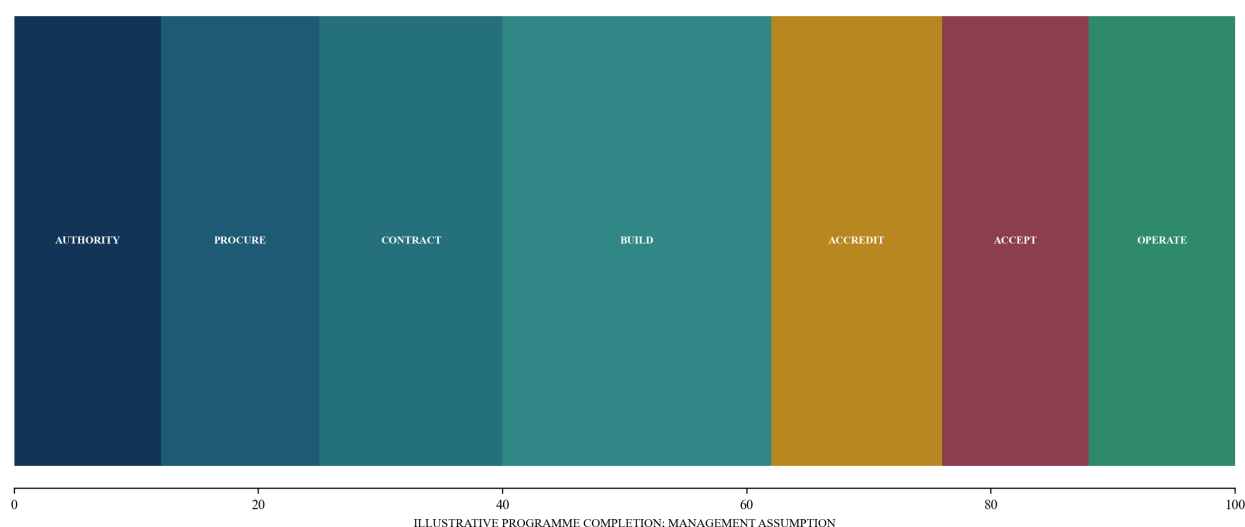
The project should use staged acceptance. Site and power readiness precede equipment delivery. Factory tests precede shipment where appropriate. Installation, cluster integration, security accreditation, performance tests, failover and customer workload trials establish service readiness.

Construction draws should follow evidence. Early equity can fund development and deposits. Debt can fund contracted equipment after licences, fixed-price scope and offtake conditions are satisfied. Later draws can require commissioning and acceptance. Retentions or reserves can cover outstanding defects.

The sovereign buyer should control acceptance objectively. Test scripts, data, tolerances, witnesses, retest rights and deemed-acceptance conditions should be agreed before construction. An undefined satisfaction standard creates delay and payment risk.

Capacity modules can reduce exposure. Each module should have customer allocation, infrastructure, equipment, acceptance and payment evidence. Expansion options become committed only after defined notice, budget and deposit conditions.

Figure 4. Sovereign compute capex release gates
CAPITAL RELEASE FOLLOWS CONTRACT AND ACCEPTANCE EVIDENCE



Capital follows authority, contracted demand, technical completion, security approval and customer acceptance.

13. Align contract remedies with financing

The offtake, construction, equipment, operating and financing documents should use compatible definitions. If the customer can deduct for a failure that the operator treats as excused, the project company bears an unallocated gap. If the equipment warranty excludes a condition required by the service agreement, the gap can be permanent.

Step-in rights should preserve service. Lenders can require notice and cure before termination for provider default. Government can require replacement of key subcontractors and continuity for critical workloads. Security incidents may need immediate protective action while financial remedies follow a controlled process.

Termination payments should vary by event. Government default, prolonged force majeure, provider default and voluntary termination can produce different formulas. The formula can consider outstanding senior debt, break costs, lifecycle reserves, asset value, insurance and mitigation. Its enforceability and fiscal treatment need current legal advice.

Change control should preserve the economic bargain. New workloads, higher security, extra capacity, technology substitution or regulatory change can alter cost and schedule. A documented process should require impact evidence, approval, price adjustment and financing consent where relevant.

14. Size debt to collected base-case cash

Debt sizing should begin with accepted capacity and enforceable payment. The model should separate reservation revenue, consumption revenue, public subsidy, third-party sales and managed-service fees. It should apply deductions, payment timing, taxes, operating cost, refresh capex, reserves and working capital.

