

The 22nd Intercollegiate Negotiation Competition  
Problem (November 13 version): Final Version

1. The country of Negoland has a population of approximately 90 million people and a per capita GDP of approximately US\$30,000. Negoland is known for its hardworking people, advanced science and technology, and high-quality industrial products. In recent years, however, the country has been facing problems such as a declining birthrate and sluggish economic growth, and due to the economic growth of other countries, Negoland's relative position in the world economy is gradually declining. In addition, the number of people willing to enter doctoral programs and pursue advanced research is decreasing. This is creating concerns about a decline in the country's research capacity in the fields of science and technology due to the decrease in the number of excellent engineers who have supported the country's growth in the past. The Negoland government has reached a sense of crisis about this situation, and from three years ago has been actively taking measures such as large increases in subsidies to leading universities and research institutes for research and for human resource development in order to foster qualified people in science and technology for the purpose of improving competitiveness. These government policies have led to recent progress in human resource development for researchers at universities and investment in R&D at companies. In addition, an increasing number of start-up companies are taking on the challenge of launching new businesses.

2. In Negoland space-related business has recently attracted a lot of attention. Up until around 2010, space-related projects in Negoland were mainly carried out by the National Space Agency of Negoland, in which the government holds 100% of the shares, and were mainly for public benefit, such as the launch of meteorological satellites and research on space environments, including the Moon and Mars. The government's annual budget for space-related activities was US\$2 billion. However, stimulated by the recent progress in space development efforts in the United States, China, and other countries, the Negoland government has increased its space-related budget to US\$5 billion. The main items in Negoland's 2023 space budget are shown in Exhibit 1. In Negoland, there have long been major companies involved in the manufacture of space launch vehicles and the provision of satellite-based communication and observation systems, but in recent years there has also been an increase in the number of start-up companies newly entering the space business. Regardless, the Negoland government does not have a large presence in the commercial space industry, as the majority of the government's space-related budget is used for research and development purposes so far and cooperation between the government and the private sector

regarding the commercial use of space is not well developed.

3. Arbitria has a population of approximately 200 million and a per capita GDP of approximately US\$15,000. The population of Arbitria is growing at a rate of about 1% per year, and its presence in the world economy is increasing year by year. On the other hand, the disparity between the rich and the poor has become a serious problem, and while some people have high incomes and can live on par with the wealthy in developed countries, many others are forced to work for low wages and are unable to make a living on a daily basis. The government of Arbitria aims to eliminate this disparity between rich and poor through further economic development and the entire country has been focusing on the development of science and technology in recent years. In particular, companies with world-class technology in the field of IT are growing, and the number of researchers involved in advanced research in the field of science and technology is also increasing.

4. Arbitria is also actively involved in space development. Since the 1980s, the country, led by the Arbitrian Space Research Institute, a government agency, has been actively involved in launching satellites in practical fields such as observation, communications, and broadcasting, and has advanced technologies for the manufacture and launch of satellites. The major use items of the space-related budget of Arbitria in 2023 are shown in Exhibit 2. Although the size of the budget in Arbitria is smaller than that of Negoland, the country is investing with a greater awareness of practicality; since the late 2010s, Arbitria has also been working diligently to foster private space operators, and private operators are becoming more active in the space business. For example, private companies are emerging with the goal of building satellite constellations for observation and communication purposes, extracting resources from the Moon's surface, or offering space travel.

5. Negoland and Arbitria are parties to the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* (commonly referred to as the "Outer Space Treaty"), and the *Convention on Registration of Objects Launched into Outer Space* (commonly referred to as the "Space Object Registration Convention"), however, they are not parties to the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (commonly referred to as the "Moon Agreement") or other space-related treaties. In addition, both Negoland and Arbitria are parties to the *Convention on the Recognition and Enforcement of Foreign Arbitral Awards* (commonly referred to as the "New York Convention") and the *United Nations Convention on Contracts for the International Sale of Goods* (commonly referred to as the "CISG").

There are no other treaties to which either the State of Negoland or the State of Arbitria is a party that should be considered in relation to this issue. It is assumed that all matters described in this issue are possible and real, regardless of the current level of science and technology and knowledge, and that the organizations and persons appearing in this issue have the necessary technology and knowledge.

6. Red Corporation (“Red”) is a very large company in the country of Negoland, engaged in the manufacture of semiconductors, sensors, and solar batteries, the manufacture of electronic devices and toys, internet communications, and the provision of weather data, etc. The company has been in the space business since around 2015, and has been successful in manufacturing semiconductors, sensors, and batteries for satellites, as well as providing internet communications and weather data using other companies' satellites. The company also possesses superior radar technology, which can be used to determine the geological status of materials underground and in the ocean with high precision. Recently, the company has announced that it has a plan to develop more advanced space projects with an eye to the future, such as extracting materials from the Moon for use in the manufacture of semiconductors, sensors, electronic devices, and other revolutionary products. An overview of Red is provided in Exhibit 3.

7. Blue Inc. (“Blue”) is a very large company in Arbitria, involved in the manufacture of aircraft and automobiles, mobile communications, and the travel business. Since around 2010, the company has been committed to making 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. In recent years, the company has been working on building a constellation of satellites for communications and observation and has already successfully launched about 1,000 small satellites. This satellite constellation is used for the company's mobile communications, and its high-quality, location-independent mobile communications have captured a 40% share of the mobile communications market in Arbitria. Blue has announced its intention to expand its satellite constellation by launching small satellites in the future. In the field of space travel, Blue has already provided space travel services via suborbital flights and has announced its future plans to realize space travel via orbital flights and the construction of a space hotel. An overview of Blue Inc. is shown in Exhibit 4.

8. Red and Blue have had a business relationship since the 1980s. Specifically, when Blue

decided to manufacture new aircraft and automobiles, it researched suppliers around the world and found that Red best met Blue's needs in terms of quality and other factors. Red's semiconductors, sensors, and batteries are slightly more expensive in terms of price, but they can meet Blue's most demanding requirements and are of extremely high quality. Therefore, since the 1980s, Blue has been using Red's high-performance semiconductors and sensors as the core components for manufacturing Blue's mainstay aircrafts and automobiles.

9. In January 2017, the presidents of both Red and Blue participated in the World Business Leaders Forum held in Japan, where top executives of the world's major companies gathered. The presidents of both companies agreed that the era of space business is certain to come in the future, and while it may take some time to monetize the business, if they do not invest early, they will miss the boat. Further, it was their consensus that the collaboration of such major companies as Red and Blue would enable them to take on ambitious projects. Therefore, following the Forum, the presidents of both companies instructed the space business divisions of their respective companies to consider projects that the two companies could work on together over the long term.

10. After 2 years of discussions, Red and Blue decided to jointly work on resource extraction on the Moon and asteroids. The lunar regolith is expected to have a variety of use values, and asteroids are expected to contain rare metals such as gold, silver, and platinum, and rare-earth elements. Geological studies have shown the possibility of the presence of other materials in the Moon and asteroids, such as water and base metals that are difficult to transport from the Earth but have high value for life and construction in space. Red and Blue agreed that there might be a substantial basis for such research and that the project was worthwhile for both companies to join forces. The Memorandum of Understanding (MOU) attached hereto as Exhibit 5 was prepared in January 2019 as a record of the results of their discussions.

