

CAUSATION, STANDARDS OF PROOF AND VALUATION UNDER UNCITRAL WORKING GROUP III: Reducing Uncertainty and Decisional Subjectivity

Informal Note, 14 October 2026

*By José Manuel Alvarez Zárate, Universidad Externado de Colombia**

ABSTRACT

The assessment of damages has been one of the areas in which States participating in UNCITRAL Working Group III have expressed concerns about inconsistency, unpredictability and the correctness of ISDS awards. The successive versions of the draft provision on damages were intended to address those concerns. The revised Draft Provision 20 in WP.268 have incorporated a but-for test, requires loss or damage to be directly caused by the breach, replaces the former requirement of satisfactory evidence with a reasonable degree of certainty, and, for certain future damages, proposes a clear and convincing evidence standard. These developments, however, do not fully resolve the evidentiary and causal problem. Identifying who bears the burden of proof does not determine how much uncertainty that party must overcome before a factual proposition may be treated as established. Nor does reasonable degree of certainty, without further criteria, explain how the evidence should be assessed or what a tribunal must identify before concluding that the standard has been satisfied. This still leaves substantial room for subjective and divergent approaches to causation and quantum to Tribunals.

This paper argues that Draft Provision 20 should distinguish more clearly between the existence of the alleged loss, factual causation, legal compensability and quantification. Causation should determine which alleged economic losses are attributable to the breach before questions of legal compensability and valuation arise. For each material head of loss, the tribunal should identify the alleged causal mechanism, the relevant counterfactual, the material factual propositions on which it depends and the material alternative explanations for the same economic outcome before the loss proceeds to valuation. The paper proposes that a material factual proposition necessary to establish the existence of loss and factual causation should be treated as proven only where the evidentiary record provides an objective and verifiable basis for that finding. The tribunal should identify the evidence supporting and contradicting the proposition, assess its reliability, contemporaneity, source

** The views expressed in this note are solely those of the author's and do not necessarily reflect the official positions of the South Centre, its Member States, or other developing countries.*

independence, corroboration, consistency and completeness, address material competing explanations supported by the record, and explain why the evidence establishes the proposition despite the residual possibility of error. Quantification should likewise rest on identified factual inputs and assumptions supported by the record, and the amount awarded should remain within the limits that the evidence can support.

The purpose is to make the exercise of adjudicative judgment transparent, disciplined and objectively reviewable. Findings on loss and causation should be capable of being reconstructed from the evidence, and the loss ultimately valued should correspond to the loss established as caused by the breach and determined to be compensable under the applicable law.

I. INTRODUCTION

A. The problem in UNCITRAL WG.III: damages, causation and evidence

At its fifty-fifth session in Vienna, from 12 to 16 October 2026, Working Group III will consider, among other relevant documents, WP.255 on the Draft Guidelines on the Calculation of Damages and Compensation and the revised text of Draft Provision 20 contained in WP.268.¹ WP.255 is a set of guidelines to assist tribunals, while DP20 is being developed as treaty language.² One of the questions of this paper is whether some of the distinctions explained in WP.255 are sufficient to warrant expression in clear rules in DP20, which of them WP.268 has incorporated, and which questions remain insufficiently regulated. This is important because WG.III identified concerns relating to the inconsistency and unpredictability of awards, the correctness of damages determinations, high compensation awards, speculative evidence, causation, burden of proof, valuation methodology, the role of experts and interest. It also called for damages claims and awards to be realistic and proportionate to the loss suffered and for the relationship between expert calculations and the burden of proof to be examined.³

WP.255 identifies among the concerns underlying WG.III's work on damages, the inconsistency and unpredictability of damages awards, high amounts of compensation awarded by ISDS tribunals, the complexity in damages calculations and the substantial differences that may arise between the amount invested and the amount ultimately awarded. A reform that leaves decisive evidentiary questions to an undefined overall assessment by the tribunal would preserve much of the adjudicative discretion and subjectivity that WG.III reform on damages seeks to discipline. Before deciding how much compensation should be awarded, the tribunal should first determine which economic consequences were caused by the breach. Causation therefore identifies the losses attributable to the breach before the separate before the separate inquiries of legal compensability and valuation arise. Those causal findings should be established under the applicable standard of proof and on an objective and verifiable

¹ UNCITRAL, Working Group III, A/CN.9/WG.III/WP.268, 'Remaining draft provisions on procedural and cross-cutting issues: revised text of draft provision 20', 21 September 2026, para. 1.

² UNCITRAL, A/CN.9/WG.III/WP.255, 'Draft guidelines on the calculation of damages and compensation in investor-State dispute settlement', 24 June 2025, paras. 3-5.

³ See A/CN.9/1124, paras. 89-100; see also, Jose Manuel Alvarez, 'Discussions on Draft Provisions on Damages in the Investor-State Dispute Settlement System in UNCITRAL Working Group III', South Centre Research Paper No. 207, 29 August 2024, pp. 1, 11-12.

evidentiary basis. The flexibility inherent in economic valuation should not be allowed to relax the evidentiary requirements applicable to those prior determinations.⁴

B. From WP.244 to WP.268: the evolution of the rule

i) WP.244 and WP.248

WP.244, issued on 8 July 2024, reformulated the draft provisions on procedural and cross-cutting issues. Draft Provision 20 required the tribunal to reflect only loss or damage incurred by reason of, or arising out of, a breach and allowed monetary damages only where they were established on the basis of *satisfactory evidence* and were not *inherently speculative*. The text did not yet contain an express but-for test or a differentiated evidentiary threshold for future damages.⁵ WP.248, of 15 November 2024, did not adjust DP20. It dealt principally with joint interpretation, submissions by non-disputing Treaty Parties and Working Group resources.⁶

ii) WP.255 and WP.253

WP.255, issued on 24 June 2025, contains the Draft Guidelines which describe the assessment and calculation of damages as having procedural, legal and quantitative dimensions. Procedurally, the process depends heavily on expert evidence and case management. Legally, it is governed by entitlement to reparation, evidentiary standards and limits on compensation. And quantitatively economic valuation remains bound by the applicable legal framework. This separation is important because valuation is only one component of the inquiry into damages.⁷

