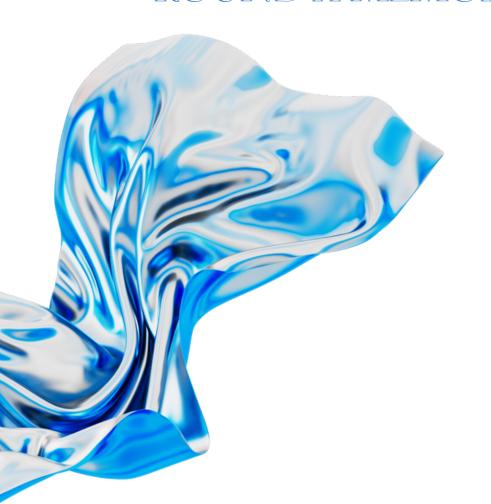


NATIONAL UNIVERSITY OF SINGAPORE BLUE INC. ROUND A MEMORANDUM



ENGLISH 1



Moon Case

SUMMARY OF FACTS

Red Incorporation ("Red") and Blue Inc. ("Blue") contracted for Avrio to collect lunar materials in accordance with the Memorandum of Understanding for Lunar Exploration Project (Exhibit 5). However, due to the passing of the Negoland Space Resources Act ("NSRA") (Exhibit 11) on May 1, 2023 (Paragraph 17), transfer of materials to Red has been deemed illegal. Nevertheless, the space resources were collected by Avrio on May 3, 2023. On Avrio's return to Earth on May 20, 2023 (Paragraph 19), the Order concerning handling of data pertaining to the Moon ("the Order") (Exhibit 13) came into force in Arbitria at the same time. On Red's request of the transfer of the lunar materials, Blue subsequently refused to comply, pursuant to both the NSRA and the Order . Upon agreement of Red to proceed (paragraph 21) with the settlement procedures under the Agreement for Cost-Sharing for the Lunar Probe Project (Exhibit 6), Blue calculated the total costs of the project to be US\$400 million and invoiced Red for half of the costs and an agreed adjustment of US\$10 million, amounting to US\$160 million total. After Blue came to an agreement to sell all the materials extracted to Black and the Government of Arbitria, Blue has offered to reduce Red's payment obligation to US\$110 million. In response, Red filed a motion before the Arbitral Tribunal to enjoin Blue from selling any of the material or data extracted from Area β.

SUMMARY OF ARGUMENTS

Blue submits that the contractual obligation to transfer the data and space resources to Red is negated because, 1) the contract has been frustrated by illegality pursuant to the NSRA; 2) it would cause hardship to transfer the data. Should Blue be held to this obligation, the distribution of materials should be negotiated between both parties. If Blue has the obligation to deliver, Red cannot delay payment as the time of performance has been specified in the agreement. Furthermore, Red cannot anticipatorily withhold payment. If Blue does not have the obligation to deliver, Red will be obliged to pay either US\$160 million or US\$110 million as Blue has offered a cure equal to the proceeds of the sale of the materials. Red's claim for interim measures cannot succeed as the likely harm suffered by Blue if the enjoinment is granted is greater than the likely harm suffered by Red if the enjoinment is not granted.

ISSUE 1: BLUE IS NOT LEGALLY OBLIGED TO DELIVER HALF THE MATERIAL DISCOVERED IN AREA β AND THE FULL COPY OF THE DATA

A. Blue is exempt from delivering half of the materials as due to illegality, pursuant to Ex 11: Negoland Space Resources Act.

- 1. Blue is exempt from delivering half of the materials and data to Red as the Negoland Space Resources Act renders private ownership of space resources illegal.
- 2. Pursuant to Art 5 of the Negoland Space Resources Act (NSRA), all ownership of space resources mined by persons with the permission of the state "shall belong to the state" unless the state transfers this ownership. The materials gathered from Area β on qualify as "space resources", defined by Art 2 as "water, minerals and other natural resources that exist in outer space, including the Moon and other celestial bodies. Art 5 further provides that the Act would apply to the materials of Area β mined on May 3 2023, which were "mined or newly possessed after the date of entry [of the Act] into force", May 1 2023. As such, given that the materials found in Area β falls squarely within the ambit of the Negoland Space Resources Act, Blue is necessarily exempt from delivering them to Red as it would contravene this law.
- 3. Even if Red argues that Blue would not contravene the Negoland Space Resources Act if Red

simply acts as an intermediary to surrender the materials to the Negoland government, the purpose of Blue and Red's agreement was for each party to gain ownership of the mined space materials. The intention to contract with Red, and not the Negoland Government is stated in Cl 2.1 of Ex 6, "2.1. All materials collected from the lunar surface or subsurface and brought back to Earth shall be divided equally *between Red and Blue*."

4. Thus, as it stands, it is impossible for Red to retain ownership over these materials. In these circumstances, it is not reasonable to enforce Blue's obligation to deliver the materials and data under the 'Agreement' (Ex 6).

