Performance-Based Port Concession Extensions: A Pragmatic Framework for Renewal in Colombia and Beyond

Part 2: From Market Structure to Institutional Design

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Introduction

Part 1 examined whether high-performing port concessions approaching maturity should be automatically re-tendered or whether performance-based extensions may, under defined conditions, better serve the public interest. The principal conclusion was that re-tendering and renewal are complementary instruments within the concession toolkit, and that the appropriate choice should be grounded in case-specific economic assessment rather than institutional reflex.

Figure 1. Complexity is inherent in maritime systems, but performance depends on clarity. As in Turner's harbor scenes, it is not activity alone that defines outcomes, but the structure that brings it into focus.

Source. National Gallery of Art, Washington, D.C., Joseph Mallord William Turner, *Keelmen Heaving in Coals by Moonlight*, 1835 (https://www.nga.gov/stories/articles/sublime-light-jmw-turner-keelmen).

A recurring theme in discussions subsequent to the release of Part 1 has been market concentration. Container terminal markets are structurally capital-intensive and naturally tend toward oligopolistic environments. Major gateways frequently host three to five operators, often affiliated with global shipping alliances or integrated logistics groups. High fixed costs, minimum efficient scale requirements, and network effects limit the number of viable competitors in most ports. Even where multiple terminals operate within a single port, competition is typically bound by physical capacity constraints and long-term contractual arrangements. Those of us who were involved in the early waves of port concession programs will recognize that these structural characteristics, and the debates surrounding them, are not entirely new, even if they now tend to be framed in more sophisticated terms.

In this context, it is important to distinguish between structural concentration and performance discipline. Re-tendering in a concentrated market will often reproduce a similarly concentrated outcome. While the identity

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of the operator may change, the underlying market structure may remain largely unaltered. If the post-tender equilibrium continues to consist of a small number of global operators operating under comparable regulatory oversight, the act of operator substitution alone does not fundamentally transform competitive conditions. In practice, the result may be a different operator managing largely the same structural reality—sometimes with different branding, but not necessarily with different outcomes.

This observation does not diminish the relevance of contestability. Rather, it clarifies where contestability must operate. In mature port systems, performance discipline is frequently sustained through regulatory oversight, contractual enforcement mechanisms, benchmarking, and exposure to inter-port or intra-port rivalry. Where incumbent operators have failed to meet investment obligations or performance standards, concession contracts typically provide remedies, including penalties, non-renewal, or termination. Conversely, where operators have delivered sustained efficiency, complied with regulatory requirements, and operated within a competitive port system, the economic rationale for mandatory turnover becomes less self-evident.

Moreover, in many jurisdictions, the debate over renewal is not driven solely by concerns over competition. Governments may seek recalibration of financial terms as assets mature, adjustments to royalty structures, enhanced environmental commitments, or additional capital expenditure obligations. These objectives are legitimate. However, they are institutional design questions rather than structural competition questions.

If performance-based renewal is to function as a credible policy instrument, including in concentrated or even monopoly environments, it must be anchored in predefined eligibility criteria, objective operational and financial metrics, independent verification, and transparent procedural safeguards. In such settings, the credible prospect of non-renewal itself may serve as a disciplinary mechanism, reinforcing incentives for efficient operation and constructive engagement in commercial recalibration. Renewal cannot be discretionary in a political sense; it must be rule-based, auditable, and economically defensible.

This raises a related question that has emerged in several discussions: if an incumbent operator has demonstrated sustained performance in a concentrated, or even monopoly, environment, what is the economic rationale for mandatory operator substitution? If the structural conditions that limit entry will persist following re-tendering, and if contractual enforcement mechanisms already exist to address underperformance, the case for turnover must be grounded not in structure alone, but in observable deficiencies in performance, compliance, or investment delivery.

The central question of Part 2 is therefore not whether extension or re-tendering is inherently superior. Rather, it is how a structured renewal framework should be designed to preserve accountability, protect public value, and maintain long-term investment incentives. Addressing that question requires moving the debate from ideology toward institutional architecture.

The remainder of this paper develops a structured framework for performance-based renewal. Section I examines why renewal mechanisms should be embedded within the original concession architecture to enhance transparency, predictability, and investment incentives. Section II introduces a set of objective performance indicators, supported by an illustrative KPI eligibility matrix, while Section III discusses how such metrics should be interpreted in practice to distinguish operator-controlled performance from broader system effects. Section IV outlines procedural safeguards and the renewal process, including independent verification, structured review timelines, and commercial recalibration mechanisms. Section V identifies the conditions under which renewal should not be granted and re-tendering should proceed.