WP.253, issued five days after, on 30 June 2025, retained a general evidence rule under which each disputing party bears the burden of proving the facts relied upon to support its claim or defence. DP20 continued to require *satisfactory evidence* and non-speculative damages, while reintroducing, for further discussions, in brackets, a fact-based inquiry for expected future cash flows that included whether the investment had operated for a sufficient period to establish a performance record of profitability. A sunk-cost ceiling remained as an alternative.⁸

iii) WP.262, WP.267 and WP.268

WP.262, of 17 November 2025, issued after the ninth intersessional meeting in Santiago, Chile, strengthened the causal formula by requiring loss or damage to be *directly caused by the breach*. It nevertheless maintained the formulation of *satisfactory evidence*, the prohibition of inherently speculative damages and the competing proposals concerning future cash flows and sunk costs.⁹ Then, WP.267, issued on 30 July 2026, preserved essentially that structure. Paragraph 3 continued to require direct causation, paragraph 4 continued to require satisfactory evidence and non-speculation, together with the bracketed alternatives for discussion on a profitability record and a sunk-cost cap.¹⁰

⁴ UNCITRAL, A/CN.9/WG.III/WP.255, para. 1; see also, UNCITRAL Report, A/CN.9/1124, paras. 91, 94–100

⁵ UNCITRAL, A/CN.9/WG.III/WP.244, 'Draft provisions on procedural and cross-cutting issues', 8 July 2024, Draft Provision 20, paras. 3-4.

⁶ UNCITRAL, A/CN.9/WG.III/WP.248, 'Additional provisions on procedural and cross-cutting issues and resources available to the Working Group', 15 November 2024, paras. 1-2.

⁷ UNCITRAL, A/CN.9/WG.III/WP.255, Annex, paras. 1-4.

⁸ UNCITRAL, A/CN.9/WG.III/WP.253, 'Draft provisions on procedural and cross-cutting issues', 30 June 2025, Draft Provision 1, para. 1, p. 4; Draft Provision 20, paras. 3-4.

⁹ UNCITRAL, A/CN.9/WG.III/WP.262, 'Draft provisions on procedural and cross-cutting issues (revised text of draft provision 5-8, 12, 18, 19 and 20)', 17 November 2025, Draft Provision 20, paras. 3-4.

¹⁰ UNCITRAL, A/CN.9/WG.III/WP.267, 'Remaining draft provisions on procedural and cross-cutting issues', 30 July 2026, Draft Provision 20, paras. 3-4; annotations, paras. 51-52.

WP.268, issued on 21 September 2026, makes significant changes. Paragraph 3 now requires the claimant to establish that the alleged loss *would not have been suffered but for the breach* and was *directly caused by such breach*. Paragraph 4 replaces satisfactory evidence with evidence that is not inherently speculative and requires monetary damages to be established *with a reasonable degree of certainty*. Where no record of profitability exists, for further discussions, the bracketed text proposes that the existence and amount of future damage based on expected future cash flows or other forward-looking valuation methods be established through *clear and convincing evidence*.¹¹ WP.268 therefore represents changes that should be discussed further. The remaining question is whether those rules are sufficiently clear to achieve consistency, predictability and correctness that motivated the reform.

This procedural history is significant. DP20 was last substantially considered by WG.III in a formal session at its 49th session in September 2024. The subsequent formulations reflected in WP.262, WP.267 and WP.268 were developed through informal intersessional meetings and subsequent drafting by the Chair, Rapporteur and Secretariat to facilitate further deliberations on WG.III.¹² The Draft Guidelines in WP.255 are in similar position. At the 49th session, WG.III reiterated that guidelines could be prepared to assist tribunals, and it was suggested that they be developed in parallel with DP20, after which the Secretariat prepared the text contained in WP.255. The reports do not show that the Guidelines have since been subjected to a complete substantive examination by WG.III. The changes introduced concern the structure and content of the rules governing causation, standards of proof, evidentiary assessment, future loss and valuation, and in several instances alter concepts or terminology capable of affecting the outcome of damages claims. Neither the successive formulations of DP20 from WP.262 to WP.268 nor the propositions contained in WP.255 should therefore be treated as agreed or settled positions of the Working Group. Therefore, they remain open to substantive discussions which should take place at the 55th session. That session should accordingly provide for a deeper examination of the relationship between the Guidelines and DP20, including the underlying conceptual choices reflected in both texts, rather than limiting the discussion to the alternatives in bracketed language or to the specific questions identified in the annotation to WP.268. The Guidelines should then be reviewed and, where necessary, adjusted considering the agreements reached on DP20, so that both instruments reflect a coherent approach to causation, evidentiary standards and valuation.

II. FROM BURDEN OF PROOF TO THE ALLOCATION OF THE RISK OF ERROR

A. Three distinctions in WP.255 should be more clearly articulated in DP20

WP.255 develops three important distinctions. First, it separates the *existence of injury*, the *causal nexus* and the *amount of loss*, where the claimant bears the burden of establishing each of those propositions, while the respondent bears the burden of establishing the defences or compensation-reducing circumstances on which it relies.¹³ A valuation may establish what an investment was worth, but it does not by itself establish that the breach caused the claimant to suffer the loss being valued.

¹¹ UNCITRAL, A/CN.9/WG.III/WP.272, paras. 48-49, 57, 69, 74-78; see also, UNCITRAL, A/CN.9/WG.III/WP.268, Draft Provision 20, paras. 3-4; annotations 3-4.