B. Blue cannot transfer a copy of the data due to hardship, pursuant to Ex 13: "Order concerning handling of data pertaining to the Moon" and Arbitrian Government negotiations

- 5. It is submitted that transferring a copy of data under the liability clause imposed by the Arbitrian Government is onerous and Blue invokes hardship to be exempt from delivering a copy of the data. Pursuant to Ex 13, "data pertaining to the condition of the Moon shall not be transferred to any person unless [...] the permission of the state has been obtained in advance", rendering transfer of data to Red illegal.
- 6. In accordance with Red's request, Blue acted in good faith by applying for permission to transfer data on four occasions in May, in immediate follow-up to the passing of the 'Order' (Ex 13), as well as in June, July and November. However, in response, the Arbitrian government imposed an onerous condition that "Blue guarantees to the Government of Arbitria that Red will never use the data in a manner that is contrary to the national security of Arbitria" and should the Arbitrian government determine such a case, Blue would be liable to a fine of US\$1,000,000.
- 7. Blue taking on additional liability to supervise Red's use of data to protect Arbitria's national security, as a private company has qualified Blue to terminate the contract under hardship. Art 6.2.2 of PICC defines hardship to have occurred "where the occurrence of events fundamentally alters the equilibrium of the contract because the cost of a party's performance has increased, and (a) the events occur or become known to to the disadvantaged party after the conclusion of the contract; (b) the events could not reasonably have been taken into account by the disadvantaged party at the time of the conclusion of the contract; (c) the events are beyond the control of the disadvantaged party; and (d) the risk of the events was not assumed by the disadvantaged party".
- 8. The additional liability has increased the cost of Blue transferring the materials and data with the potential penalty of US\$1,000,000. Blue has fulfilled (a) and and (b), as the 'Order' (Ex 13) was passed on May 20 2023 with no prior discussion. The law was thus known to Blue after the conclusion of the 'Agreement', and could not reasonably have been taken into account by Blue at the time. Given that Blue is under the jurisdiction of the Arbitrian Government and has attempted negotiations to no avail, the onerous liability was also beyond the control of Blue, fulfilling (c). Further, in no part of the 'Agreement' (Ex 6) did Blue assume the risks of liability for Red's use of the data, fulfilling (d).
- 9. Thus, in light of hardship in transferring a copy of the data pursuant to Ex 13, it is not reasonable for the Tribunal to compel Blue to do so.

Blue cannot be compelled to perform its transfer obligations on grounds of illegality.

- 10. Given that the Agreement on Distribution of Lunar Data and Materials contravenes the Art 5 of the Negoland Space Resources Act, it is a contract which "infringes a mandatory rule" (Art 3.3.1(1), PICC). Thus, it is submitted that Blue should be allowed to terminate this contract.
- 11. The NSRA "does not expressly prescribe the effects of an infringement upon [the 'Agreement']", entitling Red and Blue to "exercise such remedies under the contract as in the circumstances are reasonable" (Art 3.3.1(2), PICC). Art 3.3.1(2) is worded "sufficiently [broadly] to permit a maximum of flexibility" (PICC at 128–129), allowing the exercise of "any remedies that the parties may want to exercise" (Vogenauer, 560), including "the right to treat the contract as being of no effect" (PICC, 129). Further, "[in] determining what is reasonable, regard is to be had in particular to (a) the purpose of the rule which has been infringed …" (Art 3.3.1(3)(a), PICC).

- 12. It is submitted that the reasonable step to take is to void the 'Agreement On Distribution of Lunar Data and Materials' (Ex 6) as it is tainted by illegality. The 'Agreement' directly contravenes the purpose of the NSRA, which is "the philosophy that it is inappropriate to use space and space resources for the benefit of only a limited few" (Facts at [17]). Transferring the materials and data to Red would constitute vesting private ownership to one large company, which is diametrically opposed to this philosophy and unenforceable. There is minimal likelihood that the Negoland Government would grant ownership to Red despite negotiations, as evinced by the article published by Negoland's most trusted science journal which has stated that "the value of space resources would not be known [...] when the Negoland government does not conduct its own research [...] and it is highly unlikely the government would transfer ownership of space resources of such an uncertain value to private companies (Facts at [22])".
- 13. Furthermore, it is submitted that Red had taken on the risk for this legal development, with regards to factor (e) whether one or both parties knew or ought to have known of the infringement, to be taken into account to determine a reasonable remedy under Art 3.3.1 of the PICC. [17] of the Facts states that the Government of Negoland had been discussing the bill since early 2022, and it was expected to come into effect around summer 2023. Given that the discussions were public knowledge in Red's domestic sphere, it can be reasonably expected of Red to have taken account of this law and assumed risk for the barring of private ownership of space resources.
- 14. With regard to factor (g) under Art 3.3.1 of the PICC, "reasonable expectations of both parties", in response to the enactment of the NSRA, Blue has acted in good faith by offering to deliver the profits from the sale of the materials in lieu of transferring the materials and data as addressed in issue 2, thus offering a measure of remuneration to honour the intention of mutual benefit between Blue and Red when contracting the 'Agreement'.
- 15. Terminating the contract is also in accordance with prescribed effects of hardship under Cl (4) of Article 6.2.3 of the PICC, which states the courts may "terminate the contract at a date and on terms to be fixed".
- 16. Thus, Blue should be granted the right to terminate the 'Agreement' given that the distribution of both materials and data is unenforceable.

If Blue is obliged to hand over half of the substance, the arbitral tribunal should submit the division of materials for negotiation between Blue and Red.

- 17. Given that Blue and Red have not entered discussion on the division of materials, both parties should submit this matter for negotiation to reach an amicable resolution, pursuant to Cl 8.2 of Ex 6: "Agreement on Distribution of Lunar Materials".
- 18. Cl 8.2 states "All disputes in connection with this Agreement or the execution thereof shall be settled in a friendly manner through negotiations. In case no settlement can be reached, the case may then be submitted for arbitration in Japan to arbitration in accordance with the UNCITRAL."
- 19. Prior to negotiation, the resources may be stored by Blue in a location "mutually decided [by both parties]" pursuant to Cl 3.2 of Ex 6. Following negotiation, the parties may then sever ownership.
- 20. Should the tribunal see fit to divide and determine the half of materials to be allocated to each party, the tribunal should allocate resources "based on weight, volume, and/or value as determined by the Parties" in accordance with Cl 2.2 of Ex 6. Blue submits that the "rock weighing 10kg" (Facts at [19]) should be allocated to Blue, and the remaining space resources of "seven rocks weighing about 1kg each, ten rocks weighing about 100g each and a regolith weighing about 2kg" allocated to Red.
- 21. This division is an equitable 50/50 weight distribution split and corresponds to the respective interests of Blue and Red. Blue's interest is to research the possibility of materials in space to contemplate future trips to the Moon, as per Art 1 Para 2ii of the Lunar MOU (Ex 5) and thus should be allocated the 10kg rock, deemed to be "most notable for research purposes" (Facts at [19]). Red's interest is in the manufacture of semiconductors from the materials gathered, pursuant to Art 1 Para 2i of Ex 5, and hence would equally benefit from the remaining rocks, which indisputably contain a considerable amount of titanium (Facts at [15]) and the lunar regolith "expected to contain rare metals such as gold, silver, and platinum, and rare-earth elements." (Facts at [10]).