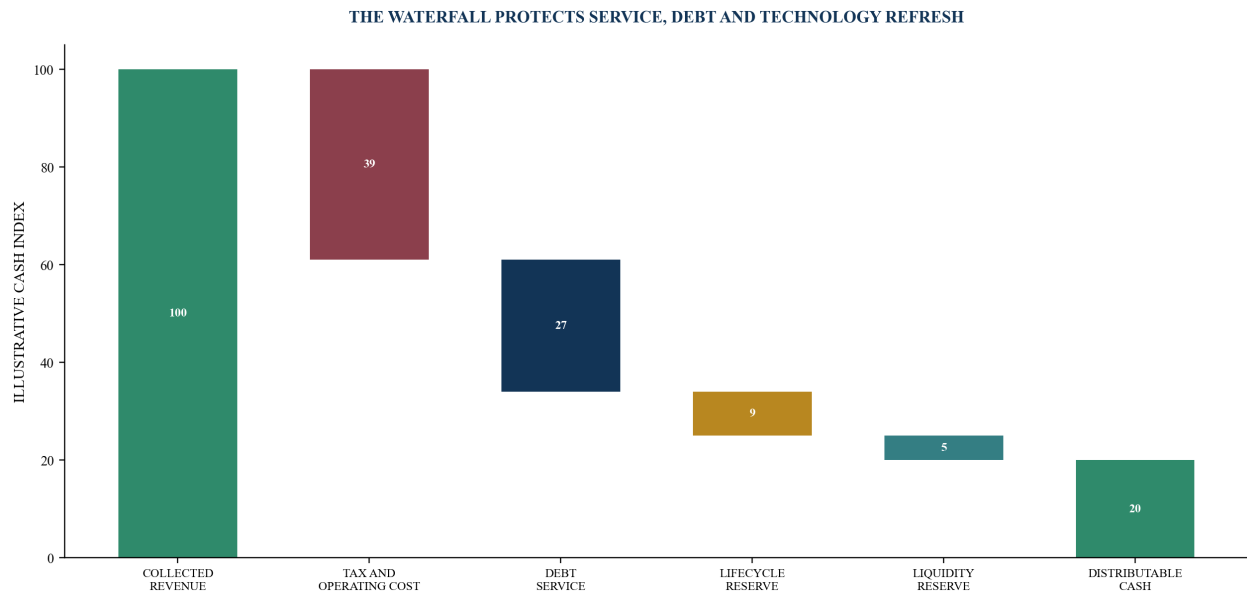
The base case should use the firm minimum. Uncommitted agency demand and third-party use belong in sensitivities. If the contract allows capacity cancellation, the model should apply notice, compensation and remarketing. If government pays after annual appropriation, liquidity should

cover timing risk.

Debt service coverage should be tested after lifecycle capex. A project can show strong cash before refresh and fail when equipment replacement is funded. The model should also test electricity escalation, foreign exchange, delayed acceptance, lower utilisation, security remediation and technology substitution.

Cash control can include an assignment of receivables, collection account, operating waterfall, debt-service reserve, lifecycle reserve, insurance proceeds and distribution lock-up. Sovereign consent and local law determine whether assignments and security are effective.

Figure 5. Illustrative sovereign compute cash waterfall



Collected cash funds service continuity, debt and lifecycle obligations before sponsor distributions.

Table 4. Finance evidence and lender response

Evidence area	Required document	Red flag	Financing response
payer	authority and credit evidence	sponsor differs from obligor	direct agreement or support
budget	appropriation and payment route	annual budget assumed automatic	reserve, guarantee or lower debt
service	accepted capacity and performance	equipment count used as output	acceptance condition and tests
demand	firm reservation or availability payment	applications treated as orders	exclude upside from base case
deductions	objective and bounded regime	subjective unlimited set-off	cure, cap and liquidity reserve
refresh	funded lifecycle plan	replacement omitted	funded reserve before distributions
termination	enforceable event formulas	policy statement treated as support	legal opinion and downside haircut

Lenders size to contractual and collected cash after service, fiscal and lifecycle risk.

15. Model an illustrative 48 MW programme

The worked case assumes a 48 MW accepted IT-capacity programme developed in three modules. It assumes a public buyer reserves 24 MW at opening, increases to 36 MW after the second acceptance gate and can exercise an option for the final 12 MW. The capacity, timing and contractual structure are management assumptions.

The tariff assumes a fixed reservation payment for accepted capacity, a consumption charge for measured use, and a separate secure-environment charge. The financial model treats the option module as upside until exercised. It carries equipment refresh, security operations, energy, cooling, staff, insurance and reserves.