11. Based on the MOU in Exhibit 5, Red and Blue executed several agreements and proceeded with the development of a space probe. Red provided semiconductors, sensors, and photovoltaic cells, which were the result of their cutting-edge technology. Red has also been manufacturing futuristic robot toys, just like the ones that are popular on TV and in comic books, and that actually transform themselves depending on the situation. The manufacturing technology for such toys was also used as a reference for the construction of a space probe with various functions, such as driving on the Moon and collecting resources. Blue Inc. applied the technology it had acquired through the manufacture of its previous

satellites to this space probe. As a result, it was expected that the space probe would surely fulfill all of the planned functions. In particular, the space probe was equipped with the world's most powerful sensors provided by Red, which enables it to locate areas of potential materials and land within a margin of error of 30 centimeters. In addition, Red's ultra-high-performance solar cells have extremely high energy storage capabilities, enabling the space probe to operate for long periods of time even in environments where sunlight does not reach. Without Red's technology, this mission would not have been possible.

12. The design, testing, and manufacturing of the space probe proceeded from February 2019. With the exception of the manufacture of components to be manufactured by Red, the assembly and testing of the space probe was carried out at Blue's factory. Considering the manufacturing status of the space probe and the launch schedule of Blue's rocket, the launch schedule was decided to be January 2023. The launch was scheduled to take place at Blue's launch facility in Arbitria. The space probe was named "Avrio," referring to the Greek for Tomorrow, to signify the dawning of a new day for space exploration, and it was agreed that Red and Blue co-own Avrio on a 50:50 basis. Avrio's telemetry, tracking and control center (TT&C center) was established at Blue's satellite monitoring facility in Arbitria. Based on the MOU in Exhibit 5, the agreement in Exhibit 6 was signed in May 2020 for the distribution of the fruits of the exploration. In addition, the agreement in Exhibit 7 was signed regarding the sharing of the costs of the launch and exploration by Avrio.

*NOTE: All memorandums of understanding (MOUs), contracts, etc. attached to this problem have been modified by the Steering Committee from draft contracts prepared by generative AI to include the minimum necessary content for the purpose of this problem and are not based on actual contracts used in the space business.*

13. In February 2021, the State of Arbitria enacted a law on the promotion of business activities related to the exploration and exploitation of space resources, in order to encourage the investment in space by its domestic companies. An excerpt of this law is shown in Exhibit 8.

14. After designing and building a prototype, and conducting various experiments, the actual probe was made, and the probe and ground system were completed in October 2022. In addition, Red obtained the necessary permits from the Government of Negoland for the launch, and Blue obtained the same from the Government of Arbitria. The permission from the Government of Negoland was addressed to Red and the permission from the Government of Arbitria was addressed to Blue, but in the applications for permission in both countries, it

was mentioned that the project was a joint venture between the two companies. In January 2023, the rocket carrying Avrio was launched as scheduled. The launch of Avrio was watched by Red and Blue personnel gathered at the TT&C center. The TT&C center was staffed by project managers from both Red and Blue. These project managers were given full authority over Avrio by their respective companies.

15. The launch was successful. After consultations between Red and Blue, Arbitria registered Avrio as its own space object with the United Nations. Avrio approached the Moon and, using the latest radar technology, surveyed the geological conditions of the surface on the far side of the Moon that had previously only been poorly studied. This data was transmitted to a satellite monitoring station on the ground and sent to a Blue Inc. research facility set up adjacent to the station, where Red and Blue researchers were expectantly waiting. The researchers of Red and Blue immediately examined the data and were excited to find that there was the possibility of a significant amount of water in one area (this area is called "Area  $\alpha$ "), and a high possibility of a considerable amount of titanium buried not deep below the surface in another area (this area is called "Area  $\beta$ "). Further, it was calculated that Area  $\alpha$  and Area  $\beta$  are about 1 km apart.

16. Based on the results of this data analysis, Red and Blue discussed Avrio's landing site and mining plan. The discussions at this time were recorded, and the relevant portions of this recording are transcribed in Exhibit 9. Exhibit 10 consists of a summary of the exploration instructions prepared by Red and Blue (the actual exploration of the lunar surface and collection of materials were to be conducted in accordance with the contents of these instructions).

17. On May 1, 2023, the Negoland Space Resources Act entered into force in Negoland. An excerpt of this law is shown in Exhibit 11. This is based on the philosophy that it is inappropriate to use space and space resources for the benefit of only a limited few. The Government of Negoland had been discussing this bill since early 2022. Initially, it was expected to come into effect around the summer 2023, but the deliberations were faster than expected and the bill was passed on May 1 and came into effect on the same day.

18. On May 3, 2023, Avrio landed in Area  $\beta$  and successfully collected material from Area  $\beta$  as instructed. Unfortunately, however, Avrio's data transmission equipment was faulty, and some of the data obtained while actually driving in the beta region could not be transmitted to earth in real time (the data was recorded in the data recorder). In addition,

the remaining propellant was lower than expected (neither Red nor Blue can be held liable for this), and in order to ensure safe return to Earth, it became difficult to move to Area  $\alpha$ . As a result, Red and Blue decided to give up moving to Area  $\alpha$  and made preparations to return Avrio to Earth. The meeting on May 7, at which the decision was made to abandon the move to Area  $\alpha$ , was recorded, and the relevant portions of the recording are transcribed in Exhibit 12.

19. On May 20, 2023, the capsule of Avrio containing the material collected and the data recorder returned safely to Earth, landing on a lake near Blue's launch base in Arbitria, as originally planned. After the landing, Blue's technical staff retrieved the capsule and removed from the capsule the material from Area  $\beta$  that Avrio had collected, as well as the data recorder. The material and the data recorder were transported to a research facility at Blue's launch base and stored securely. The material collected from the  $\beta$  area consisted of one rock weighing about 10 kg (with various materials expected to be contained within), seven rocks weighing about 1 kg each, ten rocks weighing about 100 g each and a regolith weighing about 2 kg. The most notable for research purposes is the 10-kilogram rock.

20. Red requested Blue to hand over half of the material collected from Area  $\beta$  and a copy of the data recorded on the Avrio data recorder, in accordance with the Agreement on Lunar Data and Materials Distribution, attached as Exhibit 6. Blue refused to hand over both the material collected from Area  $\beta$  and the data. First, Blue claimed that it could not hand over the material taken from Area  $\beta$  to Red because the Negoland Space Resources Act made it impossible to hand over the ownership of the material taken from Area  $\beta$  to Red. Regarding the data, Blue also claimed that on May 20, the Government of Arbitria issued an order restricting the handover of data related to the Moon survey in accordance with the country's National Security Act, and that according to that order, the data cannot be handed over to Red at this time. The contents of the above-mentioned order are shown in Exhibit 13. (Under the Arbitrian National Security Act, the government has the authority to issue such orders.) At present, there is no agreement regarding the above order between Negoland and Arbitria, and there has been no concrete movement to conclude such an agreement. At the request of Red, on May 25, 2023, Blue applied to the Government of Arbitria for permission to deliver the data to Red, but the Government of Arbitria had made neither a decision to grant permission nor a decision not to grant permission (in other words, it had not made a decision either way). In June and July, Blue also checked the status of permission with the Government, but the Government of Arbitria repeatedly replied, "We need to carefully consider the matter, and we cannot say when or how we will be able to make a

decision.” Later, in November, when Blue further inquired regarding the situation, the Government of Arbitria replied, "Upon consideration, we have decided to request that, as a condition of permission, Blue shall submit a document stating 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.’ If the Government of Arbitria determines that Red has used the data in a manner that is contrary to the national security of Arbitria, Blue shall be deemed to have delivered the data in violation of this order and shall be liable to a fine of US\$1,000,000." (Such a condition can be imposed under Arbitrian law.) Blue argues that it cannot submit a document that carries such a large risk so it cannot transfer the data to Red.