22. Thus, this matter should be submitted for negotiation between Blue and Red. However, if this Tribunal sees it fit to divide the resources to the parties, Blue submits that it should be awarded the "rock weighing 10kg" for its utility. Blue submits that Red cannot delay in making payment for 2 reasons.

ISSUE 2: EVEN IF BLUE WAS OBLIGED TO TRANSFER HALF THE MATERIAL, RED CANNOT REFUSE TO PAY BLUE UNTIL SAID OBLIGATION IS FULFILLED. RED MUST PAY BLUE US\$110 MILLION IF BLUE DID NOT HAVE SUCH AN OBLIGATION.

A. Even if Blue was obliged to transfer half the materials, Red cannot refuse to make payment until Blue fulfils said obligation.

- 23. Firstly, Blue submits that it is clear in the phrasing of the Agreement for Cost Sharing for the Lunar Project ("CSA") at Cl 3.1 that the parties shall calculate the total amount of incurred costs and in Cl 3.3 if that cost exceed a party's share it should be invoiced to the other party. Cl 3.1 states that this process should begin upon the completion of all "project activities". The "Project" as defined in the Cost-Sharing agreement ends with the materials being brought back to earth. This definition is identical to the one in the Agreement on Distribution of Lunar Data and Materials ("DA"), where the obligation to distribute materials is found. Therefore, Blue submits the parties intended for the costs and requisite invoicing to be done immediately upon the materials and the probe to earth, regardless of the progress of the distribution to earth.
- 24. Secondly, Blue submits that Red cannot delay in making payment as this payment plan does not fall under the categories established under the PICC with regards to withholding performance. PICC Art 7.1.3 establishes two categories where a party may withhold performance:
 - (a) where the parties are to perform simultaneously, either party may withhold performance until the other party tenders its performance; and
 - (b) where the parties are to perform consecutively, the party that is to perform later may withhold its performance until the first party has performed.
- 25. The Official Comment on Art 7.1.3 emphasises that Art 7.1.3 is to be read together with Art 6.1.4. Art 6.1.4 elaborates on the order of performance stating that if "performances of the parties can be rendered simultaneously, the parties are bound to render them simultaneously". However, an exception to this rule is provided in the Official Comment on Art 6.1.4, which states where "the performance of only one party's obligation requires a period of time ... that party is **bound** to render its performance first." [emphasis added] . Therefore Red is bound to render its payment obligation as per the time period set in the Cl 3.4 of the CSA in Ex 7. Cl 3.4 states that an invoiced party shall make the payment within "one month from the date of receiving the invoice". As such, Red is obligated to render its performance before Blue and PICC Art 7.1.3 (1) is inapplicable.
- 26. Furthermore, Blue submits that Red is unable to anticipatorily withhold its obligation. This is because as per Art 7.1.2, Red caused Blue's non-performance through its own behaviour and is hence barred from withholding performance. As stated in Issue 1, Blue's inability to perform the delivery of the space materials and data stems from the Negoland Space Resources Act as enacted by Red's government. On the facts, Red bore responsibility to obtain permits from their own government while Blue did the same, furthermore Red was aware of the bill before it was passed and hence assumed the risk of it coming into force. Per Art 7.1.2, Red may not rely on the non-performance of Blue should that non-performance be caused by "another event for which [Red bore] the risk". Therefore Red is unable to claim withholding performance for anticipatory breach of a consecutive performance and there is no reason as to why Red should refuse to make payment until Blue fulfils its alleged obligation.

B. Given that Blue does not have such an obligation, Red should pay Blue US\$160 million or US\$110 million if Blue's sale of material is successful

27. It is submitted that Red should pay Blue \$160 million. Alternatively, upon the successful completion of the sale of material, Blue should receive \$110 million from Red. These figures are

made of 2 parts.