Throughout the paper, short illustrative scenarios are used to demonstrate how these principles may apply in practice, including cases involving multi-operator environments, metric misinterpretation, structured renewal processes, and performance-based non-renewal.

I. Why Renewal Frameworks Should Be Embedded in the Original Concession Contract

If performance-based renewal is to function as a legitimate policy instrument rather than a discretionary accommodation, its foundations must be established at the outset of the concession relationship. Renewal should not be improvised in the final years of a contract term. Instead, the conditions under which extension may be considered should be embedded, at least in principle, within the original concession framework.

This design choice serves several institutional objectives:

1. It reduces political sensitivity. Concession renewals, particularly in high-profile ports, often attract scrutiny from competitors, regulators, labor groups, and political actors. Absent predefined criteria, extension decisions can be perceived as opaque or preferential, even where economically justified. By contrast, when eligibility thresholds, evaluation metrics, and procedural steps are specified ex ante, renewal becomes a rule-based mechanism rather than an ad hoc negotiation. In practice, many renewal discussions have historically taken exactly this form, emerging late in the concession cycle, often under time pressure and without the benefit of a structured framework. This distinction is not merely semantic. Late-stage negotiations, absent a predefined framework, can quickly become exercises in improvisation, rarely an ideal basis for long-term infrastructure decisions.

2. It enhances transparency and auditability. A structured renewal framework allows both the concessioning authority and external stakeholders to evaluate performance against objective benchmarks. Operational indicators, investment delivery, financial compliance, environmental obligations, and safety performance can be measured against predefined standards. Independent technical audits and financial reviews can verify compliance. In this way, extension eligibility becomes evidence-based rather than discretionary.

3. Embedding renewal logic within the original contract strengthens investment incentives throughout the concession lifecycle. When operators understand from the outset that sustained performance may qualify them for extension (subject to measurable criteria—they can incorporate that prospect into long-term capital planning. Conversely, where renewal criteria are undefined or politically uncertain, operators may treat the terminal horizon as fixed, reinforcing late-cycle underinvestment risks discussed in Part 1 (the “hold-up” problem).

Importantly, embedding a renewal framework does not guarantee extension. Rather, it establishes conditional eligibility. The concession contract can specify that renewal consideration will occur within a defined review window, say 24 to 36 months before expiration, subject to fulfillment of objective performance thresholds and compliance with all regulatory obligations. Failure to meet those thresholds would automatically default the asset to competitive re-tendering.

This approach also addresses concerns that renewal undermines contestability. Contestability is preserved because renewal is contingent, not automatic. The credible threat of re-tendering remains in place where performance deteriorates or obligations are unmet. At the same time, high-performing operators are not penalized for meeting or exceeding contractual commitments.

Finally, early definition of renewal mechanics facilitates commercial recalibration without destabilizing governance. Governments may legitimately seek adjustments to royalty structures, revenue shares, environmental commitments, or capital expenditure programs as assets mature. When renewal parameters are anticipated within the contractual architecture, such recalibration occurs within a structured framework rather than through reactive renegotiation.

A related issue arises in ports with multiple concessionaires operating under different contracts. Renewal of one concession may introduce revised commercial terms, performance obligations, or regulatory conditions that differ from those applied to other operators within the same port. To preserve competitive neutrality, authorities may need to ensure that material differences in contractual terms do not distort intra-port competition. This can be addressed through benchmarking, harmonization of key commercial parameters over time, or through regulatory oversight of pricing and service conditions. In short, the core principle is institutional clarity. Renewal frameworks should be designed as part of concession architecture, not appended at maturity. When properly structured, they reinforce accountability, protect public value, and align private incentives with long-term infrastructure stewardship.

Vignette 1. Renewal in a Multi-Operator Port: Ensuring Competitive Neutrality

Illustrative Scenario:

A major gateway port has three container terminals operated under concession contracts awarded at different points in time. One concession approaches expiration and is eligible for renewal based on the operator's strong operational and investment performance. During the renewal process, the authority negotiates updated royalty terms, revised performance obligations, and new capital commitments reflecting current market conditions.

However, competing operators, still operating under earlier contractual frameworks, raise concerns that the revised terms may create asymmetries affecting competitive dynamics within the port. In particular, differences in revenue-sharing structures, investment obligations, and performance requirements are perceived as potentially altering the level playing field.