21. While negotiating the delivery of the materials and the data, Red and Blue agreed to proceed with the settlement procedures in accordance with the agreement attached as Exhibit 7. Calculated in accordance with the contract in Exhibit 7, the total cost of the entire process, from the launch of Avrio to the recovery of the capsule, was US\$400 million. Of this amount, US\$50 million was borne by Red and US\$350 million by Blue. Therefore, Blue requested Red to pay US\$150 million, which was calculated in accordance with Article 3 of the Agreement attached as Exhibit 7. In addition, Blue claimed that Red had agreed to pay US\$10 million at the May 7 meeting. On June 1, 2023, Blue sent an invoice to Red requesting a total payment of US\$160 million.

22. In response, Red demanded that Blue hand over half of the material collected in Area  $\beta$  plus a full copy of the data, and insisted that it would not pay the launch costs until the material and data were handed over. Red has assured Blue that, after receiving delivery of the material in Arbitria, it will negotiate with the government of Negoland to recognize Red's ownership of its half of the materials collected in Area  $\beta$ . Negotiations have not yet started, but Negoland's most trusted science journal has published an article stating that "even if negotiations were to take place, the value of space resources would not be known at a stage when the Negoland government does not conduct its own research and investigation of space resources, and it is highly unlikely that the government would transfer ownership of space resources of such an uncertain value to private companies."

23. The claims of both Red and Blue were parallel. Therefore, in August 2023, Red filed for arbitration demanding that Blue hand over half of the material collected in Area  $\beta$  plus a full copy of the data. In response, Blue filed a counterclaim against Red seeking payment of US\$160 million.



24. In September 2023, Black Company of Arbitria announced that it had reached an agreement with Blue to purchase half of the material extracted from Area  $\beta$  from Blue for US\$50 million. Black is a major manufacturer of semiconductors, sensors, and electronic devices, and is internationally recognized as a competitor of Red. Furthermore, three days later, the Government of Arbitria announced that it had reached an agreement to purchase half of the material collected from Area  $\beta$  and a copy of Avrio's data from Blue for US\$100 million (US\$50 million for the materials and US\$50 million for the data). This means Blue will not continue to hold any materials collected from Area  $\beta$ , but Blue will continue to keep the data recorder and the data recorded in the recorder. Regarding the sale of the entire material collected in Area  $\beta$ , Blue explained to Red, "Since it is no longer possible to deliver the material to Red under Negoland law, we, as the owner of the material under Arbitria law, have decided to sell the material. Initially, we planned to sell only half of the material to Black. But after we concluded a contract with Black, we received an extremely strong request from the Government of Arbitria to sell the other half of the material to the Government of Arbitria so that it could be used for government-led research. If we refused this request, there was a strong possibility that the government of Arbitria would cut off or greatly reduce its future support for our space exploration activities. The matter of how to divide the material collected in area  $\beta$  into two halves will be negotiated between Black and the Government of Arbitria." In addition, an affidavit from the president of Blue Inc., as shown in Annex 13-1, was submitted with regard to the reasons for the decision to sell the materials, etc.

25. Red demanded that Blue Inc. not deliver to Black Company or the Government of Arbitria the material extracted from Area  $\beta$ , as Red had the right to half of the material. In response, Blue claimed that it would reduce its claim against Red by half of the proceeds from the sale of the material extracted from Area  $\beta$ , and therefore it would reduce its claim to US\$110 million upon completion of the sale and receipt of the proceeds. Red argues that it does not have to make any payments to Blue until the material and data are delivered, and that the agreement for Red to bear US\$10 million more is not validly concluded. In addition, Red filed a motion before the Arbitral Tribunal seeking to enjoin Blue from selling any of the material extracted from Area  $\beta$  and the data to Black or the Government of Arbitria. Red claims that Blue cannot dispose of half the weight of the material without Red's consent because the material extracted from Area  $\beta$  varies in composition from place to place, and therefore Red's consent is necessary for Blue to dispose of any of the material. The above dispute shall be referred to as the "Moon Case".

26. Another dispute arose between Red and Blue. In 2021, Red planned to launch a new

communications satellite in order to further advance its telecommunications business. The satellite was named Red Star and was dedicated to Red's communications business. Red decided to ask Blue to launch the satellite. It was also agreed that the launch would be scheduled between December 15, 2022 and January 31, 2023. The two companies signed the contract for the launch of Red Star, attached as Exhibit 14. No launch insurance that should be considered in relation to this Problem was concluded for this launch.

27. The manufacture of Red Star by Red was successfully completed. It was decided that Red Star would be launched on January 10, 2023, using Blue's rocket from Blue's launch site in Arbitria. As per the contract in Exhibit 14, Red paid Blue US\$75 million as a portion of the launch fee.

28. January 10, 2023 was a beautiful day with a temperature of 0 degrees Celsius, but the scheduled launch did not happen. This was due to the fact that several Blue Inc. personnel involved in the launch had been drinking excessively the day before, contrary to Blue's regulations, and were therefore unable to participate in the launch operations. Blue apologized to Red for not being able to launch on the 10th and informed Red that the launch would take place on the 13th. Red replied, "That can't be helped."

29. The launch was re-scheduled and took place on January 13, 2023. However, on 13 January, a geomagnetic storm occurred during the time of the launch. The rocket carrying the satellite failed to reach its planned orbit due to this effect and re-entered the atmosphere and vanished with the satellite. Geomagnetic storms are known to have the potential to interfere with electronic systems, but Blue argues that a sudden severe geomagnetic storm (G4 on the G scale of the Space Weather Forecast Center of the US National Oceanic and Atmospheric Administration), which was not predicted by the Space Weather Service, occurred after the launch, affected the rocket's guidance system, and caused the launch failure. Blue asserts that this was the cause of the launch failure. On January 14, Blue notified Red that the launch had failed due to a geomagnetic storm, a force majeure event. The record of testimony in this regard of the person responsible for the launch at Blue is attached as Exhibit 15. In response, Red argues that Blue failed to comply with established safety protocols during launch preparations, leading to the launch failure. The record of testimony in this regard of the person responsible at Red is attached as Exhibit 16. It was confirmed that no geomagnetic storm occurred on January 10. It was also confirmed that an anomaly was detected in the guidance system prior to launch, that Blue concluded that it was a sensor anomaly after conducting an inspection, and that reliable space forecasts indicated that solar activity would

increase around the time of launch and that a magnetic storm of G1 magnitude could occur, and that Blue was aware of this space forecast. The value of Red Star was US\$75 million. Subsequently, during the arbitration proceedings, it was found that the following facts existed: (1) There were two occasions in 2022 when a launch was delayed due to excessive drinking by Blue's launch staff members (the cause was that some members of Blue's launch team were fond of drinking and frequently invited their colleagues to go out drinking), and this had become a problem within Blue. Blue did not take concrete measures to prevent the recurrence of such drinking, but only gave strict warnings to those who participated in the drinking. (2) Blue's rules stipulate that "when an abnormality is found in a launch vehicle, it must be inspected by two persons." When an abnormality was found in the guidance system, two staff members from Blue inspected it, but only one person carried out subsequent repairs of the sensor. (The rules do not have explicit provisions regarding the number of people involved in case of repairs.) (3) Analysis of data on the operation of the rocket after the launch showed data indicating anomalies in the sensors before the geomagnetic storm occurred that Blue had described as already having been repaired.