- (a) Half of the total cost of the project subtracted by the amount Red has borne, "half the net costs". This amounts to \$150 million or, upon the successful completion of the sale of material, \$100 million; and
- (b) The \$10 million payment agreed on at the May 7 meeting, the "compensation payment".
- 28. Red is obligated to pay "half the net costs" as set out by the CSA. Cl 3.2 is clear that the "total costs [should be split] equally" and should "one Party's actual incurred costs exceed their share of the total aggregated costs, the overpaying Party shall invoice the other Party for the difference." Blue has paid US\$350 million of the total US\$400 million cost of the project. Therefore as per Cl 3.2 of the Cost-sharing agreement, Red has to pay Blue US\$150 million in order for the cost borne by the parties to be split equally.
- As mentioned in Issue 1, Blue is unable to pass the materials over to Red. However, upon the successful sale of half the material, Blue would be in a better position than it would have been had all obligations under the contracts been discharged. Blue submits that as a matter of equity and fairness, the appropriate measure in the circumstance is to deduct the profits from the sale from the amount Red owes to Blue. This ensures that Blue's position is as such as if the contract were fulfilled. This is supported in Art 3.3.2 of the PICC, "where there has been performance under a contract infringing a mandatory rule under Art 3.3.1, restitution may be granted where this would be reasonable in the circumstances". In determining what is reasonable, Art 3.3.2 refers to the criteria set out in Art 3.3.1(3) which is applicable in this case for reasons set out above in Issue 1 at [8-9]. Therefore, upon the successful sale of half the materials, Blue would Set-off the profit from the sale of half the materials, \$50 million USD, as a form of restitution to Red.
- 30. With regards to the compensation payment, the figure of \$10 million USD was suggested by Red and agreed by Blue, in Ex 9, as such they would be obligated to pay it. Thus, as per PICC Art 7.2.1, Red is obliged to make payment and if it does not do so, Blue "may require payment". The Official Comment on Art 7.2.1 elaborates that there is a generally accepted principle that "payment of money which is due under a contractual obligation can always be demanded and ... enforced by legal action". Therefore, Red is obliged to pay Blue "half the net costs", which amounts to \$160 million USD or \$110 million USD upon the successful completion of the sale to black.

ISSUE 3: RED'S PETITION FOR INTERIM MEASURES SHOULD BE DISMISSED AND BLUE IS ALLOWED TO SELL THE MATERIALS AND DATA.

- 31. Red's petition for interim measures rests on UNCITRAL Arbitration Rules Art 26. Art 26 elaborates that the requesting party would have to prove two elements, Art 26 3(a) and 3(b), to the arbitral tribunal in addition to the 4 valid grounds for an interim measure being granted. Blue submits that interim measures should not be imposed as the requirements 3 (a) and 3 (b) are not fulfilled.
 - (a) Harm not adequately repairable by an award of damages is likely to result if the measure is not ordered, and such harm substantially outweighs the harm that is likely to result to the party against whom the measure is directed if the measure is granted; and
 - (b) There is a reasonable possibility that the requesting party will succeed on the merits of the claim. The determination on this possibility shall not affect the discretion of the arbitral tribunal in making any subsequent determination.
- 32. Given that the wording of Art 26 is identical to Art 17 and 17A of the UNCITRAL Model Law, it is submitted that authorities on this provision of the UNCITRAL Model Law should be considered favourably in the circumstances. Red's claim does not pass the first element 3(a), for two reasons:
 - (a) Firstly, as explained in Issue 1 at [1-5], Red will be unable to gain possession of the materials or the data even in the unlikely event of Blue is obligated to pass them to Red as Red would have to immediately "deliver them" to the Negoland government as per the Space Resources

- Act of Negoland. Therefore the harm suffered by Red should this claim be dismissed is not the loss of possession of the materials. Furthermore, should this motion be dismissed, Red would not be in a worse of position because of the restitution Blue would give to Red as discussed in Issue 2 at [8].
- (b) Secondly, as stated in Ex 13-1, the President of Blue has acknowledged that non-cooperation with the Government of Arbitria's request for the remaining half of the materials and copy of data would make it "difficult to obtain future support for space development from the Government of Arbitria" and that there is an "aspect of competition" in the space industry. The interim measure would deprive Blue of invaluable time for research and development to gain competitive advantage in the industry and reap the expected benefits of the exploratory venture. Blue has committed since 2010 to making the "space business one of its future core businesses, and with abundant financial resources has been developing its own rockets, launching positioning satellites, communication satellites, and observation satellites, and conducting research and development to realize space travel". Therefore the impact of granting the interim measures will lead to substantial harm to Blue. Red on the other hand is focused on manufacturing and its sole interest in space lies in "extracting materials from the Moon". As such the harm the harm the Blue will incur if the interim measures are granted substantially outweighs any harm that would happen to Red if the measures are not granted.
- 33. Further, Red's claim does not pass the second element 3 (*b*) as it is unlikely that its underlying claim has a "reasonable possibility" to succeed on the merits of the claim. The UNCITRAL Secretariat made clear that "reasonable possibility" of success refers to the underlying claim and not interim measure (UN GAOR Working Group II (Arbitration), 43rd Sess, at [6], UN Doc A/CN.9/WG.II/WP.141 (2006)). Red must show that its claim is "more than plausible" (SCC Practice Note 2015–2016 at 13–14 (Case No. EA 2016/095)) but it is unlikely to succeed due to the reasons set out in Issue 1. Furthermore, it is on Red to show 'a reasonable chance' that Blue breached the Distribution of Lunar Data and Materials. For reasons made out in Issue 1, Blue's defence is compelling.

CONCLUSION: BLUE SHOULD BE EXEMPT FROM ITS TRANSFER OBLIGATIONS. SHOULD THE TRIBUNAL FIND OTHERWISE, THE ALLOCATION OF SPACE RESOURCES SHOULD BE NEGOTIATED. IN ANY CIRCUMSTANCE, RED CANNOT WITHHOLD PAYMENT. EVEN IF BLUE DID HAVE THE OBLIGATION TO DELIVER, RED WILL HAVE TO PAY US\$110 MILLION. RED'S APPLICATION FOR INTERIM MEASURES MUST FAIL AS THE LIKELY HARM TO BLUE IF THE APPLICATION SUCCEEDS EXCEEDS THAT OF RED'S IF IT FAILS.

SATELLITE CASE

SUMMARY OF FACTS

Blue undertook launching Red's satellite (Red Star). There was a slight delay in the launch as Blue's staff was unable to participate in launch operations. Nevertheless, the eventual launch still took place within the agreed launch window. Amidst pre-launch inspections, an abnormality was identified, investigated and repaired by Blue. Reliable space forecasts were checked by Blue before its decision to proceed. Unfortunately, Blue's rocket encountered a strong geomagnetic storm, which resulted in the loss of both Blue's rocket and Red Star.