In response, the authority undertakes a benchmarking exercise and implements a phased approach to alignment. This includes introducing comparable performance standards across terminals through regulatory oversight, adjusting tariff and service conditions where permissible, and planning for convergence of key commercial parameters as existing concessions approach their own renewal points. In some cases, limited mid-term contractual adjustments are pursued, where legally feasible, to address material imbalances.

The outcome preserves operational continuity while mitigating distortions in intra-port competition, demonstrating that renewal can be accommodated within a multi-operator environment when supported by active regulatory management and a clear path toward contractual alignment.

II. Designing Objective Performance Triggers: Metrics That Inform Rather Than Distort

The selection and interpretation of metrics is key if renewal eligibility is to be conditioned on performance. However, not all commonly cited port indicators are equally suitable as renewal triggers. Some metrics capture operator efficiency directly; others reflect broader system conditions that may fall outside the concessionaire's control.

This is an important distinction. Poorly designed indicators can distort incentives, encourage superficial compliance, or penalize operators for structural constraints beyond their influence.

Box 1. Treatment of Force Majeure Events

Renewal frameworks should explicitly define how performance is assessed during force majeure events. Indicators should be adjusted or suspended where performance outcomes are materially affected by events beyond the operator's control, such as extreme weather events, armed conflict, or systemic disruptions.

Particular care is required in the treatment of labor disruptions. Where labor is directly employed by the terminal operator, performance impacts may reasonably be attributed to operator responsibility. Where labor is supplied through third-party arrangements, attribution may depend on contractual control and risk allocation.

The objective is to ensure that renewal eligibility reflects controllable performance, while maintaining accountability for risks that fall within the operator's sphere of influence.

A. Operational Metrics: Efficiency Versus System Effects

Operational performance indicators typically include measures such as:

- Crane productivity (moves per crane-hour)
- Vessel productivity (total moves per ship hour)
- Vessel turnaround time
- Berth occupancy levels
- Yard productivity
- Gate (transaction) time
- Truck turnaround time

Note that yard productivity indicators may be informative but are typically secondary. Inefficiencies in yard operations are more reliably reflected in downstream indicators dealing with productivity and elapsed time, such as berth productivity, truck turnaround time, or berth occupancy levels.

By contrast, container dwell time requires careful interpretation. Although frequently cited as a performance metric, dwell time is often a system variable rather than a pure operator variable. Elevated dwell time may result from:

- customs procedures and inspection regimes,
- hinterland transport bottlenecks,
- tariff structures that make terminal storage cheaper than off-dock warehousing,
- regulated storage fees that reduce incentives for rapid evacuation, or
- strategic commercial pricing decisions (e.g., setting storage tariffs below competing warehouse rates to attract or retain cargo).

In certain jurisdictions, artificially low storage charges have unintentionally encouraged prolonged container stays in terminals, exacerbating congestion. In others, shippers may rationally prefer to leave containers in the terminal when storage pricing is economically attractive relative to warehouse alternatives outside the

terminal. In such contexts, high dwell time, particularly with storage capacity availability, does not necessarily indicate operational inefficiency.

Moreover, where container berth utilization approaches 75 percent sustained occupancy, yard congestion effects can intensify non-linearly, making dwell time sensitive to capacity constraints rather than managerial performance alone.

For these reasons, renewal frameworks should either:

1. Exclude raw dwell time as a primary trigger metric; or
2. Adjust dwell time indicators for system variables and regulatory constraints; or
3. Pair dwell time with berth productivity and gate efficiency indicators to isolate operator-driven effects.

The broader principle is methodological discipline: renewal eligibility should rely on metrics that meaningfully reflect controllable performance, rather than outcomes driven by multi-agency coordination failures or policy distortions.

B. Investment and Asset Condition Metrics

Operational performance alone is insufficient. Renewal eligibility should also assess:

- Verified CAPEX delivery relative to contractual commitments
- Asset condition audits (quay walls, cranes, pavement integrity)
- Technology upgrades (TOS modernization, digital integration, automation)
- Maintenance compliance records

These indicators help prevent “asset sweating” in late-cycle periods and directly address the hold-up risk mentioned in Part 1.

C. Financial and Commercial Metrics

Governments may legitimately reassess:

- Revenue-sharing structures
- Royalty alignment with competitive market benchmarks, recognizing that concession structures combining fixed and variable payments may influence operator cost structures and, indirectly, user pricing where tariff flexibility exists
- Tariff evolution relative to efficiency gains
- Cost pass-through transparency (i.e., the extent to which changes in costs or concession payments are reflected in user tariffs, subject to contractual or regulatory constraints)

Where markets are concentrated, financial metrics become especially important. However, market concentration alone does not invalidate renewal; what matters is whether pricing and investment behavior remain consistent with regulatory objectives.