¹² See A/CN.9/1194, paras. 57-104; UNCITRAL 'Previous deliberations on the draft provisions on procedural and cross-cutting issues', paras. 1-6; A/CN.9/WG.III/WP.272, paras. 1-2 and fn. 2.

¹³ UNCITRAL, A/CN.9/WG.III/WP.255, para. 18 and Recommendations, pp. 7 and 9. WP.255 states that the investor must establish (i) existence of injury, (ii) causal nexus and (iii) amount of loss, while the State bears the burden of defences and compensation-reducing circumstances.

Second, WP.255 distinguishes factual from legal causation. Factual causation asks whether the investor would have suffered the claimed injury but for the breach. Legal causation concerns the limits of attribution and may be expressed through directness, proximity, foreseeability or remoteness which should not be viewed as equivalent.¹⁴ Paragraph 3 of WP.268 has now included both dimensions. The *but-for* test addresses factual causation, while the requirement that the loss be “*directly caused*” by the breach addresses legal causation. Their inclusion in the same paragraph makes it particularly important to distinguish their respective functions: factual causation determines whether the breach produce the loss, while legal causation determines whether that consequence falls within the scope of compensable loss.

Third, uncertainty as to whether a loss was caused by the breach should be distinguished from uncertainty as to the amount of that loss once causation has been established. WP.255 divides the existence of injury, causation and quantification, and recognizes that the evidentiary treatment of quantification may differ from that applicable to the existence of injury and causation. Pearsall and Heath likewise treat causation as a distinct analytical step between breach and quantum.¹⁵ Bonniticha, Alvarez-Zárate et al. similarly treat causation as analytically separate from both the determination of breach and the assessment of quantum, and place valuation only after the applicable legal rules and causation analysis have identified the loss that is compensable and attributable to the breach.¹⁶ Those distinctions should therefore be clearly articulated in DP20 and expressly coordinated with the Guidelines. Otherwise, reasonable degree of certainty risks becoming a single flexible expression applied to questions that perform different legal and evidentiary functions.¹⁷

B. Burden of proof and evidentiary threshold

WP.268 places the burden of proof on the claimant to establish factual causation, direct causation and the monetary damages claimed,¹⁸ which determines which party bears the consequences of insufficient proof. It does not, however, determine the degree of evidentiary support that must be reached before a factual proposition may be treated as established. That is the function of the standard of proof. The standard sets an evidentiary threshold, as the point at which the available evidence is considered sufficiently persuasive for the tribunal to treat a proposition as proven notwithstanding the residual possibility of error.¹⁹ The policy question is therefore not only who bears the burden of proof, but also *at what evidentiary threshold should a claimant's factual proposition be treated as legally established notwithstanding the residual risk of error?*

¹⁴ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 25-26, and Recommendations; Martin Jarrett, ‘Depolluting the Doctrine on Causation in International Investment Law: The Case of Extracting “Legal Causation”’, in Gábor Kajtár, Başak Çalı and Marko Milanovic (eds), *Secondary Rules of Primary Importance in International Law* (OUP 2022), pp. 127–134.

¹⁵ Patrick W. Pearsall and J. Benton Heath, “Causation and Injury in Investor-State Arbitration”, in Christina L. Beharry (ed.), *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration* (Brill Nijhoff 2018), pp. 85–86

¹⁶ Bonniticha, Zhang, Alvarez-Zárate, Menkes, and Ostřanský, *The Assessment and Calculation of Damages in Treaty-based ISDS*, (2026) 27 *Journal of World Investment & Trade* 1, pp. 18–23. See also Herfried Wöss, Adriana San Román Rivera, Pablo T. Spiller and Santiago Dellepiane, *Damages in International Arbitration under Complex Long-Term Contracts* (OUP 2014), ch. 5, paras. 5.128–5.131.

¹⁷ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 18–23.

¹⁸ UNCITRAL, *Revised Text of Draft Provision 20*, A/CN.9/WG.III/WP.268, 21 September 2026, paras. 3–4.

¹⁹ See, Ferrer Beltrán, ‘La prueba de la causalidad en la responsabilidad civil’..., pp. 223-226.

WP.255 recognizes that the answer may require scrutiny in damages claims. It invites tribunals to consider a high evidentiary threshold considering broader public-interest implications and the need for rigorous scrutiny, while recommending at least a balance-of-probabilities standard for the existence of injury and causation. Read together, those propositions raise two related questions. The first is whether balance of probabilities is sufficiently demanding for the material factual propositions that condition an award of compensation against a State. The second is how the tribunal should assess the evidence when determining whether the applicable standard has been met. An invitation to rigorous scrutiny may not by itself resolve either question. WG III should therefore consider both the standard of proof and the evidentiary discipline necessary to ensure that findings of loss and causation rest on an objective and verifiable evidentiary basis.²⁰

The choice of standard matters because different standards distribute the risk of factual error differently. A more objective standard reduces the risk of awarding compensation for a loss that was not in fact caused by the breach, while increasing the risk of denying compensation for a loss that was. A less objective standard produces the opposite allocation. As Ferrer explains, the choice of standard of proof involves a policy decision concerning the distribution of the risk of error. Moreover, a factual proposition should not be treated as established merely because it is better supported than a competing hypothesis, because the evidentiary record itself must provide sufficient support for treating that proposition as proven.²¹

WP.268 requires monetary damages to be established on evidence that is not inherently speculative and with a reasonable degree of certainty. For certain future damages, it also proposes, for discussion in brackets, a clear and convincing standard of evidence. Neither “reasonable degree of certainty” nor “clear and convincing evidence”, standing alone, determines how the evidence should be assessed or when the applicable threshold has objectively been satisfied. Without further criteria, tribunals may reach materially different conclusions while formally applying the same standard. A reform aimed at improving consistency and predictability should therefore determine both the allocation of the risk of error and the evidentiary criteria through which the tribunal must establish that a material factual proposition has been proven.²²

C. Evidentiary sufficiency and the objective assessment of evidence

i) Objective evidentiary sufficiency for existence of loss and factual causation

WP.255 recommends, at a minimum, a balance-of-probabilities standard for determining the existence of injury and causation, meaning that the relevant factual proposition must be more likely than not. At the same time, however, it calls for rigorous scrutiny of damages claims and invites tribunals to consider a high evidentiary threshold considering their broader public-interest implications. Read together, those recommendations suggest that balance of probabilities should be understood as a minimum threshold rather than necessarily as the appropriate standard for every factual determination relevant to damages.²³

²⁰ UNCITRAL, *Draft Guidelines...*, A/CN.9/WG.III/WP.255, Recommendations, p. 9.