30. Blue demanded that Red pay the remaining amount of US\$75 million under the contract in Exhibit 14, claiming that, under the cross-waiver clause in Article 4.3 of that contract, Blue is not liable, and as the accident was caused by force majeure, Red still has to pay for the launch even if the satellite was lost.

31. In response, Red has refused to pay, claiming that the launch failed due to Blue's gross negligence, and, based on the contract in Exhibit 14, Red is demanding a payment of US\$75 million from Blue. Red and Blue negotiated these issues but were unable to reach an agreement, and the parties finally agreed to settle the dispute through arbitration. Blue filed for arbitration demanding payment of US\$75 million, the balance of the satellite launch contract; and Red filed a counterclaim, demanding Blue to pay Red US\$150million under the contract in Exhibit 14.

This dispute shall be referred to as the "Satellite Case".

32. Arbitration proceedings were properly initiated and the three arbitrators were appointed on September 5, 2023; an oral hearing is scheduled for December 9. Procedures for the purpose of clarifying the issues were conducted between the arbitrators and the representatives of the parties on September 23, 2023, and the issues have been set forth in Exhibit 17. The arbitrators have also instructed the parties to submit preliminary memoranda and responses by the prescribed dates.

33. Of the three arbitrators, the arbitrator selected by Red was Mr. Bob Orange. Orange is a lawyer who studied space engineering at a top U.S. university, worked for NASA for 15 years, and then qualified as a barrister in the UK, specializing in space law. No disclosure of a conflict of interest was made by Orange in becoming an arbitrator and there is no suggestion that a conflict of interest exists. On September 25, 2023, Orange attended an international conference in Japan on space law entitled "Space Accidents - Apportioning Liability". At this conference, he gave a lecture entitled "Force Majeure in Launch Services". This lecture had been scheduled prior to his appointment as arbitrator. In his speech, Orange did not refer specifically to the Red Star incident, but he did make a general comment, saying, "Even a G1-level magnetic storm should be considered as having the potential to lead to a serious accident, and it should be difficult to accept a claim of force majeure if one knew that a magnetic storm was likely to occur." The conference was the first time that Bob Orange had expressed this view.

34. Representatives from both Red and Blue were present at the conference. Since the Red Star accident was well known in the academic community, all participants at the conference could easily make the assumption that the Red Star accident had given rise to this statement. After hearing these comments, in accordance with the UNCITRAL Arbitration Rules, Blue's counsel submitted a notice for Bob Orange's removal as an arbitrator, arguing that the comments raised doubts about his impartiality to act as an arbitrator for this dispute. At the hearing on December 9, the issue of whether Bob Orange should be removed is scheduled to be heard together with the Satellite Case. Regardless of the outcome, it has been agreed that the December 9 hearing will be conducted before an arbitral tribunal that will include Orange.

<Round B>

*Round B is to be conducted in accordance with paragraphs up to and including paragraph 13, and paragraph 35 and below. Paragraphs 14 to 34 do not apply to Round B. For purposes of Round B, please assume that none of the events set out in Paragraphs 13 to 34 occurred. Paragraphs 35 and below and confidential information do not apply to Round A.*

35. After designing and building a prototype, and conducting various experiments, the actual probe was made, and the probe and ground system were completed in October 2022. In addition, Red obtained the necessary permits from the Government of Negoland for the launch, and Blue obtained the same from the Government of Arbitria. In October 2022, in Negoland, a law with the same content as the Arbitrian law on the promotion of business activities related to the exploration and exploitation of space resources, which is mentioned in Paragraph 14, entered into force.

36. In January 2023, the rocket carrying Avrio was launched on schedule. The launch was a success. After consultation with Red and Blue, the State of Arbitria registered Avrio with the United Nations as its own space object. Avrio approached the Moon and used its state-of-the-art technology from the outer space close to the Moon to investigate surface and subsurface conditions in previously under-studied areas. (Avrio is equipped with instruments that can detect not only the surface, but also the subsurface conditions and the presence of mineral deposits at a certain depth below the surface.) Analysis of the data from this survey has shown that there is likely to be a significant amount of water ice in “Area  $\gamma$ ,” that a significant amount of titanium is likely to be buried not deep below the surface in “Area  $\delta$ ,” that there are likely to be abundant deposits of aluminium beneath “Area  $\epsilon$ ,” that there are certain to be deposits of iron beneath “Area  $\zeta$ ,” and that there are likely to be abundant deposits of silica in “Area  $\eta$ .” It was also found that a huge cavity 30 km long and 10 km wide exists beneath “Area  $\theta$ ,” and that a cavity 10 km long and 10 km wide exists beneath “Area  $\iota$ .” Unfortunately, however, due to a malfunction of the landing gear, it was not possible to land on the surface of the Moon to carry out the survey, and uncertainties remained regarding the results of the survey. The results of this survey are summarised in Exhibit 18. The location of the various regions is also shown in Exhibit 19.

37. Following these results, Red and Blue started discussions on the content of the second project in accordance with the MOU in Exhibit 5. Both Red and Blue hold positive views about implementing the second project in order to make use of the findings of the first project

and to move on to more concrete steps. The second project envisages sending humans to the Moon and using a lunar rover capable of travelling on the lunar surface to survey specific areas. In the next round of negotiations, the parties will negotiate (i) where the landing point should be, (ii) which areas will be surveyed, (iii) when the rocket will be launched for the second project, and (iv) what the main roles of Red and Blue companies will be. The explorer will be able to carry up to 5 astronauts and the duration of the explorer's stay on the Moon in the second project is planned to be 72 hours. (The probe cannot move from the landing point.) Exploration activities by astronauts are planned to last three hours per area (5 hours when entering the cavity in the  $\theta$  and  $\iota$  areas to survey the inside of the cavity). (These times cannot be shortened.) The total maximum time each astronaut can engage in the exploration activities, including travel time to the sites selected for the surveys, is 24 hours. (The areas to be explored should be selected within this limit.) Only one lunar rover can be transported to the Moon by the explorer. To ensure the safety of the astronauts, at least two astronauts must go to explore any area selected and the rover must be in the same area as the astronauts while the astronauts are exploring an area. (The rover cannot move to another area while leaving one or more of the astronauts in one of the areas.) In light of the above, the negotiations on 10 December are expected to produce a draft document corresponding to the MOU in Exhibit 5, which was prepared for the first project.