D. Environmental and ESG Metrics

Modern concession frameworks increasingly incorporate:

- Emissions intensity reductions
- Shore power deployment
- Energy efficiency benchmarks
- Safety performance
- Workforce training standards

These indicators should be defined using measurable benchmarks, such as emissions per TEU handled, percentage of electrified equipment, or compliance with internationally recognized safety standards. Embedding these into renewal triggers ensures that extensions reflect contemporary policy priorities rather than historic contractual baselines.

Table 1 presents illustrative KPIs, some of which have been used in the performance standards in concession contracts, that may be incorporated for performance-based renewal, how they are measured, their relevancy, and key considerations.

Table 1. Illustrative KPI Eligibility Matrix for Performance-Based Renewal

Category	Indicator	Measurement Approach	Renewal Relevance	Key Considerations
Operational Performance	Crane Productivity	Moves per crane-hour (normalized by vessel size/class)	High	Directly reflects terminal efficiency; should be benchmarked against comparable ports
	Vessel Turnaround Time	Time from berth to departure (percentile-based)	High	Captures integrated berth performance; adjust for vessel size and call complexity
	Berth Occupancy	% utilization over sustained period	Medium–High	High occupancy (>70–75%) may signal congestion risk; must be interpreted with capacity context
	Gate / Truck Turn Time	Average transaction time per truck	Medium	Reflects landside efficiency; influenced by appointment systems and hinterland conditions
	Yard Productivity	Moves per hectare or per equipment unit	Medium	Useful but sensitive to terminal layout and cargo mix
	Vessel Windows Management	Adherence to scheduled berthing windows and flexibility metrics	Medium	Poor window management can reduce effective capacity and increase congestion
	Container Dwell Time	Average days per container	Low (unadjusted)	System-driven metric; influenced by customs, pricing,

Category	Indicator	Measurement Approach	Renewal Relevance	Key Considerations
				and regulation; should not be used without adjustment
Investment & Asset Condition	CAPEX Delivery	% of committed investment delivered (audited)	High	Core renewal trigger; must be independently verified
	Asset Condition Index	Engineering audit (quay, cranes, yard)	High	Prevents late-cycle asset deterioration ("asset sweating")
	Technology Upgrades	Compliance with TOS/digital/automation roadmap	Medium–High	Ensures modernization; should be milestone-based
Financial & Commercial	Revenue Share / Royalty Alignment	Benchmark vs comparable ports	High	Enables recalibration without re-tendering
	Tariff Structure	All-in pricing or tariff benchmarking	Medium–High	Important in concentrated markets; focus on effective user cost
	Volume Growth / Throughput	TEU growth relative to market	Medium	Indicator of competitiveness, but partly exogenous
Environmental & ESG	Emissions Intensity	CO_2 per TEU or per move	Medium–High	Increasingly policy-relevant
	Shore Power / Electrification	Implementation milestones	Medium	Forward-looking compliance metric
	Safety Performance	Incident rates (LTIFR, etc.)	High	Non-negotiable baseline requirement
Regulatory Compliance	Contractual Compliance	Record of breaches / penalties	High (threshold)	Disqualifier if persistent non-compliance
	Audit Outcomes	Independent audit findings	High	Must confirm integrity of reported KPIs

Vignette 2. The Dwell Time Trap: When Metrics Mislead

Illustrative Scenario:

A container terminal is flagged for poor performance due to elevated average dwell times. On initial review, the indicator suggests operational inefficiency. However, further analysis reveals that storage tariffs at the terminal are significantly lower than competing warehouse rates, encouraging shippers to use the terminal as a temporary storage facility. At the same time, customs inspection processes and inland transport constraints contribute to delayed cargo evacuation.

Despite elevated dwell times, the terminal demonstrates strong crane productivity, efficient berth operations, and acceptable truck turnaround performance.

The authority concludes that dwell time reflects system-level conditions rather than operator inefficiency and excludes it as a primary renewal trigger, instead focusing on performance indicators within the operator's control and interpreting system indicators as secondary diagnostics.

III. Interpreting Performance: From Metrics to Renewal Eligibility

The presence of defined performance indicators does not, in itself, ensure a sound renewal framework. What matters equally is how those indicators are interpreted, weighted, and translated into eligibility decisions. Renewal frameworks must therefore distinguish between metrics that reflect operator performance and those that capture broader system conditions.