SUMMARY OF ARGUMENTS

The unpaid balance of \$75 million should be paid to Blue, as it has performed all of the contractual obligations required to effect payment from Red under the SLA. Blue is not obliged to pay any damages to Red, as there was no willful misconduct or gross negligence on its part. Additionally,

the occurrence of a force majeure event precludes Red from claiming any damages from the launch failure. Bob Orange should be removed as arbitrator as his comments and failure to disclose his conflict of interest evinced prejudgement and partiality.

ISSUE 1: RED IS LEGALLY OBLIGED TO PAY US\$75 MILLION TO BLUE.

1. Red is obliged to pay the remaining US\$75 million to Blue in accordance with Cl 3.1 of the Satellite Launch Agreement in Ex 14 ("SLA"), as Blue has performed its obligations under the SLA to effect the full US\$150 million payment by Red. The phrase "upon successful orbital insertion" in Cl 3.1 of the SLA should be interpreted as "upon Blue's performance of its contractual obligation". Blue's contractual obligation under the SLA is to conduct a launch of Red Star within the launch window stated in Cl 2.1 of the SLA ("Launch Window") and in accordance with the information present in Attachment A of the same agreement. Even though Red Star has vanished due to the geomagnetic storm, Blue has performed its obligation under the SLA reasonably in the context of the geomagnetic storm, and hence, Red is obligated to pay Blue the full amount under Cl 3.1 of the SLA.

Blue does not have a duty to achieve a specific result under Cl 3.1 of the SLA

- 2. Blue submits that the "Final Payment" under Cl 3.1 of the SLA is due as Blue is under no obligation to achieve a specific result of launching Red Star into a certain Geostationary Transfer Orbit ("GTO"). Although the payment schedule states that the payment is "due upon successful orbital insertion", there is insufficient essential information (such as orbital parameters) to support the reading that the obligation imposed was one involving the specific result of launching Red Star into a certain GTO. Furthermore, the contractual price, as well as the degree of risk involved in the launch support this. The factors which aid in determining whether such an obligation exists are: a) the way in which the obligation is expressed in the contract; b) the contractual price and other terms of the contract; c) the degree of risk normally involved in achieving the expected result; d) the ability of the other party to influence the performance of the obligation) (PICC, Art 5.1.5).
- 3. Firstly, no specified result was indicated in the SLA. Read together with SLA's Cl 1.1, the definition of "successful" in Cl 3.1 of the SLA would be "in accordance with the specifications as outlined in Attachment A". Cl 1 of Attachment B of the SLA ("the Performance Guarantee") similarly leads to a deduction of the "specified Geostationary Transfer Orbit" in Attachment A. However, Attachment A does not contain any information regarding such an orbit into which Red Star should have been inserted. Moreover, SLA Cl 9.2 excludes the relevance of any information outside of the SLA in interpreting Blue's contractual obligations. Hence, the absence of any information specifying an orbit in the entirety of the SLA indicates that Blue did not have a duty to achieve the specific result of inserting Red Star into any certain GTO.
- 4. Secondly, while an "unusually high price" for performance may indicate a duty to achieve a specific result (Official PICC Commentary, Comment 3, Art 5.1.5), the SLA's contractual price of US\$150 million was not unusually high, relative to the high costs of satellite launches. Considering Negoland and Arbitria's annual allocation of US\$400 million to rocket and launch vehicle developments respectively (Ex 1 and 2), US\$150 million is a justified cost.
- 5. Thirdly, the high degree of risk in Blue's launch of the satellite, in a small launch window indicates that Blue had no duty to achieve a specific result. Comment 4 of Art 5.1.5 in the Official PICC Commentary states that where performance involves a "high degree of risk", both parties should not "expect to guarantee a result". Considering the extreme conditions which a rocket and satellite are put through in space, the risks of satellite launches are inherently high.
- 6. Given that there is a lack of key information relating to any GTO in the entirety of the SLA, and taking the other factors above into account, the SLA should not be interpreted to have imposed an obligation on Blue to achieve the specific result of launching Red Star into a certain GTO. Hence, the

phrase "due upon successful orbital insertion" should not be interpreted literally. A different interpretation of this phrase based on information actually present in the SLA should be taken instead.

Blue has reasonably performed its obligations to effect payment under Cl 3.1 of the SLA