38. Blue has been working on building a constellation of satellites since 2021, and has recently succeeded in developing a low-cost but super-functional small satellite that uses transponder, antenna technology and security functions supplied by Red. Blue launched a large number of these new small satellites into low orbit in a concentrated manner and launched a satellite communications service in Arbitria in January 2023 under the name "Blue Link," using a constellation of satellites built mainly from these new small satellites. Blue Link enables high-speed communication and smooth communication even in areas with poor internet conditions. Initially, the service has been launched in Arbitria, with the details set forth in Exhibit 20, and it has been well received in terms of communication quality and price range. Blue is considering providing services not only in Arbitria but in other countries. Although it is possible for Blue to make contracts with individual companies and individuals via the internet, Blue believes that the ideal way to acquire customers more effectively is to provide services in partnership with local telecommunications operators, etc. Red Company is currently providing a satellite Internet communication service in Negoland using a communications satellite owned by U.S.-based Green Company, in order to address areas where the Internet environment is poor, but upon learning that Blue has launched a new Blue Link service, it is considering switching to Blue Link. In the next round of negotiations, the

main contract terms - (i) financial terms, (ii) service level and (iii) contract term - are to be negotiated.

39. In the negotiations that will be held at a hotel in Japan on 10 December, negotiations are scheduled to take place on the second Moon exploration project and 'Blue Link'. From Red, the vice-president, head of the space business, head of the telecommunications business and others are expected to participate, while from Blue, the vice-president, head of the space exploration business, head of the satellite communications business and others are expected to participate.

## Exhibit 1

### Major use items in Negoland's space-related budget in 2023

(No further details have been released.)

- Development of fundamental technologies for space development
  - Rocket development and sophistication - Approx. US\$400 million
  - Research and development of satellite-related technologies - Approx. US\$100 million
  - Development of space-related technologies - Approx. US\$100 million
  - Research to build a small satellite constellation - Approx. US\$100 million
- Support for space-related projects by the private sector
  - Support for commercial space technology projects - Approx. US\$100 million
  - Support for advancement of space-related business - Approx. US\$100 million
- Security-related
  - Development of information-gathering satellites from a security perspective - Approx. US\$800 million
  - Development, maintenance, and operation of the Quasi-Zenith Satellite System - Approx. US\$300 million
  - Strengthening Space Domain Awareness (SDA) - Approx. US\$300 million
  - Enhancement of defence communications satellite systems - Approx. US\$600 million
  - Development of space defence systems - Approx. US\$300 million
- Satellite Development and Satellite Technology Application
  - Development of Earth observation satellite - US\$100 million
  - Development of next-generation geostationary meteorological satellites - US\$600 million
  - Use of satellite technology in agriculture - US\$100 million
  - Utilization of satellite technology in the field of surveying and transportation - US\$100 million
- Lunar and Planetary Exploration
  - Research and development for lunar exploration - US\$500 million
  - Promotion of Mars satellite exploration program - US\$100 million



## Exhibit 2

### Major use items in Arbitria's space-related budget in 2023

(No further details have been released.)

- Development of launch vehicle: US\$400 million
- Geostationary satellite program for weather and other observations: US\$200 million
- Other satellite development: US\$150 million
- Space-related ground equipment maintenance: US\$150 million
- Regional navigation satellite system development: US\$20 million
- Related to manned spaceflight program: US\$5 million
- Lunar and asteroid exploration: US\$10 million
- Security: US\$300 million
- Private sector support: US\$100 million

### Exhibit 3

#### Red Corporation Overview

Established:	1900
Headquarters:	Negonego, Negoland (capital)
President:	Hiromi Red
Capital:	US\$2,647 million
Operating revenue in FY2022:	US\$600 million
Operating income in FY2022:	US\$60 million

#### Business Segments and Percentage of Operating Income Each Business Segment Contributes to Operating Income

Electronics Division (semiconductors, sensors, solar cells, etc.)	50%
Toy Division	10%
Telecommunications Business Segment	25%
Data Business Unit	15%
Space Business Sector	0%

## Exhibit 4

### Overview of Blue Inc.

Established:	1920
Headquarters:	Abu Abu, Arbitria (Capital)
President:	Taro Blue
Capital:	US\$3,500 million
Operating revenue in 2022:	US\$1,000 million
Operating income in 2022:	US\$100 million

### Business Segments and Percentage of Operating Income Each Business Segment Contributes to Operating Income

Aircraft Business	40%
Automotive Business	30%
Mobile Communications Business	15%
Travel Business	10%
Space Business	5%

Exhibit 5

Memorandum of Understanding for Lunar Exploration Project

1. Red Corporation (“Red”) and Blue Inc. (“Blue”) agree to carry out a joint project with the following mission:
  - ① The first project is to reach the Moon's surface by January 2023.
  - ② The exploration vehicle will survey the lunar surface and subsurface to an extent to be separately agreed upon by the two companies to determine what resources may be present. In doing so, the following surveys and resource extraction shall be conducted to suit the interests of Red Corporation and Blue Inc.
    - i. Red is particularly interested in the existence and possibility of extracting materials that can be used to manufacture semiconductors and other products.
    - ii. Blue is particularly interested in the existence and possibility of extracting water and base metals that are expected to be procured off Earth, especially when considering future trips to the Moon and space.
  - ③ The explorer probe will collect lunar and subsurface materials that meet the interests in (2) above.
  - ④ The explorer probe will explore at least two (2) or more areas. Red and Blue may each designate at least one area (but will consult with each other to ensure that the areas are adjacent to each other within 5 km).
  - ⑤ A capsule containing the collected materials and data recording equipment will be returned to Earth and the materials and data brought back to Earth will be examined.
  - ⑥ Based on the results of the study in ⑤, the content of the second project will be discussed.
2. The explorer probe shall have the following capabilities
  - ① Capability to be launched by rocket and reach the lunar surface after being ejected from the rocket.
  - ② A function that can use ultrasonic waves to survey the Moon's surface and subsurface for resources and transmit the data back to Earth.
  - ③ Ability to drive about 5 km on the surface of the Moon under its own power.
  - ④ Ability to collect and store small amounts of material from the lunar surface or underground.
  - ⑤ Ability to return the capsule storing the collected materials and data recording equipment to Earth, with the stored material.
3. The explorer probe will be developed jointly by Red and Blue.

4. The explorer probe will be launched using Blue's rocket.
5. The cost of manufacturing and launching the explorer probe will be split between Red and Blue.
6. Both Red and Blue shall have rights to the data and material obtained by the explorer probe.