Not all indicators carry equal diagnostic value. Measures such as crane productivity, vessel and truck level of service, berth utilization rates, and verified capital investment directly reflect managerial efficiency and operational execution. These metrics can serve as primary eligibility triggers because they are largely within the control of the concessionaire.

As discussed in Section II, certain indicators, most notably container dwell time, are influenced by a wider set of institutional and commercial factors. Customs procedures, inland transport capacity, tariff structures, and regulatory interventions can all materially affect dwell time outcomes. In some cases, low storage tariffs or pricing structures may even create incentives for extended container stays within the terminal. As a result, elevated dwell times do not necessarily indicate operational inefficiency. The metric may be accurate, but the conclusion is not.

As discussed in Section II, this distinction becomes particularly relevant in high-utilization environments, where system constraints may materially influence observed outcomes, and indicators such as dwell time may reflect capacity pressures and coordination effects rather than operator inefficiency. Renewal frameworks should therefore interpret such metrics in conjunction with capacity conditions and complementary performance indicators.

For these reasons, renewal frameworks should avoid reliance on unadjusted system-level indicators as primary eligibility criteria. Instead, such metrics should either be adjusted for system conditions or interpreted alongside complementary indicators that isolate operator-controlled performance.

A second interpretive issue concerns benchmarking. Performance thresholds should not be defined in absolute terms alone, but relative to comparable ports with similar cargo profiles, vessel sizes, and operational conditions. In practice, identifying comparable ports requires careful selection based on cargo mix, vessel size distribution, terminal configuration, and hinterland characteristics. Perfect comparators rarely exist; benchmarking therefore relies on peer group ranges rather than exact matches. Percentile-based benchmarking or peer group comparisons can provide a more robust basis for evaluation, reducing the risk of penalizing operators for structural or geographic factors beyond their control.

Finally, renewal eligibility should be based on a portfolio of indicators, rather than a single metric, as suggested in Table 1 above. High performance in one dimension should not offset persistent underperformance in another critical area, particularly where safety, compliance, or investment obligations are concerned. In such cases, performance outcomes tend to reflect underlying issues that are unlikely to be resolved through continuity alone. Conversely, minor deviations in secondary indicators should not automatically disqualify an otherwise high-performing operator.

The objective is not mechanical scoring, but disciplined evaluation. A well-designed KPI framework supports structured judgment -- anchored in data, but informed by context.

IV. Procedural Safeguards and the Renewal Process

A performance-based renewal framework is only as credible as its implementation process. Even well-defined performance metrics can lose legitimacy if the evaluation and decision-making process lacks transparency, consistency, or independence. For this reason, procedural safeguards are not ancillary to renewal design; they are central to its acceptance by stakeholders and its durability under scrutiny.

The renewal process should be structured around a defined timeline, clear institutional roles, and independent verification mechanisms. Establishing these elements in advance reduces uncertainty for operators, strengthens regulatory credibility, and mitigates the perception that renewal decisions are discretionary or politically motivated.

A. Defined Review Window

A structured renewal process should begin sufficiently in advance of concession expiration to allow for rigorous evaluation and, where appropriate, negotiation of revised terms. In most cases, a review window commencing approximately 24 to 36 months prior to expiration should provide an appropriate balance.

Initiating the process too late compresses decision-making and increases the risk of default extensions or rushed re-tendering. Experience suggests that compressed timelines rarely improve decision quality and often limit the range of viable options available to the authority. Initiating it too early may reduce the informational value of recent performance data. A defined window ensures that both performance evaluation and commercial recalibration are based on current and relevant information.

B. Independent Technical and Financial Evaluation

A central safeguard in the renewal process is the use of independent verification. Performance assessments should not rely solely on operator-reported data or internal regulatory analysis. Instead, they should be supported by:

- Independent technical audits of asset condition and operational performance
- Verification of CAPEX delivery against contractual commitments
- Financial benchmarking studies comparing royalty structures, tariffs, and returns to peer ports
- Where appropriate, external valuation or fairness opinions[2]

Independent evaluation enhances credibility, particularly in environments where renewal decisions may be subject to legal or political challenge. In the absence of such safeguards, even well-founded decisions may struggle to withstand scrutiny, particularly when outcomes are consequential.