- 7. Blue submits that the phrase "due upon successful orbital insertion" should be interpreted as "due upon Blue's performance of its contractual obligation". Blue's contractual obligation, as set out in [1] of the Satellite Case above, is derived from unequivocal portions of clauses and information present in the SLA (Cl 1.1, 2.1 and Attachment A of the SLA). Taking into account the unexpected encounter with the strong geomagnetic storm, Blue has since performed this obligation reasonably, and thus the balance under Cl 3.1 of the SLA is due from Red.
- 8. Where the quality of Blue's performance of this obligation was not stated in the SLA, the required quality is one that is "not less than average in the circumstances" and "reasonable" (PICC, Art 5.1.6). The standard of "average" is determined according to circumstances such as information available on the market at the time of performance (Official PICC Commentary, Comment 1, Art 5.1.6), while the standard of "reasonableness" is intended to exclude "insufficient standards" where a performance may be average but unsatisfactory in a certain market (Official PICC Commentary, Comment 2, Art 5.1.6).
- 9. Firstly, the quality of Blue's performance was "not less than average" given the level of technology available at the time of performance. It was undisputed by Red that there was "no available technology or countermeasure that [could] protect the launch vehicle systems" from the geomagnetic storm encountered (Ex 15). There is hence no shortfall in market standards in this encounter with the G4 geomagnetic storm, and thus the quality of Blue's performance was "not less than average".
- 10. Secondly, the quality of Blue's performance was reasonable as it was not one that was unsatisfactory in the market. Considering the intention of including the term "reasonable" as stated in Comment 2 of Art 5.1.6 of the Official PICC Commentary, the relevant question is whether Blue's performance was unsatisfactory in the market. The standard of Blue's performance in light of the encounter with the geomagnetic storm could not be said to be unsatisfactory as Blue had checked "reliable space forecasts" and had addressed the anomaly detected in accordance with its inspection rules (Facts at [29]). Furthermore, as established earlier, the state of technology available at the time of launch was one which could not withstand such a storm. To find otherwise that the result was unsatisfactory would be unreasonable.
- 11. The insurmountable geomagnetic storm encounter, Blue's reasonable standard of performance, Blue's adherence to the Launch Window, and the absence of any facts that indicate a deviation from the information present in Attachment A of the SLA altogether show that Blue has successfully performed its obligations under the SLA. Therefore, Red should similarly perform its obligation under the SLA and pay the remaining sum due under Cl 3.1 of the agreement.
- 12. In conclusion, the phrase "due upon successful orbital insertion" under Cl 3.1 of the SLA should be interpreted to mean "due upon Blue's performance of its contractual obligations". Blue has performed its contractual obligations under the SLA by conducting a launch of reasonable quality within the Launch Window, and in accordance with the information present in Attachment A. Therefore, the tribunal should find that Red is obligated to counter-perform by paying Blue US\$75 million, the remainder due under Cl 3.1 of the SLA.

ISSUE 2: BLUE IS NOT LEGALLY OBLIGED TO PAY US\$150 MILLION TO RED.

A. Red must bear the cost of damage to Red Star, as Blue had demonstrated neither willful misconduct nor gross negligence in performing its obligations.

13. Blue is not required to pay any damages to Red under Cl 4.3 of the SLA ("Cross-Waiver"), as there was no willful misconduct or gross negligence on the part of Blue in relation to (a) the encounter with the G4 geomagnetic storm, and (b) the management of the sensor anomaly detected in the rocket guidance system.

Blue did not demonstrate willful misconduct

- 14. Blue had no willful misconduct as it did not omit or commit any acts which were intended to cause the failure of the launch, intentionally or otherwise. In the absence of a definition of willful misconduct in the SLA or the PICC, Blue proposes that the definition in *GNSS v Tenex* [2007] (SCC) ("*GNSS*") be used as a guideline. *GNSS* defines wilful misconduct as a "conscious decision", that was "calculated" and "deliberate" ([151]). From this definition, the element of intention can be deduced to be an essential ingredient in the finding of wilful misconduct. Although the governing law in *GNSS* was the CISG, this should not preclude the tribunal from applying the definition to the present matter. The CISG was the main international instrument the Working Group referenced in formulating the PICC (Brodermann, 5). Furthermore, both Negoland and Arbitria are parties to the CISG (Facts at [5]). Red and Blue are therefore bound by the CISG as well, and Blue proposes that the definition of willful misconduct in *GNSS* be relied upon for the present matter.
- Blue did not intend to cause launch failure. In encountering the geomagnetic storm, Blue had checked reliable space forecasts prior to launch (Facts at [29]), and proceeded only upon knowledge of there being no forecast of geomagnetic conditions which would have made the launch impossible (Ex 15). Similarly, in the management of the sensor anomaly, Blue had prepared for the launch in accordance with the established protocols. When an abnormality was found during pre-launch inspections, Blue inspected and repaired the anomaly in accordance with Blue's inspection rules (Facts at [29]). Finally, despite the 10th January launch delay, this incident is irrelevant as it did not cause the launch failure. Instead, Blue had taken clear steps to mitigate the risk of launch failure caused by its employees' drunkenness by rescheduling the launch to a later date (Facts at [28]). Contrary to the claim of willful misconduct, Blue never had the intention to cause launch failure and had in fact, taken steps consistent with an intention to ensure a successful satellite launch.

Blue did not demonstrate gross negligence, and in any case did not cause the loss of Red Star.

(i) Blue was not negligent, and did not cause the loss of Red Star

- 16. For a claim in negligence to succeed, Blue proposes that two elements are required. Firstly, there must be (a) a clear and reasonable link between the negligent act and the actual consequence; and (b) the harm suffered must be reasonably foreseeable. These elements are derived from the UNIDROIT principles which establish the significance of causation for compensation (PICC, Art 7.4.2), and foreseeability in establishing liability for harm (PICC, Art 7.4.4). Blue submits that for the geomagnetic storm, sensor anomaly and drinking incident, neither element (a) nor (b) is present.
- 17. Firstly, there was no clear link between Blue's decision to proceed with the awareness of a possible G1 geomagnetic storm occurrence (Ex 16) and the consequences of a G4 storm. The effects of a G1 storm are very different from that of a G4 storm, and the G4 storm was not considered when Blue took the forecast into account. Accordingly, it was not reasonably foreseeable that Red Star would be lost when Blue chose to proceed. Giving weight to the small possibility of a G4 storm occurring would be impractical, and Red chose to assume this inherent risk when launching Red Star.
- 18. There was no clear link with the sensor anomaly, the facts do not show that the anomalies themselves led to launch failure, especially since the rocket still reached above the atmosphere (Facts at [29]). Furthermore, Blue could not have foreseen that fixing it would have caused the satellite loss, as it had inspected and repaired the anomaly in accordance with Blue's rules (Facts at [29]).
- 19. Lastly, there was no clear link in the drinking incident. First, Red agreed to reschedule the launch to the day of the G4 storm (Facts at [28]); Moreover, no employees were drunk on the actual launch, so any drunkenness is unrelated to Red Star's loss. Moreover, it was not foreseeable that Blue's positive steps in giving "strict warnings" would have damaged Red Star. (Facts at [28]).