Capex includes site and power allocation, data-centre fit-out, accelerators, network, storage, software integration, security, commissioning, development and contingency. It excludes any cost or feature absent from the illustrative schedule. A live project needs engineering, bids, tax, customs, licences and financing terms.

The debt case assumes draws follow module acceptance and that the reservation payment covers a defined share of fixed cost and debt service. Consumption revenue supports upside and operating recovery. This is a method illustration. It is not a forecast of sovereign demand or a financing offer.

Table 5. Illustrative sovereign compute assumptions

Input	Base assumption	Downside	Live evidence required
opening accepted capacity	24 MW	16 MW	executed service schedule
second module	12 MW	8 MW delayed	exercised capacity notice
option module	12 MW	not exercised	approved option and deposit
total programme capex	USD 1.44bn	USD 1.66bn	design, procurement and contingency
debt share	55%	40%	lender terms and conditions
base utilisation	68%	42%	workload register and orders
acceptance period	24 months	34 months	programme and test schedule
lifecycle refresh reserve	7% of revenue	10%	equipment and service-life plan

Every value is a management assumption for method demonstration.

16. Stress the payment and technology chain

The first downside is delayed authority or procurement. Equipment deposits can become exposed before the contract is effective. Development gates should limit irreversible spend until approval, award and required licences are evidenced.

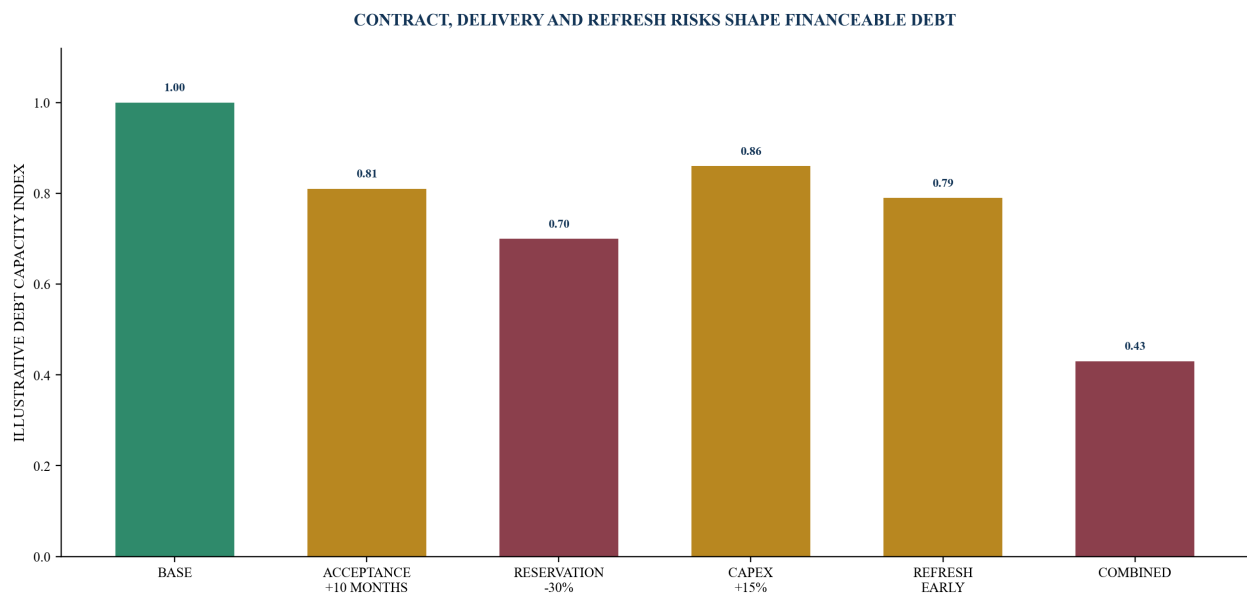
The second downside is delayed acceptance. Construction can complete while security accreditation, software integration or workload testing remains open. Revenue begins later, interest accrues and equipment ages. The model should carry delay liquidity and allocate responsibility through the contracts.

The third downside is lower reservation or utilisation. A firm availability payment can protect fixed cash, subject to performance. A usage-led structure can create volatile revenue. The project can stage equipment, remarket permitted capacity and maintain sponsor liquidity.

The fourth downside is technology or export restriction. A replacement architecture can cost more, deliver less or arrive later. The contract should permit approved substitution and adjust service requirements when a public change causes the impact. The finance model should haircut residual value.