C. Transparent Evaluation Criteria

The criteria used to assess renewal eligibility should be clearly defined and disclosed. These criteria should align with the KPI framework described in Section III and should specify:

- Minimum thresholds for eligibility
- Weighting or prioritization of key indicators
- Conditions under which renewal may be granted, denied, or made conditional

Transparency in evaluation criteria reduces informational asymmetry and ensures that operators understand the basis for renewal decisions. It also provides a defensible framework in the event of disputes.

D. Structured Negotiation Phase

Where an operator meets eligibility thresholds, renewal should move to a structured negotiation phase. This phase is not a continuation of the existing contract, but an opportunity for commercial recalibration. Key elements may include:

- Adjustment of royalty or revenue-sharing arrangements
- Updated CAPEX commitments tied to capacity expansion or modernization
- Revised environmental and ESG obligations
- Refinement of service-level requirements and performance benchmarks

The negotiation phase should be bounded in time and guided by the results of benchmarking and independent evaluation. This ensures that renewal reflects current market conditions without becoming an open-ended renegotiation.

E. Preservation of the Re-Tendering Option

An important safeguard in any renewal framework is the credible preservation of the re-tendering alternative. If an operator fails to meet eligibility thresholds, declines to accept revised terms, or if the evaluation process identifies material deficiencies, the concession should proceed to competitive tender. This reinforces the importance of initiating the renewal process sufficiently in advance of contract expiration to preserve a credible re-tendering pathway if required.

[2] A fairness opinion in this context refers to an independent assessment of whether the proposed commercial terms of renewal, particularly financial adjustments such as royalties or tariffs, are consistent with market benchmarks and comparable transactions.

The credibility of this fallback option is fundamental. It reinforces performance incentives throughout the concession lifecycle and ensures that renewal remains contingent rather than automatic. In this sense, the renewal framework does not replace competition; it conditions its application.

F. Disclosure and Institutional Oversight

Finally, renewal decisions should be accompanied by an appropriate level of disclosure and oversight. While commercial confidentiality must be respected, authorities should provide:

- A summary of the evaluation process
- Confirmation of compliance with eligibility criteria
- High-level justification for the renewal decision

In some jurisdictions, additional oversight mechanisms, such as review by an independent regulator, audit institution, or legislative body, may further strengthen legitimacy.

The allocation of evaluation and transaction costs also warrants careful consideration. In some jurisdictions, concessionaires are required to reimburse the costs of independent audits, benchmarking studies, and advisory services associated with concession agreements; such arrangements can include audits and supporting studies in furtherance of renewals. While such arrangements can be justified on efficiency grounds, particularly where renewal confers significant economic value, they must be structured to preserve independence and avoid perceptions of conflict. Best practice typically involves predefined, transparent cost-recovery mechanisms, with advisors appointed by and accountable to the concessioning authority rather than the operator.

Taken together, these procedural elements ensure that performance-based renewal is not a discretionary outcome, but a structured, transparent, and economically grounded process. The remaining question is therefore under what conditions such a framework should not be applied, and re-tendering should proceed as the preferred course.

Vignette 3. Structured Renewal with Commercial Calibration

Illustrative Scenario:

A concessioning authority initiates a renewal review process 30 months prior to contract expiration. Independent technical audits confirm that the operator has met investment commitments, complied with the concession's performance requirements, and maintained asset quality.

Based on these findings, the authority enters a structured negotiation phase. The renewal agreement incorporates increased revenue-sharing terms, new capital investments tied to capacity expansion, and updated environmental obligations, including electrification of yard equipment. The negotiated adjustments are informed by benchmarking and independent evaluation, ensuring that revised terms reflect current market conditions without undermining long-term investment incentives.

The renewal is granted subject to clearly defined performance conditions, preserving operational continuity while recalibrating public value in line with current market conditions.

V. When Renewal Should Not Be Granted

A structured renewal framework must be as clear in identifying when extension is inappropriate as it is in defining eligibility conditions. Renewal should not be viewed as a default outcome for incumbent operators. Rather, it is a contingent mechanism that depends on demonstrated performance, compliance, and alignment with public policy objectives.

There are several circumstances under which renewal should not be granted and re-tendering should proceed as the preferred course.

A. Persistent Operational Underperformance

Where an operator has consistently failed to meet defined operational benchmarks, such as crane or berth productivity, vessel turnaround time, or service reliability, renewal is difficult to justify. Sustained underperformance indicates that the operator has not delivered the efficiency gains that concession frameworks are intended to achieve.

Importantly, this assessment should be based on trends over time rather than isolated deviations. Short-term disruptions may arise from external factors, but persistent gaps relative to comparable ports or agreed thresholds signal structural inefficiencies.