(ii) Blue was not grossly negligent

20. Blue cannot be deemed grossly negligent if negligence cannot even be established, but gross negligence is discussed for completeness. As it follows, gross negligence has a higher threshold and should involve a "clear and serious breach of the standard of care required". This aligns with: (a) the

civil law definition in International Transport Law, which is the unusually grave violation of a duty of care expected (Damar, p277); and (b) the common law definition, which imposes a higher degree of breach than that of mere negligence (Damar, p274). As the present matter concerns the transportation of Red's satellite into space, this definition should be applicable.

- 21. In the Geomagnetic Storm incident, Blue's actions could not have amounted to a clear and serious breach of standards. Blue acted with an appropriate standard by checking reliable space forecasts, and the G4 storm was not predicted by the Space Weather Service (Facts at [29]). There was no clear breach of standards in proceeding with possible G1 conditions, as G1 geomagnetic storms only have minor impacts on satellite operations. The National Oceanic and Atmospheric Administration states that G1 storms are a common occurrence, with an average of 154 events every year (NOAA Space Weather Scales). Blue's decision not to delay the entire launch due to a possibility of such a frequent and minor event was thus reasonable and commercially sound.
- 22. Furthermore, Blue had also not acted with a clear and serious breach of an appropriate standard upon discovery of the anomaly in the guidance system. Blue had adhered to "established protocols" during pre-launch preparations (Ex 15). Blue conducted investigations and repairs in compliance with Blue's inspection rules (Facts at [29]). The facts do not indicate that the repair work required more than one personnel. The issue with a single sensor (Facts at [29]) could very well have only necessitated the attention and work of one person. Any additional measures on Blue's part would be disproportionate and excessive.
- 23. Finally, there was no serious breach of appropriate standards in Blue's handling of its employees' drinking. Blue opting to give "strict warnings" (Facts at [29]) does not constitute a clear and serious breach of standards. Blue has responded to past incidents, and even took the additional safety measure of rescheduling launches if its employees were excessively drinking (Facts at [28], [29]). Such measures taken by Blue were clearly sufficient and appropriate, as no launch failures were directly caused by any drunkenness of Blue employees based on the Facts.
- 24. It is clear that there was no willful misconduct or gross negligence on Blue's part in relation to the aforementioned events. Hence, Blue should be allowed to rely on the Cross-Waiver and is not obliged to pay any damages to Red.

B. Blue's non-performance is excused as per the Force Majeure claim.

- 25. Blue is not obliged to pay any damages to Red as the geomagnetic storm constitutes a force majeure event. The requirements of a Force Majeure event are outlined in Cl 6.1 of the SLA, where either party is not held liable for non-performance caused by events that were (a) beyond its reasonable control and (b) unforeseeable circumstances. The requirements set out in Art 6 of the SLA should supersede those in Art 7.1.7 of the PICC. Crucially, Art 1.5 of the PICC provides for the implied exclusion of the PICC within a contract, especially where parties agree upon contract terms that are inconsistent with the PICC provisions (Official PICC Commentary, Comment 2, Art 1.5).
- 26. Even if Art 7.1.7 is taken as the authority for Force Majeure events, the result is the same since the requirements are that Blue's non-performance was caused by an impediment beyond its control, and Blue could not reasonably either: (a) be expected to have taken the impediment into account at the time of contract conclusion; (b) have avoided the impediment; (c) have overcome the impediment; or (d) have avoided or overcome the consequences of the impediment.

The G4 geomagnetic storm was an uncontrollable impediment

27. The G4 geomagnetic storm was an impediment that was beyond Blue's reasonable control. Firstly, Blue's sphere of control is one within which it is objectively possible to ensure performance of the contract, by exercising appropriate control (*Schlechtriem*, 814). Generally, acts of God, natural catastrophes, or disasters that impair performance are accepted to be outside of the obligor's sphere of control (*Brunner*, 206). Likewise, it is impossible for Blue to have any control over a natural, geomagnetic storm. The first requirement is fulfilled.

The G4 geomagnetic storm was also an unforeseeable impediment

- 28. Upholding contractual risk allocations, both Art 6 of the SLA and Cl 4(b) of the Performance Guarantee recognise "natural disasters" and "Acts of God" as "unforeseeable circumstances". This allows for geomagnetic storms to fall squarely within the definition of an unforeseeable impediment.
- 29. Furthermore, the G4 storm was not reasonably foreseeable at the time of contract conclusion. Under 4.1(2) of the PICC, "unforeseeable circumstances" under Art 6 of the SLA is to be interpreted objectively, from the perspective of "reasonable persons of the same kind as the parties". Blue is therefore held to the standard of a business with experience in the satellite launching field, who must be certain that it has the ability to perform the promised obligation (*ICC No. 12112/2009*).
- 30. Fundamentally, Blue was certain that it could perform its obligations, because the likelihood of a G4 storm occurring was virtually negligible (Ex 15), and therefore unforeseeable. Since natural disasters are rare but not impossible, both the severity and the degree of likelihood of the G4 storm occurring are relevant in assessing whether it was an unforeseeable impediment (*Brunner*, 158-159). The greater the severity, and the lower the likelihood, the more unforeseeable the impediment is. At the time of contract conclusion, the likelihood of a very severe geomagnetic storm occurring was low. Under the SLA, Blue has had a 95% launch success rate in the last 20 missions, with 50 successful missions overall (Ex 14, Attachment A). It is therefore unlikely that either party would have reasonably foreseen a G4 storm impairing performance. Furthermore, the severity of the impediment was great; a G4 storm was on the higher end of the G1-5 scale, and of "unprecedented scale and duration" (Ex 15). Hence, it was not reasonably foreseeable to both parties that a geomagnetic storm of such a magnitude would have resulted in the loss of the satellite when the contract was concluded.
- 31. Since the geomagnetic storm constitutes a force majeure event under Cl 6.1 of the SLA, Blue is not obliged to pay to Red any damages. Together with the absence of willful misconduct and gross negligence, Blue is not legally obliged to pay US\$150 million to Red.