The combined case matters most. Delayed acceptance, lower demand, higher energy cost and accelerated refresh can erode value simultaneously. Debt should survive the combined scenario with sufficient liquidity or a clear restructuring path.

Figure 6. Illustrative downside effect on project debt capacity



Values are management assumptions and show directional sensitivity rather than a financing conclusion.

17. Build the sovereign offtake data room

The public-authority folder should contain enabling powers, delegation, procurement approvals, budget documents, fiscal classification, tender records, award and any support instrument. The contract folder should hold the service agreement, capacity schedules, tariff, acceptance, deductions, change, termination and direct agreements.

The demand folder should contain the workload register, authorised agencies, historical consumption, allocation rules, call-off orders and pipeline classification. The technical folder should contain site, power, cooling, equipment, network, storage, software, performance and commissioning evidence.

The security folder should contain data classification, architecture, accreditation, access control, supply-chain register, incident response, audits and export authorisations. The finance folder should reconcile capex, operating cost, tariff, collections, reserves, sensitivities and security.

The issue register should identify every unconfirmed authority, budget, user, licence, interface, acceptance condition and payment dependency. Public policy should be cited as context and never relabelled as a contract.

Table 6. Sovereign offtake bankability checklist

Gate	Evidence	Principal question	Decision
authority	powers, delegation and approvals	can the obligor commit for the term?	proceed, cure or stop
procurement	compliant process and award	is the contract validly awarded?	contract condition
budget	funded payment route	how are multi-year payments approved?	support and reserves
demand	binding reservation and call-offs	which capacity is firm?	base versus upside
service	measurable output and tests	when does payment start?	acceptance gate
security	accredited operating boundary	which users and workloads qualify?	domain and controls
finance	assigned cash and lifecycle funding	can downside cash service debt?	debt and liquidity

Each board and lender claim should point to a current document, owner and expiry date.

18. Govern public value and transparency

A sovereign offtake can mobilise infrastructure while creating long-term fiscal commitments. Government should compare procurement models, disclose decision criteria where permitted, document value for money and monitor contingent liabilities. The contract should avoid paying for unavailable or obsolete service.

Public value includes more than low unit price. Capacity access, security, resilience, research outcomes, industrial adoption, skills, local capability and environmental performance can matter. Each objective should have a measurable programme indicator. The payment contract should retain a focused set of auditable service obligations.

The provider should report capacity states, availability, use, energy, water, incidents, refresh, deductions, invoices and collections. Independent verification can support material acceptance and performance claims. Confidential security and commercial information should remain protected under the governing framework.

Governance should continue after financial close. A joint contract board can approve changes and resolve issues. Government retains policy and fiscal accountability. The provider retains service delivery. Lenders monitor agreed financial and operating covenants.

19. Run a 180-day sovereign offtake office

Days 1 to 30 establish authority, objectives, users, workloads, data classes, capacity states, procurement route, budget process and decision rights. The team builds the evidence register and separates announced, approved, awarded, contracted, accepted and paid positions.

Days 31 to 60 develop the demand register, capacity modules, service definition, tariff alternatives, security domains, export-control map and preliminary capex. The buyer tests value and fiscal exposure. The provider tests technical and commercial deliverability.

Days 61 to 90 prepare the procurement and contract architecture: output requirements, evaluation criteria, acceptance, metering, deductions, indexation, change, termination and lender interfaces. The financial model sizes the firm reservation and separates upside.

Days 91 to 120 complete market engagement, qualified bids, public-finance analysis, security plan, equipment route, risk allocation and financing terms. The board selects a structure supported by current evidence.

Days 121 to 150 finalise approvals, contract schedules, support instruments, direct agreements, conditions precedent and capex gates. The implementation office aligns construction, equipment, security and customer testing.

Days 151 to 180 close the contract and financing or identify remaining conditions. Monthly reporting begins across accepted capacity, utilisation, performance, capex, budget, invoice, collection, refresh and risk. Expansion remains gated by exercised demand and evidence.

20. Convert the framework into an accountable mandate

A public sponsor or infrastructure developer can commission a sovereign-offtake readiness diagnostic to reconcile authority, demand, procurement, service definition, security, tariff, capex and financing evidence. An offtake and transaction office can coordinate government buyers, users, engineers, operators, technology vendors, security advisers, lenders and investors.

A transaction mandate can design procurement and service schedules, structure capacity reservations, test public-payment support, build the bankability model, manage lender materials and negotiate the commercial interfaces. Retained execution can govern evidence, milestones, acceptance, collections and expansion decisions. Legal, public-finance, procurement, security, export-control, engineering, environmental, tax, accounting and insurance responsibilities remain with appropriately appointed advisers.