B. Failure to Deliver Committed Investment

A central premise of port concessions is the mobilization of private capital. Where operators have not fulfilled agreed CAPEX commitments, or have deferred maintenance, development, and modernization, renewal should not be considered. Independent asset condition audits can be particularly important in identifying whether late-cycle “asset sweating” has occurred.

In such cases, re-tendering may be necessary to restore investment discipline and ensure that future operators are contractually bound to deliver required upgrades.

C. Material Regulatory or Contractual Non-Compliance

Repeated or material breaches of concession terms, whether related to operational performance, safety, environmental standards, reporting obligations, or tariff compliance, undermine the integrity of the concession regime. Where such breaches are systemic rather than incidental, renewal risks signaling tolerance of non-compliance.

A credible concession framework requires that compliance be treated as a baseline condition. Failure to meet this baseline should preclude eligibility for extension.

D. Abuse of Market Position in Concentrated Environments

In concentrated environments, concerns regarding market power should be assessed through observable indicators rather than inferred from structure alone. These may include sustained pricing levels materially above benchmark ranges, discriminatory access conditions, or persistent service deficiencies not explained by capacity constraints. Where such outcomes are identified, the issue may reflect either operator behavior or regulatory limitations. In such cases, renewal decisions should consider whether

contractual or regulatory remedies are sufficient, or whether re-tendering is required to restore effective discipline. The presence of market power concerns does not automatically imply that operator substitution will resolve them, particularly where underlying structural conditions remain unchanged.

It is important to distinguish between operator performance and regulatory effectiveness. Weak regulatory oversight should not, in itself, be attributed to the operator. However, where performance outcomes indicate underinvestment or inefficient capacity management, renewal decisions may appropriately consider whether continued operation under the existing framework is likely to deliver improved outcomes.

Vignette 4. Strong Market Position, Weak Performance

Illustrative Scenario:

A terminal operates in a concentrated port environment with limited intra-port competition. Despite favorable market conditions, the operator has consistently failed to meet berth productivity benchmarks and has deferred key capital investments required under the concession agreement. Asset condition audits reveal deterioration in critical infrastructure. Over the same period, competing terminals have increased their market share, suggesting a relative decline in the operator's competitive position.

Although the broader market remains structurally concentrated, the authority determines that the operator's performance does not meet renewal eligibility thresholds. Additionally, the observed loss of market share, while not determinative on its own, reinforces the conclusion that performance deficiencies are not solely attributable to structural constraints. The concession is therefore re-tendered, with revised investment obligations and performance standards embedded in the new contract.

The decision reflects a performance-based approach to renewal rather than reliance on market structure alone.

E. Refusal to Accept Commercial Recalibration

As assets mature, governments may legitimately seek to recalibrate financial terms, including royalty structures, revenue sharing, or investment obligations. Where an operator meets baseline performance criteria but is unwilling to accept commercially justifiable adjustments informed by benchmarking and independent evaluation reflecting current market conditions, renewal may not be achievable. In practice, the boundary between acceptable and unacceptable terms is often revealed through the willingness of parties to reach agreement within the defined negotiation window.

In such cases, re-tendering provides a mechanism to reset commercial terms through competitive bidding.

Vignette 5. Renewal Breakdown: When Commercial Recalibration Fails

Illustrative Scenario:

An incumbent operator meets operational and investment performance thresholds and is deemed eligible for renewal. During negotiations, however, the authority seeks a substantial increase in revenue-sharing terms based on updated market benchmarks. The operator contests the magnitude of the adjustment, citing long-term capital planning constraints.

After a defined negotiation period, the parties fail to reach agreement. The concession proceeds to competitive re-tendering.

The outcome demonstrates that eligibility for renewal does not guarantee extension; agreement on recalibrated terms remains a necessary condition. In practice, this type of situation highlights that negotiation constitutes a necessary component of the renewal process, and not a formality.

F. Structural or Strategic Reconfiguration of the Port

In some instances, broader strategic considerations may warrant re-tendering irrespective of operator performance. These may include:

- Major capacity expansion requiring reconfiguration of terminal layouts
- Integration of new technologies or operational models
- Changes in port governance or ownership structures
- Development of new logistics corridors or intermodal systems

Where the underlying concession framework no longer aligns with long-term infrastructure strategy, re-tendering may be necessary to support a redesigned operating model.