ISSUE 3: BOB ORANGE SHOULD BE REMOVED AS ARBITRATOR.

A. Orange's comments evinces prejudgement and partiality, and should be removed from his role as arbitrator.

32. Orange should be removed from his position as an arbitrator, in accordance with UNCITRAL Arbitration Rules Art 12(1) and 12(2). Blue submits that Orange's comments, which were made after his appointment and on the potential harm of a G1 storm and its impact on a force majeure claim, give rise to justifiable doubts as to his impartiality (the "Comment").

Time Scope of Orange's Prejudiced Comments

33. Preliminarily, Art 12(2) of the UNCITRAL Arbitration Rules states that arbitrators may be challenged "only for reasons of which [parties] become aware [of] after the appointment was made". Even if Orange's lecture was scheduled prior to his appointment as arbitrator, his Comment was made after his appointment and during the arbitral proceedings, fulfilling the Art 12(2) requirement. Even if the comment was a "general", unscripted one that could not have been disclosed earlier, the very fact that the comment was spontaneous further demonstrates Orange's predisposition towards Red's case.

Justifiable Doubts as to Orange's Impartiality

- 34. An arbitrator may be challenged if there are "justifiable doubts as to the arbitrator's impartiality and independence" under Art 12(1) of the UNCITRAL Arbitration Rules. The objective criterion of "justifiable doubts" requires a fair-minded and informed person to reach the conclusion that the Arbitrator is likely influenced by factors other than the merits of the case as presented (UNCITRAL Digest, 66). Specifically, previous courts permitted a challenge when an arbitrator published an article expressing his opinion on the disputed arbitration issue (UNCITRAL Digest, 66).
- 35. Further guidance on the standard of "impartiality" may be found in the 2014 International Bar Association (IBA) Guidelines on Conflicts of Interest in International Arbitration (the "**IBA Guidelines**"), viewed by renowned publicists as a "widely recognised benchmark for disclosure thoroughness" (Ortolani, 211) and endorsed by the Art 77 of the UNCITRAL Code for Arbitrators.

The IBA Guidelines set out an "Orange List": a non-exhaustive list of specific situations which, depending on the factual matrix of the case, may result in doubts as to the arbitrator's impartiality (IBA Guidelines, Cl 3). Under Cl 3.5.2, one such situation is where "the arbitrator has publicly advocated a position on the case, whether in a published paper, or speech, or otherwise".

- 36. Orange's speech aligns with situations outlined by both the UNCITRAL Digest and IBA Guidelines, as he articulated that it "should be difficult to accept a claim of force majeure if one knew that a magnetic storm was likely to occur", because a "G1-level magnetic storm....[has] the potential to lead to a serious accident". Though allegedly a "general comment", "all participants at the conference could easily make the assumption that the Red Star accident [gave] rise to this statement". Hence, Orange had advocated for Red's position through his speech and made a clear stance against Blue's submissions on the Force Majeure clause.
- 37. The IBA Guidelines indicate that situations under the Orange List depend on the case's factual matrix; cases should therefore be referred to. Governed by the UNCITRAL Arbitration Rules, *National Grid PLC v The Republic of Argentina [2006] (LCIA) ("National Grid")* offers guidance. In *National Grid*, the challenged arbitrator made a general comment on the "major change in the expectations of investment", which was central to the dispute at hand. In *obiter*, the tribunal held that a reasonable third person would gain the impression that the arbitrator had already taken a firm view on issues which were key to the final result of the arbitration (*National Grid*, 92); the challenge was only dismissed because the comment was made during a cross-examination (National Grid, 93).
- 38. Distinguishing *National Grid* from the facts, Orange's Comments were made in a lecture, where he freely expressed his clear views on the legal issue of Blue's Force Majeure claim. Yet in parallel with National Grid, Orange's Comments were central to Blue and Red's dispute. Hence, the obiter in *National Grid* should be followed, as a reasonable third person could see that Orange would practically be unable to approach the arbitration with an open mind. Given the significance of the Force Majeure question, Orange should be removed from his position for his lack of impartiality.

B. Orange failed to disclose his conflict of interest, further demonstrating his lack of impartiality.

- 39. Under Art 11 of UNCITRAL Arbitration Rules, an arbitrator has an obligation to "disclose any circumstances likely to give rise to justifiable doubts as to his or her impartiality". Such disclosure is required from the time of appointment and throughout the arbitral proceedings (UNCITRAL, Art 11).
- 40. Orange's failure to disclose a conflict of interest is a significant factor in establishing a breach of the obligation to be independent and impartial. While "[n]on-disclosure cannot by itself make an arbitrator partial or lacking independence" (IBA Guidelines, Art 5), this failure to disclose may be taken as a factor in deciding whether there was apparent bias (IBA Guidelines, Art 4.1). The tribunal should therefore remove Orange from his position as arbitrator, as his failure to disclose a conflict of interest exacerbates his partiality.

CONCLUSION: RED IS OBLIGED TO PAY US\$75 MILLION TO BLUE, BLUE IS NOT OBLIGED TO PAY US\$150 MILLION TO RED, AND BOB ORANGE SHOULD BE REMOVED FROM HIS POSITION AS ARBITRATOR.