Exhibit 6

AGREEMENT ON DISTRIBUTION OF LUNAR DATA AND MATERIALS

THIS AGREEMENT ("Agreement") is made and entered into this 10th day of May, 2020, by and between Red Corporation, a corporation organized under the laws of Negoland ("Red") and Blue Inc., a corporation organized under the laws of Arbitria ("Blue") (collectively referred to as the "Parties".):

WHEREAS, the Parties have jointly initiated a project ("Project") to send a probe to the Moon, to gather data about the surface of the Moon, understand materials that exist on the surface or underground, collect sample materials, and bring said materials to the Earth;

WHEREAS, the Parties signed a Memorandum of Understanding regarding the Project on January 15, 2019, and have entered into various agreements to implement the Project;

WHEREAS, as part of the process of implementing the Project, the Parties discussed the distribution of the data and materials to be obtained by the project.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

Distribution of Data

1.1. All data collected from the Project, including but not limited to, images, measurements, analysis, and any other form of information, shall be jointly owned by the Parties.

1.2. Both Parties shall have equal rights to access, use, distribute, or otherwise benefit from the data.

1.3. Neither Party shall withhold any portion of the data from the other Party for any reason, other than as expressly provided for under the terms of this Agreement or as required by applicable law.

Distribution of Materials

2.1. All materials collected from the lunar surface or subsurface and brought back to Earth shall be divided equally between Red and Blue.

2.2. Such division shall be made based on weight, volume, and/or value as determined by the Parties.

2.3. Both Parties shall have equal rights to access, use, distribute, sell, or otherwise benefit from these materials.

#### Handling and Storage

3.1. The materials shall be handled and stored in a manner that maintains their integrity and value.

3.2. Both Parties shall mutually decide on a location or locations for storage or shall each store their respective shares separately, ensuring all necessary precautions are taken.

. . .

#### Termination

6.1. In the event of a breach of this Agreement by either Party, the non-breaching Party shall have the right to terminate this Agreement upon written notice. Such termination shall not affect the rights to the data or materials already distributed or shared.

#### Governing Law

7.1. This Agreement shall be governed by and construed in accordance with UNIDROIT Principles of International Commercial Contracts 2016.

#### Dispute Resolution

8.1. 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

Arbitration Rules.

Miscellaneous

9.1. This Agreement constitutes the entire understanding between the Parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements and understandings, whether oral or written, pertaining thereto.

9.2. Any changes to this Agreement must be made in writing and signed by both Parties.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date first above written.

Red Corporation  
(Signature)

Blue Inc.  
(Signature)



Exhibit 7

Agreement for Cost Sharing for the Lunar Probe Project

THIS AGREEMENT ("Agreement") is made and entered into this 15th day of May, 2020, by and between Red Corporation, a corporation organized under the laws of Negoland ("Red") and Blue Inc., a corporation organized under the laws of Arbitria ("Blue") (collectively referred to as the "Parties".):

WHEREAS, the Parties have jointly initiated a project ("Project") to send a probe to the Moon, to gather data about the surface of the Moon, understand materials that exist on the surface or underground, collect sample materials, and bring said materials to the Earth;

WHEREAS, the Parties signed a Memorandum of Understanding regarding the Project on January 15, 2019, and have entered into various agreements to implement the Project;

WHEREAS, as part of the process of implementing the Project, the Parties discussed how to share the costs for this project.

NOW, THEREFORE, in consideration of the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Roles and Responsibilities:

1.1 Red shall primarily provide components for exploratory vehicles and rockets and engage in the design of the exploratory vehicles.

1.2 Blue shall be primarily responsible for manufacturing the exploratory vehicles and rockets and launching the rockets.

1.3 The Parties shall collaboratively conduct planning and management of the exploration project.

2. Cost Allocation:

2.1 Each Party shall bear the costs relating to their respective roles and responsibilities outlined in Section 1.

2.2 If payment to a third party is required, either Red or Blue shall make the payment to the third party.

3. Settlement:

3.1 Upon the return of the lunar probe to Earth and the completion of all project activities, each Party shall calculate the total amount of their incurred costs and notify the other Party.

3.2 The Parties shall then aggregate the reported costs and determine the amount each Party should bear, splitting the total costs equally.

3.3 If 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.

3.4 The invoiced Party shall make the payment within one month from the date of receiving the invoice.

4. General Provisions:

4.1 This Agreement may be amended only by written agreement of both Parties.

4.2 This Agreement shall be governed by and construed in accordance with UNIDROIT Principles of International Commercial Contracts 2016.

4.3 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 Arbitration Rules.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date first above written.

Red Corporation:

By: (Signed)

Blue Inc.:

By: (Signed)

Exhibit 8

Excerpts from the Act on the Promotion of Business Activities for the Exploration and  
Development of Space Resources of Arbitria

(Purpose)

Article 1

The purpose of this Act is to promote business activities for the exploration and development of space resources by private business operators by specifying the rules for the acquisition of ownership of space resources and other necessary matters concerning such activities, with respect to the exploration and development of space resources.

(Definitions)

Article 2

In this Act, the meanings of the terms set forth in the following items are as provided respectively in those items:

(i) "space resources" means water, minerals and other natural resources that exist in outer space, including the Moon and other celestial bodies.

(ii) "exploration and development of space resources" means any activities listed in any of the following sub items (excluding those conducted exclusively as scientific research or for the purpose of scientific research):

(a) examination of the existence of space resources that contribute to the mining and extraction (referred to as "mining, etc." or "mined, etc."); and

(b) mining, etc. of space resources and related processing and storage.

. . .

(Acquisition of Ownership of Space Resources)

Article 5

A person who conducts business activities related to the exploration and development of space resources shall acquire the ownership of space resources that have been mined, etc. in accordance with the business activity plan for the exploration and development of space resources that the government has approved in advance, by possessing said space resources

with the intention to own.

(Sincere Implementation of International Agreements, etc.)

Article 6(1)

In the enforcement of this Act, attention shall be paid not to hinder the sincere implementation of treaties and other international agreements Arbitria has concluded.

(2) No provision of this Act shall unjustly harm the interests of other States exercising freedom of the exploration and use of outer space, including the Moon and other celestial bodies.

### **Sound recording of discussion between Red Corporation and Blue Inc.**

**Head Researcher of Red:** This is very good data. Based on the analysis of the data obtained so far alone, we found the likelihood of presence of a relatively large volume of water in Area  $\alpha$ , and a great likelihood of the presence of a relatively large volume of titanium not so deep from the surface in Area  $\beta$ . However, it appears that some data has not been sent, probably due to some malfunction of the data transmission device of Avrio.

**Head Researcher of Blue:** Let's analyze the data that has not been sent after it returns to Earth. But the data we received so far alone is a great success.

**Project Manager of Blue:** That's right. We will now go on to the material extraction stage. For the extraction of material, why don't we do that in the order of Area  $\alpha$  and Area  $\beta$  and land it at Area  $\alpha$ ?

**Project Manager of Red:** I think that it would be better to examine Area  $\beta$  first, as there is a greater likelihood of deposits of our target materials in Area  $\beta$ . If we reveal the news that we have succeeded in extracting valuable materials from Area  $\beta$ , it will certainly become world news.

**Head Researcher of Blue:** Hmm . . . I think that since whether or not the Moon has water is a bigger issue, it will be better to put that issue ahead. Also, we will be in trouble if we end up not being able to examine both areas due to some problem.

**Technical Manager of Red:** Don't worry about that. The probe is designed to be able to run with its own power for at least for 5 km in the first place, and Area  $\alpha$  and Area  $\beta$  are only 1 km apart.