²¹ Jordi Ferrer Beltrán, ‘La prueba de la causalidad en la responsabilidad civil’, in *Estudios sobre la prueba*, pp. 223–226.

²² UNCITRAL, A/CN.9/WG.III/WP.268, 21 September 2026, Draft Provision 20, para. 4; annotation 4, p. 3.

²³ UNCITRAL, *Draft Guidelines...*, A/CN.9/WG.III/WP.255, para. 19.

Balance of probabilities has the advantage of providing a recognizable decision rule, where the claimant succeeds if the factual proposition is more likely to be true than not. Its limitation, however, is that comparative superiority does not necessarily demonstrate that the evidentiary basis is sufficiently strong. A claimant's explanation may be better supported than a competing explanation while both remain weakly supported by the available evidence. Ferrer's analysis is particularly useful in this respect, because he distinguishes the comparative support of competing hypotheses from the weight or completeness of the evidentiary set and shows why the former, standing alone, may result in a proposition being treated as proven despite an insufficient evidentiary foundation.²⁴

One possible response is to use reasonable certainty as a more demanding standard. The Academic Forum Concept Paper adopts that approach and describes reasonable certainty as more demanding than preponderance of the evidence. The expression may therefore provide greater control than a bare balance of probabilities. Its difficulty, however, is that it remains open-textured unless the evidentiary content of reasonableness is defined. If the objective of the reform is to reduce tribunals subjectivity, asking whether a proposition is reasonably certain may reproduce the same difficulty if different tribunals remain free to determine what degree of certainty is reasonable.²⁵

A more determinate approach is to define the conditions under which a material factual proposition may be treated as proven. The relevant policy choice concerns the allocation of the risk of factual error: the greater the evidentiary sufficiency required before a proposition is treated as established, the greater the risk that residual uncertainty remains with the party bearing the burden of proof. That choice should therefore be made expressly by WG III rather than left to an undefined degree of tribunal conviction.

For the existence of loss and factual causation, this paper proposes that a material factual proposition be treated as established only where the evidentiary record provides an objective and verifiable basis for that finding. The tribunal should identify the evidence supporting and contradicting the proposition; assess, as relevant, its reliability, contemporaneity, source independence, corroboration, consistency and completeness; address material competing explanations supported by the record; and explain why the evidence establishes the proposition despite the residual possibility of error. Where that evidentiary basis is insufficient, the party bearing the burden of proof has not established the proposition.

This approach gives operative content to the allocation of the risk of error. It requires more than the tribunal's statement that the evidence is "clear and convincing" or that it has reached a "reasonable degree of certainty". The finding must instead be capable of being reconstructed and verified from the evidentiary record.

ii) Objective and verifiable assessment of the evidence

A higher standard of proof cannot by itself ensure greater objectivity. WP.268 may require clear and convincing evidence for certain future damages, but it does not define how a tribunal should evaluate the evidence in determining whether that standard has been met. The assessment of evidence should therefore be treated as a distinct question from the standard of proof. The standard identifies how persuasive the evidence must be, while the assessment rules discipline the process through which the tribunal reaches that conclusion.²⁶

²⁴ Jordi Ferrer Beltrán, 'La prueba de la causalidad...', pp. 223–226.

²⁵ Bonnitcho, Zhang, Alvarez-Zárate, Menkes and Ostřanský, *The Assessment and Calculation of Damages...*, Principle 6 and Commentary, pp. 41-42.

²⁶ UNCITRAL, A/CN.9/WG.III/WP.268, Draft Provision 20, para. 4; annotation 4.

For each material factual proposition, the tribunal should identify the evidence supporting and contradicting it and assess, as relevant, its reliability, contemporaneity, source independence, corroboration, internal consistency and the completeness of the evidentiary record. This does not imply a mechanical hierarchy of evidence or eliminate adjudicative judgment. It requires that the conclusion be capable of being reconstructed and clearly reviewed from the evidence on which the tribunal relied.

That is, that a factual proposition should not be treated as established merely because it is more plausible than an alternative, is repeated across several expert models, or fits the overall narrative of the case. The tribunal should identify the evidence that supports and contradicts each material proposition and assess its reliability, corroboration, source independence, consistency and completeness. It should also address the material competing explanations supported by the record and explain why they do not prevent the proposition from being established under the applicable standard. This structured assessment provides an objective and verifiable evidentiary basis for the finding and makes the tribunal's causal reasoning more transparent and reviewable.

iii) Quantification must rest on an objective and verifiable evidentiary basis

Once the existence and causal attribution of a compensable loss have been established, quantification may require estimation even after the existence and causal attribution of the compensable loss have been established. That does not authorize the tribunal to select an amount merely because it appears reasonable, falls within the range advanced by the parties, or represents a compromise between competing valuations. Such an approach would replace proof with adjudicative discretion and may preserve substantial awards even where important valuation assumptions remain insufficiently supported.