Vignette 6. Strategic Reconfiguration: When Structure Requires Re-Tendering

Illustrative Scenario:

A port authority initiates a long-term strategic review that identifies the need to reconfigure terminal layouts to accommodate larger vessels, improve intermodal connectivity, and integrate new operational technologies. While the incumbent operator has demonstrated strong performance under the existing concession framework, the current structure of the concession is not suited to support the anticipated transformation.

The proposed reconfiguration involves significant changes to berth layout, yard configuration, landside access systems, and the integration of new technological capabilities. These changes extend beyond the scope of existing contractual commitments and would require a substantial redefinition of the operating model.

In this context, the authority determines that re-tendering is the most appropriate mechanism to implement the new strategic vision, enabling the attraction of operators with the technical, financial, and operational capabilities required to execute the redesign. The competitive process also facilitates the incorporation of updated contractual terms aligned with the port's long-term objectives.

The case illustrates that, even where performance is satisfactory, renewal may not be appropriate when structural conditions require a more fundamental transformation of the concession model.

The conditions described above underscore that renewal is neither automatic nor unconditional. It is a performance-contingent outcome that depends on sustained efficiency, fulfilled investment commitments, regulatory compliance, and alignment with evolving public policy objectives. Where these conditions are not met, re-tendering remains not only justified, but necessary to preserve the credibility and effectiveness of the concession regime.

VI. Conclusion: From Renewal Debate to Institutional Design

The maturation of first-generation port concessions and, increasingly, their extensions, has brought the question of renewal to the forefront of port policy. As Part 1 of this discussion emphasized, the choice between re-tendering and extension is not binary. Both are legitimate instruments within the concession framework, each appropriate under different circumstances.

Part 2 has sought to move the discussion beyond that framing toward a more practical question: how renewal, if pursued, should be designed?

The analysis suggests that performance-based renewal can serve the public interest when it is structured, transparent, and grounded in measurable outcomes. Renewal should not be understood as a continuation of existing arrangements, but as a conditional process that requires verification of performance, fulfillment of investment obligations, and alignment with evolving policy objectives. When properly designed, it preserves operational continuity while enabling commercial recalibration and modernization.

At the same time, renewal is not universally appropriate. Where operators have failed to meet performance standards, neglected investment commitments, or demonstrated persistent non-compliance, re-tendering remains not only justified, but necessary to maintain the credibility of the concession regime. Similarly, where broader strategic or structural changes are required, operator substitution may be the more effective course.

The presence of market concentration, whether in the form of oligopolistic or even monopoly structures, does not, in itself, resolve this choice. As this paper has argued, re-tendering in such environments will often reproduce similar structural conditions. The more relevant question is whether performance discipline is effectively maintained through contractual enforcement, regulatory oversight, and credible renewal conditions.

This places institutional design at the center of the discussion. A well-constructed renewal framework should incorporate predefined eligibility criteria, carefully selected performance metrics, independent verification, and clear procedural safeguards. It should preserve the credibility of re-tendering as a fallback option while providing a structured pathway for renewal where justified by performance. It should also allow for commercial recalibration -- through updated royalty structures, investment commitments, and service obligations -- without undermining long-term investment incentives.

In this sense, the debate over renewal is less about choosing between continuity and competition, and more about ensuring that both are embedded within a sound governance framework. As port systems continue to evolve and concession cycles mature, the quality of this institutional architecture will

increasingly determine outcomes. Where renewal is structured, performance-based, and transparent, it can reinforce efficiency, sustain investment, and support competitiveness. Where it is ad hoc or weakly governed, it risks undermining both public confidence and economic performance. The challenge for policymakers is therefore not to adopt a single approach, but to design frameworks that are capable of distinguishing between cases where continuity enhances value and those where change is required.

The issues explored in this paper also point toward a broader need for structured guidance on concession design, performance monitoring, and renewal governance -- areas that remain underdeveloped in practice despite their central importance to long-term port performance. That distinction, and the discipline with which it is applied, will ultimately define the next phase of port concession policy and its long-term effectiveness.

The *For the Beauty of Logistics* Series

This paper is the fourteenth installment in Dr. Kent's *For the Beauty of Logistics* series, a collection of short articles that explores how logistics principles intersect with economic, policy, and infrastructural systems to drive innovation, optimize complex processes, and reveal deeper insights into global dynamics. Previous papers in the Series can be found here:

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The series seeks to demonstrate that logistics is not merely a technical discipline, but an analytical framework through which complex systems can be understood and designed with rigor, creativity, and strategic vision—revealing the beauty that emerges when efficiency, economics, and governance align coherently.