**Head Researcher of Blue:** Hmm . . . I wonder . . . For our company, Area  $\alpha$  is more attractive.

**Project Manager of Red:** I understand the importance of Area  $\alpha$  too. But, for our company, Area  $\beta$  is more attractive. Could you agree on landing at Area  $\beta$ ?

**Head Researcher of Blue:** Hmm . . . We will be in serious trouble if the exploration of Area  $\alpha$  should become impossible. There is also a possibility of some trouble occurring while it is running on the surface of the Moon.

**Technical Manager of Red:** Don't worry! We have installed our state-of-the-art technologies in the driving functions and the batteries etc. so we are very confident in them.

**Head Researcher of Blue:** Hmm . . . Is that so? Are you absolutely sure?

**Technical Manager of Red:** Really – no worries! I can guarantee you at least that the probe will never become unable to move because of trouble with the driving functions or batteries.

**Project Manager of Blue:** OK then, we agree to explore Area  $\beta$  first, if you insist. But we would like you to make sure that Area  $\alpha$  will be explored too.

**Project Manager of Red:** We understand. No problem!

**Project Manager of Blue:** Our company is not that much interested in materials your company is looking for. Could you guarantee that our company will not suffer any disadvantage even if exploration of Area  $\alpha$  becomes impossible?

**Project Manager of Red:** What do you mean by “guarantee”?

**Project Manager of Blue:** For example, if we could only examine Area  $\beta$  and could not examine Area  $\alpha$ , the benefits your company will gain will be much greater than ours. What I mean is, in such a case, will your company adjust the cost-sharing burdens?

**Project Manager of Red:** We can accept that we will make some kind of adjustment in such a case. As for the specific method of adjustment, is it OK for us to discuss a reasonable method if such situation actually occurs?

**Project Manager of Blue:** As it will be difficult at this time to determine what to do in such a situation, that will be fine.

April 15, 2023

A summary of instructions regarding exploration and mining of the Moon surface by Avrio

- Mission 1: Land at the landing coordinates of \_\_\_\_ in Area  $\beta$  on May 3, 2023
- Mission 2: Extract rocks and sands from locations in Area  $\beta$  where titanium is assumed to be present
- Mission 3: Move from Area  $\beta$  to Area  $\alpha$  on May 6, 2023
- Mission 4: Extract rocks and sands from the locations in Area  $\alpha$  where water is assumed to be present
- Mission 5: Make the capsule containing collected materials return to Earth

Exhibit 11

Excerpts from the Space Resources Act of Negoland

(Purpose)

Article 1 The purpose of this Act is to appropriately manage the exploration and development of space resources by determining issues such as the ownership of space resources and other necessary matters.

(Definitions)

Article 2 In this Act, the meanings of the terms set forth in the following items are as provided respectively in those items:

- (i) "space resources" means water, minerals and other natural resources that exist in outer space, including the Moon and other celestial bodies.
- (ii) "exploration and development of space resources" means any activities listed in any of the following sub items:
  - (a) examination for the existence of space resources that contribute to mining and extraction (referred to as "mining, etc." or "mined, etc."); and
  - (b) mining, etc. of space resources and related processing and storage.

. . .

(Acquisition of Ownership of Space Resources)

Article 5 The ownership in the space resources mined, etc. by a person who engages in business activities related to the exploration and development of space resources with permission of the state shall belong to the state. The same shall apply to business activities carried out by Negoland citizens without the permission of the state.

2. Unless ownership has been transferred by the state, no person other than the state may own space resources. A person who is in possession of space resources shall promptly report it to the state and deliver them to the state or otherwise follow the instructions of the state.

3. In the event a person who is in possession of space resources fails to report as required or to follow the state's instructions under the preceding paragraph, the state may exercise compulsory execution.

Supplementary provisions

Article 5 applies to space resources mined or newly possessed after the date of entry into force.



### **Sound recording of the meeting between Red Corporation and Blue Inc.**

**Project Manager of Blue:** We are in trouble. A minor malfunction has occurred to the driving function of Avrio, and it has become difficult for it to run from this point to Area  $\alpha$ . If we push it, it might be able to move 1 km or so, but it could end up getting stuck and if that happens, we will lose everything.

**Project Manager of Red:** That is certainly true. As this has happened, we have no other choice but to abandon our attempt to move the probe to Area  $\alpha$ .

**Project Manager of Blue:** I think your Technical Manager said that he would guarantee that the probe would never become unable to move due to any trouble with its driving functions or batteries. What is happening now?

**Project Manager of Red:** We ourselves are surprised as the probe was the result of numerous experiments, inspections and improvements and we had great confidence in it. I think this means that space is such a difficult place . . .

**Project Manager of Blue:** I understand that unexpected things could happen in space. But we are very disappointed that the examination of Area  $\alpha$ , which was the most anticipated part of this project for us, ended up being impossible to achieve. As this is the part related to the driving function for which your company was mainly responsible, we would like you to reflect on this a great deal and review the incident and share the results with us. I believe that we agreed to adjust cost-sharing burdens if only Area  $\beta$  could be examined and Area  $\alpha$  could not be examined. We agreed to determine the specific method of adjustment by separate discussion. It is difficult to identify which expenses for this project were for the exploration or mining of Area  $\beta$  only and it is also difficult to calculate exactly how much your company gained and how much our company lost. Therefore, how about sharing the costs between your company and our company at a ratio of 6:4, instead of 5:5?

**Project Manager of Red:** It is unfair to increase the burden on our company unilaterally, because your company can also use the results of the examination of Area  $\beta$  and rocks and sands acquired from that area. However, to show our appreciation for your company's acceptance of our company's wish to explore Area  $\beta$  first, we think that we could probably adjust the cost-sharing by increasing our share of costs by 10 million USD.

**Project Manager of Blue:** As I think that it is true that our company could use the exploration results and rocks and sands acquired from Area  $\beta$ , we accept your proposal.

Note: The above sound recording was transcribed as described above on the same day, and a PDF file of the transcribed data was sent to Red and Blue on the following day. Neither Red nor Blue raised

any objections to its contents.

**Order concerning handling of data pertaining to the Moon**

In accordance with the National Security Act of Arbitria, the Arbitrian Government orders as follows:

1. In the interests of national security, data pertaining to the condition of the Moon shall not be transferred to any person unless such transfer is made to a person located in a state with which Arbitria has entered into an agreement concerning information sharing, or the permission of the state has been obtained in advance. (The state may add necessary conditions on the permission.) The same shall apply when access is provided to a person other than an Arbitrian national or an Arbitrian legal entity.
2. Any person who transfers such data in violation of the preceding paragraph shall be subject to punishment by imprisonment of up to 10 years or a fine of up to one million USD.
3. This Order shall come into force from this date.

Exhibit 13-1

Statement of the President of Blue, Inc.

We consider the lunar exploration by Avrio was a success, as the capsule was safely recovered, although we regret that we were not able to survey Area  $\alpha$ . When we heard that Negoland had enacted a law prohibiting Red from owning or possessing space materials, we discussed internally how we should respond. In such a situation, a government official in Arbitria suggested that, as Arbitria is actively working on space development and space development has an aspect of competition between countries, if the materials cannot be handed over to Red, it should be utilised for Arbitria instead of handing over to the government of Negoland. In addition, we did not know what the State of Negoland would think about handing over the materials to Red when the State of Negoland forbids private ownership. So, we refused to hand over the materials taken from Area  $\beta$  to Red.