WP.268 requires monetary damages to be established on evidence that is not inherently speculative and with a reasonable degree of certainty. WP.255 likewise recognizes that, even where a lower standard is applied to quantification, the valuation should rest on reasonable probabilities and a persuasive factual basis.²⁷ Those formulations should not be understood as permitting the tribunal to determine quantum through an overall assessment of what appears reasonable. The tribunal should identify the evidence supporting and contradicting the proposition, assess its reliability, source independence, corroboration, consistency and completeness, address material competing explanations supported by the record, and explain why the evidence establishes the proposition. Quantification likewise should rest on identified factual inputs and assumptions supported by the record, and the amount awarded should remain within the limits that the evidence can support.

The claimant should therefore identify the material facts, assumptions and contingencies on which the valuation depends and the evidence supporting each of them. The tribunal should determine which inputs are established, which remain uncertain, and how each materially affects the calculation. WP.255 already recommends disclosure of expert instructions and key assumptions, together with sensitivity analysis showing their effect on valuation.²⁸ A disputed factual proposition does not cease to require proof merely because it appears as an input in an expert model, and convergence between different valuation methods does not establish an assumption that each method merely reproduces. Nor should an unsupported claim become compensable simply because the tribunal reduces it to a figure that appears more plausible. The existence of competing expert valuations does not by itself create a permissible range of

²⁷ UNCITRAL, A/CN.9/WG.III/WP.268, Draft Provision 20, para. 4; UNCITRAL, A/CN.9/WG.III/WP.255, paras. 19–22,

²⁸ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 10–12

damages. Where the evidence supports a range rather than a single figure, the boundaries of that range should themselves be grounded in identified evidence and stated assumptions. Any amount selected within that range should be derived from those findings, rather than from a midpoint, compromise or intuitive assessment of reasonableness.

If the evidentiary record does not support either a point estimate or a defensible range for a particular component of the claim, that component should not be awarded. The function of reasonable degree of certainty is therefore not to authorize approximation in the absence of proof, but to permit estimation within the limits established by the evidence once the compensable loss and the material valuation premises have been demonstrated.

III. A MORE DISCIPLINED METHOD FOR PROVING CAUSATION

A. Causation must identify the economic consequence attributable to the breach

For each material head of loss, the causal inquiry should identify the economic consequence that would not have occurred but for the breach. That inquiry requires more than stating a difference between the actual and counterfactual worlds. The tribunal should identify the alleged mechanism through which the breach produced the loss, the material factual propositions on which that mechanism and the counterfactual depend, and the competing explanations for the same economic outcome. Only the loss that survives that causal inquiry should proceed to the separate questions of legal compensability and valuation.

A global assessment of the record is not sufficient for that purpose. If the tribunal simply considers the record as a whole and states that causation is established under the applicable standard, the strength of the liability finding, the plausibility of the business case and the sophistication of the expert report may reinforce one another without identifying which evidence proves which causal proposition. Where tribunals reach different results, it may then be impossible to determine whether the divergence results from different standards of proof, different counterfactuals, different factual assumptions or merely different adjudicative intuitions. WP.255 recommends a structured framework to compel systematic reasoning on quantum, together with disclosure of expert instructions and key assumptions and sensitivity analysis. Similar discipline is needed for causal proof.²⁹

The problem is particularly critical where several valuation methods depend on the same unproven factual premise. Agreement among those methods does not provide independent evidentiary support for that premise. DCF, comparables or other models may produce mutually consistent results while merely reproducing the same assumption. Methodological cross-checking can test the robustness of a valuation, but it cannot transform an unproven factual or causal assumption into an established fact.³⁰

B. The tribunal should identify what must be proved

For each material head of loss, the tribunal should identify the specific loss claimed and the mechanism through which the claimant alleges that the breach produced that loss. This avoids treating the alleged loss or damage as a single undifferentiated factual proposition. It also permits the tribunal to determine whether each material causal proposition rests on an

²⁹ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 10-12, and Recommendations, .

³⁰ See UNCITRAL, A/CN.9/WG.III/WP.255, paras. 12, 54–55; Benoit d'Udekem and Eliana Garces, 'Causation before quantum: reframing damages analysis in arbitration', *The Guide to Damages in International Arbitration*, 7th ed. (GAR 2026), pp. 9–10; *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, 12 July 2019, paras. 402, 408 and 459; see also Bonnitcha, Zhang, Alvarez-Zarate et al., 'The Assessment and Calculation of Damages...', pp. 25–26.

objective and verifiable evidentiary basis. The claimant should then identify the material factual propositions on which the relevant counterfactual depends. If the claimed loss presupposes that a licence would have been granted, financing obtained, a project completed, production achieved or market demand maintained, those propositions should be identified and assessed as such. They should not disappear inside the assumptions of a financial model.

Ferrer provides an important methodological caution. A hypothesis should not be treated as established merely because it is better supported than the available alternatives if the evidentiary basis for all competing hypotheses remains weak. His analysis therefore requires attention not only to the comparative support of the preferred hypothesis, but also to the weight or completeness of the evidentiary set on which that comparison rests.³¹

Building on that distinction, this paper proposes a more specific rule for damages and causation. For each material head of loss or damage, the Tribunal should identify the causal proposition on which the claim depends, the material factual propositions underlying the relevant counterfactual, the evidence materially supporting or contradicting those propositions, and the material alternative causal explanations supported by the record. The Tribunal should then determine whether the applicable standard of proof has been satisfied on an objective and verifiable evidentiary basis.

C. The counterfactual must be legally bounded, factually supported and economically tested

WP.268's incorporation of the but-for test is an important advance, but the test does not by itself define the counterfactual. A prior question remains: what conduct or circumstance should be removed in constructing the world without the breach? Jarrett shows that this question can materially affect the result. He distinguishes between a counterfactual that removes the State's conduct as a whole and one that removes only the aspect of that conduct that made it wrongful. The choice between those approaches depends on the legal content of the breached obligation and can produce materially different counterfactual scenarios.³² Building on Jarrett's distinction, this paper proposes a narrower rule rather than the universal adoption of the Wrongful Aspect Approach. The counterfactual should remove only what the applicable legal rule justifies removing. It should therefore reflect the content of the obligation breached and should not exclude lawful conduct, regulatory choices or other circumstances that would have existed independently of the breach. In this sense, the counterfactual must first be legally bounded.