The deliverable should lead to a board decision: procure, reserve, build, finance, phase, redesign or stop. Fees should reflect scope, senior accountability, stakeholder complexity and execution period. Advisory revenue remains zero until a mandate is executed, an invoice is issued under its terms and collection is evidenced.

The investment committee should approve debt against accepted service and enforceable public payment after deductions, lifecycle cost and reserves. National ambition supplies the purpose. A controlled evidence chain supplies the cash flow.

References

- [1] UK Department for Science, Innovation and Technology and UK Research and Innovation. AI Research Resource. Updated 17 July 2026. <https://www.gov.uk/government/publications/ai-research-resource>
- [2] UK Department for Science, Innovation and Technology. AI for Science Strategy. 2025. <https://www.gov.uk/government/publications/ai-for-science-strategy/ai-for-science-strategy>
- [3] European High Performance Computing Joint Undertaking. AI Factories Access Modes. Accessed August 2026. https://www.eurohpc-ju.europa.eu/ai-factories/ai-factories-access-modes_en
- [4] European High Performance Computing Joint Undertaking. Terms of Reference: AI Factories Access Calls for Industrial Innovation. 2026. https://www.eurohpc-ju.europa.eu/document/download/bd7aa666-bdf3-4436-b5ec-0b34a781e817_en

- [5] IndiaAI Mission. IndiaAI Compute Portal. Accessed August 2026. <https://compute.indiaai.gov.in/>
- [6] IndiaAI Mission. IndiaAI Compute Price Calculator. Accessed August 2026. <https://compute.indiaai.gov.in/indiaaipricecalculator>
- [7] Innovation, Science and Economic Development Canada. Canadian Sovereign AI Compute Strategy. Updated 2026. <https://ised-isde.canada.ca/site/ised/en/canadian-sovereign-ai-compute-strategy>
- [8] Innovation, Science and Economic Development Canada. Canada to Drive Billions in Investments to Build Domestic AI Compute Capacity at Home. 5 December 2024. <https://www.canada.ca/en/innovation-science-economic-development/news/2024/12/canada-to-drive-billions-in-investments-to-build-domestic-ai-compute-capacity-at-home.html>
- [9] UAE Ministry of Foreign Affairs. UAE/US Framework on Advanced Technology Cooperation. 16 May 2025. <https://www.mofa.gov.ae/en/MediaHub/News/2025/5/16/16-5-2025-UAE-US>
- [10] The White House. Fact Sheet: President Donald J. Trump Secures \$200 Billion in New U.S.-UAE Deals. 15 May 2025. <https://www.whitehouse.gov/fact-sheets/2025/05/fact-sheet-president-donald-j-trump-secures-200-billion-in-new-u-s-uae-deals-and-accelerates-previously-committed-1-4-trillion-uae-investment/>
- [11] Abu Dhabi Department of Government Enablement. Abu Dhabi Government Accelerates Digital Strategy with Landmark Microsoft, G42 Partnership. 18 March 2025. <https://www.dge.gov.ae/en/news/microsoft-g42>
- [12] Public Investment Fund. HUMAIN. Accessed August 2026. <https://www.pif.gov.sa/en/our-investments/our-portfolio/humain/>
- [13] Public Investment Fund. HRH Crown Prince Launches HUMAIN as Global AI Powerhouse. 12 May 2025. <https://www.pif.gov.sa/en/news-and-insights/press-releases/2025/hrh-crown-prince-launches-humain-as-global-ai-powerhouse/>
- [14] World Bank Group and partner institutions. PPP Reference Guide Version 3. 2017. <https://ppp.worldbank.org/sites/default/files/2024-08/PPP%20Reference%20Guide%20Version%203.pdf>
- [15] World Bank Group. Structuring the PPP Contract. Accessed August 2026. <https://ppp.worldbank.org/structuring-ppp-contract>
- [16] World Bank Group. Budgeting for Government Commitments to PPPs. Accessed August 2026. <https://ppp.worldbank.org/budgeting-government-commitments-ppps>
- [17] World Bank Group. Allocating Risks. Accessed August 2026. <https://ppp.worldbank.org/allocating-risks>

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This paper provides a decision framework for governments, sovereign platforms, data-centre developers, investors and lenders evaluating national AI demand and project-finance offtake. It is general research and does not provide public-finance, procurement, legal, security, export-control, engineering, environmental, tax, accounting, insurance, investment or financing advice.