Legal definition, however, is only the first step, because the factual and economic assumptions on which the counterfactual depends must also be established and tested. D'Udekem and Garces provide a useful framework for this second task. Their analysis moves from identifying the alleged economic mechanism of harm, to examining confounding factors and isolating the causal effect, and only then to projection and valuation.³³ Their approach therefore helps explain how economic analysis can test whether the alleged loss is attributable to the breach rather than to other factors that would have produced the same economic outcome.

That inquiry requires consideration of material competing explanations. A causal hypothesis cannot be evaluated solely for internal plausibility. Market deterioration, lawful

³¹ Ferrer Beltrán, pp. 223-226.

³² Martin Jarrett, 'Determining compensable losses in investment treaty arbitration with the wrongful aspect approach', *Journal of International Economic Law* (2026), pp. 1–3, 9–11.

³³ Benoit d'Udekem and Eliana Garces, 'Causation before quantum: reframing damages analysis in arbitration', pp. 9–10.

regulatory action, claimant decisions, financing constraints, conduct of third parties or macroeconomic events may provide competing explanations for the same economic outcome. The tribunal should therefore assess material alternative explanations supported by the record when deciding whether the claimant has crossed the applicable evidentiary threshold.³⁴

This requirement does not reverse the claimant's primary burden. Testing the claimant's hypothesis against competing explanations is part of determining whether the claimant has proved causation. A different question arises where the respondent advances an affirmative defence or a compensation-reducing circumstance, such as contributory fault or failure to mitigate. WP.255 assigns the burden of those defences to the respondent and separately addresses intervening causes and contributory fault.³⁵ The rule should therefore distinguish between testing claimant's causal proposition against the evidentiary record and requiring the respondent to prove a separate affirmative defence. The former forms part of the claimant's burden of proving causation; the latter depends on the defence invoked and the applicable allocation of proof.

Taken together, these considerations support a three-part rule. The counterfactual should be legally bounded, factually supported and economically tested. Legal analysis determines what may properly be removed from the counterfactual considering the obligation breached. Evidence establishes the material factual propositions on which that counterfactual depends. Economic analysis may test the alleged mechanism of harm, identify competing or confounding causes and, where possible, isolate the economic effect attributable to the breach. Only the loss that survives those inquiries should proceed to valuation.

D. Economic analysis may identify causal effects, but valuation cannot prove its own assumptions

Causation requires legal and economic analysis to be connected, while keeping their respective functions clear. Economic methods may help establish causal effects and may also be used to quantify an effect once identified. Regressions, difference-in-differences and event studies, for example, can help isolate the effect of the wrongful act from other factors and, depending on their design, may also contribute to quantification. The relevant question is therefore whether the methodology is being used to establish the causal identification, valuation, or both.³⁶ Thus, where an economic methodology is relied upon for causal identification, the tribunal should assess the assumptions, confounding factors, alternative explanations and evidence on which the inference depends, and determine whether those premises have an objective and verifiable evidentiary basis. Where the methodology is used for valuation, the question is whether it appropriately quantifies a loss that has already been causally identified.

Building on that distinction, this paper proposes that the function of economic evidence should be identified expressly. Where an economic methodology is used for causal identification, its causal contribution should be assessed on its own terms and should not be inferred merely because the methodology also produces a damages figure. Where a methodology is used for valuation, it may quantify the economic consequences of an

³⁴ See UNCITRAL, A/CN.9/WG.III/WP.255, para. 27 and Recommendations; Benoit d'Udekem and Eliana Garces, pp. 9–10. See also International and Comparative Law Research Center, 'Comments on the Draft Guidelines...' (5 January 2026), paras. 23–26.

³⁵ UNCITRAL, A/CN.9/WG.III/WP.255, para. 18; para. 27 and Recommendations, p. 11.

³⁶ Benoit d'Udekem and Eliana Garces, 'Causation before quantum: reframing damages analysis in arbitration', pp. 7–10

established counterfactual, but it should not be treated as proving a factual or causal assumption merely because that assumption has been incorporated into the model. The proposed rule is therefore that valuation cannot establish the factual or causal premises on which it depends. Those premises must themselves satisfy the applicable evidentiary standard on an objective and verifiable evidentiary basis before they can be used as inputs in the valuation.

The concern is illustrated by *Tethyan Copper*, where the valuation depended on assumptions concerning the terms of a future Mineral Agreement that had not been concluded and over which the State retained discretion. The central issue was therefore not merely the choice of discount rate or the mechanics of DCF, but whether the factual and legal basis existed for assuming the future contractual terms embedded in the valuation.³⁷

IV. FROM CAUSALLY ESTABLISHED LOSS TO QUANTUM

A. Factual causation does not by itself determine the compensable loss

After factual causation comes a distinct legal inquiry. Article 31 of the Articles on State Responsibility requires reparation for injury caused by the internationally wrongful act, while the ILC Commentary explains that causality in fact is necessary but not sufficient for reparation and that injury may be excluded where it is too remote or consequential. Article 36 similarly refers to financially assessable damage caused by the wrongful act.³⁸ WP.268 expresses this legal limitation through direct causation. Whether directness is ultimately the optimal formulation deserves separate examination, especially because WP.255 records that arbitral practice has also used proximity and foreseeability and expressly regards the directness test as more restrictive. Direct causation should not be treated as a heightened evidentiary requirement, because it performs a different function, which is that after factual causation has been established, it determines whether the resulting consequence falls within the legally compensable scope of the breach. For present purposes, the essential distinction is that the loss factually caused by the breach is not necessarily identical to the loss legally compensable under the applicable law.

B. The loss valued must correspond to the loss causally established and legally compensable

This distinction leads to a rule of traceability where the loss ultimately valued should correspond to the loss established as caused by the breach and determined to be compensable. A valuation may be technically sophisticated and still be legally irrelevant if it values a different economic interest. *Eco Oro* illustrates this point, because the tribunal identified the relevant injury as the loss of an opportunity to apply for an environmental licence. The claimant's expert evidence instead addressed the market value of the concession through comparable transactions. In the absence of relevant evidence valuing the injury that the tribunal had identified, the majority awarded no damages.³⁹

³⁷ *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, 12 July 2019, paras. 402, 408 and 459; see Bonnitche, Zhang, Alvarez-Zarate, Menkes and Ostransky, 'The Assessment and Calculation of Damages...pp. 25-26.

³⁸ International Law Commission, Articles on Responsibility of States for Internationally Wrongful Acts, arts. 31(1) and 36(1); Commentary to art. 31, paras. 9-10.

³⁹ *Eco Oro Minerals Corp. v. Republic of Colombia*, ICSID Case No. ARB/16/41, Award on Damages, 15 July 2024, paras. 292, 302-305, 316; see also WP.255, para. 21 and n. 41; Academic Forum on ISDS Concept Paper 2025/1, pp. 26-27.

This paper proposes that valuation should be limited to the loss established as caused by the breach and determined to be compensable under the applicable law.

C. Quantification must rest on an objective and verifiable evidentiary basis

Quantification may require estimation.⁴⁰ That does not make intuition an adequate decision rule, nor does it collapse quantification into proof of the existence of loss or causation. WP.255 already recommends a structured approach to quantum, including disclosure of expert instructions and key assumptions and sensitivity analysis showing how those assumptions affect the valuation.⁴¹ These safeguards provide a useful basis for the objective and verifiable evidentiary rule proposed in the paper.

That process should begin with the evidentiary basis of the valuation. Material inputs should be identifiable as established facts, factual inferences or future estimates, and the evidence supporting them should be capable of being traced in the record. A disputed factual proposition does not cease to require proof merely because it appears as an input in an expert model. The same applies to assumptions that materially affect the result: their role in the valuation should be made explicit, together with the evidence supporting them and the principal alternatives supported by the record. This requirement is important where the methodology is highly sensitive to its assumptions. WP.255 describes DCF as highly sensitive to its inputs and requires its parameters to be supported by reliable evidence and its assumptions to be reasonable and realistic.⁴² A valuation model may therefore be technically sound while still depending on factual premises that have not been established. Methodological reliability cannot substitute for proof that the factual scenario being valued would have occurred.

For the same reason, sensitivity analysis should do more than demonstrate that different inputs produce different results. It should show which assumptions materially drive the valuation and how far the result changes when those assumptions are varied within ranges supported by the evidence. Where relatively small changes in an uncertain premise produce substantial changes in the damages figure, the tribunal should not present a single point estimate with a degree of precision that the evidentiary record does not support. Sensitivity analysis thus becomes part of testing the robustness of the valuation, rather than merely an explanatory appendix to the expert report. The discipline must also extend to the choice of valuation method.

The relevant question is not whether DCF, comparables, asset-based methods or sunk costs are permissible in the abstract, but whether the method selected can value the particular loss that has been causally established and determined to be compensable. WP.255 follows a similar functional approach in identifying conditions relevant to the use of DCF, including historical financial performance, the reliability of projected cash flows, market evidence, the feasibility of calculating a meaningful WACC and the characteristics of regulated markets.⁴³ The choice of methodology should therefore follow from the nature of the compensable loss and the evidentiary basis available to value it.

A tribunal should award monetary damages only to the extent that the amount can be derived from the compensable loss through material factual inputs and assumptions supported by the evidentiary record. The tribunal should identify the evidentiary basis of each material

⁴⁰ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 19–22; A/CN.9/WG.III/WP.272, para. 75.

⁴¹ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 10–12.

⁴² UNCITRAL, A/CN.9/WG.III/WP.255, paras. 53–54.

⁴³ UNCITRAL, A/CN.9/WG.III/WP.255, para. 55.

input and assumption and assess its effect on the valuation. Where the evidence supports a range rather than a single figure, the award should remain within that evidentially supported range. The range, however, must itself be established by the evidence. Where the record supports neither a point estimate nor a defensible range, no amount should be awarded for that component of the claim.

D. Probability in proof and probability in valuation perform different functions

This proposal also requires a clear distinction between probability as a matter of proof and probability as an input into valuation. In the first sense, probability concerns whether the evidence is sufficient to establish a factual or causal proposition under the applicable standard of proof. In the second, probability may be used to value a future contingency once the factual and causal premises necessary for that valuation have been established. The two functions should not be conflated.⁴⁴ A probability-weighted valuation therefore cannot establish an underlying causal proposition that has not otherwise satisfied the applicable standard of proof. Conversely, the finding that a factual proposition has been established does not mechanically determine the amount or percentage of compensation to be awarded. The purpose of the distinction is to prevent unresolved uncertainty about causation from being transferred into the valuation model and converted into a damages figure.

V. OPEN CAUSATION QUESTIONS IN WP.268

A. Claimant conduct and alternative causes

Annotation 3 asks whether non-compliance by the claimant and other circumstances should be treated as contributory fault.⁴⁵ From a causation perspective, these matters should not become a general discretion to reduce damages. This paper proposes that claimant conduct should affect compensation as contributory fault only where the respondent establishes a sufficient causal connection between that conduct and the compensable loss. Non-compliance with an independent legal obligation may have consequences elsewhere in the proceedings, but it should not justify an equitable reduction in damages simply because the conduct was wrongful or undesirable.

The same distinction becomes relevant where other factors may also explain or contribute to the alleged loss, such as conduct of the claimant, third parties, market developments or other circumstances that may need to be considered when testing whether the breach caused the alleged loss, without necessarily constituting contributory fault. The inquiry should therefore distinguish between alternative causal explanations that the claimant's case must overcome and a separate defence by which the respondent seeks to establish that the claimant's own conduct contributed to the compensable loss.

B. Future loss and causal uncertainty

Annotation 4 raises a related question in the context of future loss, and asks whether forward-looking methods should be limited to investments with a record of profitability, whether clear and convincing evidence should permit recovery without such a record, and whether recovery should instead be capped by sunk costs.⁴⁶ The central issue, in this paper's view, is

⁴⁴ See Ferrer Beltrán, pp. 216–220, 223–226; UNCITRAL, A/CN.9/WG.III/WP.255, paras. 19–22, 53–55; A/CN.9/WG.III/WP.272, paras. 75–78.

⁴⁵ UNCITRAL, A/CN.9/WG.III/WP.268, annotation 3; A/CN.9/WG.III/WP.255, paras. 18 and 27 and Recommendations.

⁴⁶ UNCITRAL, A/CN.9/WG.III/WP.268, Draft Provision 20, para. 4; A/CN.9/WG.III/WP.255, paras. 53–55; A/CN.9/WG.III/WP.272, paras. 59–61, 75–78.

whether the factual propositions and future contingencies necessary to connect the claimed loss to the breach satisfy the objective evidentiary requirements applicable to causation, rather than whether the tribunal characterises the evidence as “clear and convincing”. That is because a record of profitability may provide important evidence that projected future cash flows are not merely speculative, but it should neither automatically establish causation nor operate as an indispensable condition of recovery. Conversely, the absence of such a record may make the causal proposition more difficult to establish where the claim depends on permits, financing, production, demand or other contingencies that had not yet materialized. The tribunal should therefore identify the material contingencies on which the future loss depends, the evidence supporting them and the material alternative outcomes before determining whether the claimed loss can be attributed to the breach.

For these reasons, this paper does not recommend either a categorical prohibition of forward-looking methods or an automatic sunk-cost ceiling. Neither approach addresses the underlying problem, which is whether the projected loss has been sufficiently connected to the breach and whether the assumptions on which its valuation depends are supported by the evidence. Forward-looking methods may be appropriate where those causal premises have been established, but they also create a particular risk of overcompensation when the result is highly sensitive to variables such as projected revenues, growth rates, costs, production levels, discount rates or the duration of the projected cash flows. Small changes in those inputs may produce substantial changes in the damages figure.⁴⁷ Because many of those variables depend on assumptions selected, adjusted or modelled by the experts, the tribunal should not treat the resulting figure as reliable merely because it is produced by a sophisticated methodology or adopted by one of the experts. The evidentiary basis of the material assumptions, their sensitivity and their causal connection to the loss must therefore be examined expressly and independently.

Sunk costs present the opposite risk. They may provide an appropriate measure where they correspond to the loss established by the evidence, but an automatic ceiling would substitute an ex-ante valuation rule for the causal inquiry and may undercompensate a claimant that has proved a different compensable loss.⁴⁸ The appropriate discipline is therefore not to privilege or prohibit a particular methodology, but to require the tribunal to ensure that the method measures the loss causally established and that material changes in expert-selected assumptions do not transform evidentiary uncertainty into an inflated damages award.

VI. CONCLUSION

WP.268 has important changes over the earlier formulations of DP20 that should be taken into consideration and compared with previous formulations. It introduces an express but-for test, preserves a legal limitation through direct causation, replaces satisfactory evidence with reasonable degree of certainty and proposes a higher evidentiary standard for certain future damages. Those changes respond to legitimate concerns identified throughout the WG III process.

The remaining challenge is therefore not just adding another evidentiary formula to DP20, but to ensure that causation performs its proper function between breach and compensation. The finding of breach does not establish, by itself, that every economic consequence alleged by the claimant is attributable to that breach, just as a valuation model cannot establish the

⁴⁷ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 53–55; A/CN.9/WG.III/WP.272, paras. 56–61, 75–78.

⁴⁸ UNCITRAL, A/CN.9/WG.III/WP.255, paras. 62–64; see also Bonnitcho et al. (2026), p. 47, Principle 12 and Commentary.

causal premises on which it depends. Causation must therefore determine which losses can properly be attributed to the breach before questions of legal compensability and valuation arise.

For each material head of loss, the tribunal should identify the alleged causal mechanism and the relevant counterfactual, and determine whether the material factual propositions necessary to establish factual causation have been proven by an objective and verifiable evidentiary basis. That determination should identify the supporting and contradictory evidence, assess its reliability and completeness, address material competing explanations, and explain why the propositions has been established. The tribunal should then and then determine which of the resulting consequences are legally compensable. Only after those questions have been resolved should that same loss proceed to quantification, under a rule requiring the amount awarded to be derived from identical inputs and assumptions supported by the evidentiary record.

Legal and economic analysis should operate together while preserving their respective functions. Economic analysis may assist in constructing and testing the counterfactual, identifying confounding factors, isolating causal effects and quantifying the loss established. What it cannot do is substitute the sophistication of a valuation model for proof of the factual and causal propositions on which the claimed loss depends.

The final step should preserve a clear line between the loss established through the causal analysis and the loss ultimately valued. Thus, what is valued must be the same loss that the tribunal has found, on an objective and verifiable evidentiary basis, to have been caused by the breach and to be legally compensable. Maintaining that correspondence throughout the analysis is more important than adherence to any particular valuation methodology because it prevents the valuation exercise from redefining the loss already established through the causal analysis and thereby provides a safer basis for damages determinations that are more consistent, predictable and legally justified.

The South Centre is an intergovernmental organisation of developing countries. It produces and disseminates strategic analyses, information, and policy recommendations on international economic, social, and political issues of concern to the Global South.

For enquiries, please visit <https://www.southcentre.int/>, or e-mail south@southcentre.int