While I was receiving reports from the relevant departments that the materials collected in Area  $\beta$  were difficult to utilize immediately for our current business, the president of Black asked me if I would be interested in selling them to Black, saying that Black was interested in developing resources on the Moon and asteroids in the future and that he would be very interested in purchasing them. Subsequently, the Minister of Economy, Trade and Industry of Arbitria also said to me, "We would like you to cooperate with Black in order to support space development by Arbitrian companies," and we decided to sell half of the materials to Black.

After the sale to Black, the Minister of Science of Arbitria approached us and said, "We would like to study the materials and data obtained from this exploration at the Arbitrian Space Research Institute," and we decided to sell the remaining half, along with the copy of the data, to the government in order to cooperate with the national policy on science and technology and space development.

Although the Minister of Economy, Trade and Industry did not say anything about imposing a disadvantage if we refused the request, the Minister of Science said, "If we refuse this request, we would like you to consider that it will be difficult to obtain future support for space development from the Government of Arbitria." Since the change in the laws and regulations of Negoland made it impossible for us to deliver the materials to Red, we thought it appropriate to deliver the profits from the sale of the materials to Red while utilizing the materials for the activities of research institutes and companies in Arbitria, rather than holding on to the materials indefinitely.

## SATELLITE LAUNCH AGREEMENT

This Contract (“the Agreement”) is entered into as of January 15, 2021, by and between Red Corporation (“Client”), a corporation organized and existing under the laws of Negoland, and Blue, Inc. (“Contractor”), a corporation organized and existing under the laws of Arbitria.

### ARTICLE 1: OBJECT OF THE CONTRACT

1.1 The Contractor agrees to launch the Client’s satellite, identified as Red Star, into the geostationary orbit in accordance with the specifications as outlined in Attachment A.

### ARTICLE 2: LAUNCH WINDOW

2.1 The launch is scheduled to occur between December 15, 2022 and January 31, 2023.

### ARTICLE 3: PAYMENT TERMS

3.1 The Client agrees to pay the Contractor a total amount of US\$150 million in accordance with the payment schedule is as follows:

- Deposit: \$25 million (due upon signing)
- Interim Payment: \$50 million (due upon the date when the satellite is delivered to the launch site)
- Final Payment: \$75 million (due upon successful orbital insertion)

### ARTICLE 4: LIABILITY & INSURANCE

4.1 Contractor shall maintain third party liability insurance of \$200 million covering potential damages arising from launch failures.

4.2 Liability Cap: The liability of Blue for damages shall not exceed the amount paid by Red under this Agreement. Each party shall indemnify the other against third-party claims arising from negligence or willful misconduct of the indemnifying party.

4.3 Cross-Waiver of Liability: Each party agrees to bear and assume its own risks of damage to its property or injury to its personnel arising out of the launch services, and waives all claims against the other party for such damages incurred after the launch, except in cases of willful misconduct or gross negligence.

#### ARTICLE 5: FAILURE & BREACH OF CONTRACT

5.1 In case of launch failure attributed to Blue, a subsequent launch will be scheduled at no additional cost, or a refund of 50% of the total contract amount will be provided to Red.

5.2 A breach of contract by either party shall result in a penalty of \$20 million, in addition to any other remedies available under law.

#### ARTICLE 6: FORCE MAJEURE

6.1 Neither party shall be held liable for failure to perform its obligations due to events beyond its reasonable control and unforeseeable circumstances preventing fulfillment of the contract, including but not limited to natural disasters, wars, governmental actions.

6.2 In order to rely on force majeure, parties must notify each other within 5 days of occurrence of a force majeure event.

#### ARTICLE 7: GOVERNING LAW & DISPUTE RESOLUTION

7.1 This Agreement shall be governed by UNIDROIT Principles of International Commercial Contracts 2016.

7.2 Any disputes arising from this Agreement shall first be resolved through negotiation or mediation, failing which they shall be resolved through arbitration in Japan in accordance with the UNCITRAL Arbitration Rules.

#### ARTICLE 8: WARRANTIES & GUARANTEES

8.1 The Contractor represents and warrants that the launch vehicle and associated services will conform to the specifications outlined in Attachment A and will comply with all applicable laws and regulations.

8.2 The Contractor guarantees the performance of the launch vehicle as outlined in Attachment B.

#### ARTICLE 9: MISCELLANEOUS

9.1 Any amendments to this Agreement must be in writing and signed by both parties.

9.2 This Agreement constitutes the entire understanding between the parties and supersedes all prior discussions, agreements, or understandings, whether written or oral.

IN WITNESS WHEREOF, the Parties hereto have executed this Contract as of the Effective

Date first above written.

Red Corporation:

Signature: (Signed)

Blue Inc.:

Signature: (Signed)

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Attachment A

1. Launch Vehicle Identification:

Name: Blue Super Rocket No. 5

Manufacturer: Blue Inc.

2. Launch Capability:

Payload to Geostationary Transfer Orbit: 4,500 kg

Payload Fairing Diameter: 5 m

Payload Fairing Height: 10 m

3. Launch Site:

Location: Blue Launch Center, Arbitria

Launch Pad: LC-5

4. Launch Reliability:

Success Rate: 95% based on the last 20 missions

Redundancy: Triple-redundant avionics system

Vehicle Heritage: 50 Successful missions in configuration

5. Regulatory Compliance:

Licenses: All necessary licenses obtained as per Arbitrian Space Agency.

Environmental Compliance: All environmental assessments and impact studies completed as per regulations.

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Attachment B: Performance Guarantee

1. Performance Commitment:

Blue guarantees that Blue Super Rocket No. 5 (“Launch Vehicle”) will deliver the Red Star (“Satellite”) to the specified Geostationary Transfer Orbit (GTO) in Attachment A, subject to the conditions and exceptions defined herein.

2. Orbital Parameters:

Blue commits to delivering the Satellite to the target orbital parameters as specified by the Parties.

3. Performance Shortfall:

In the event the Launch Vehicle fails to deliver the Satellite to the target orbit within the specified tolerances, Blue shall:

- a) Attempt to remedy the shortfall at its own expense, if feasible, or
- b) Pay to Red a sum as liquidated damages as follows:
  - i. For minor deviations from the agreed-upon orbital parameters which do not impact the satellite's operational capabilities or lifespan, the Provider will pay 5% of the Launch Service Fee as liquidated damages.
  - ii. For significant deviations impacting the satellite's operational capabilities or lifespan but not resulting in total loss, the Provider will pay up to 25% of the Launch Service Fee as liquidated damages.
  - iii. In the case of total loss of the Satellite due to failure of the Launch Vehicle to reach orbit or deliver the Satellite to an incorrect orbit from which the intended mission cannot be conducted, liquidated damages equivalent to 100% of the Launch Service Fee will be payable to the Client.
  - iv. The total amount of liquidated damages payable by Blue under any circumstances shall not exceed the total Launch Service Fee paid by Red.

4. Exceptions and Limitations:

Provider shall not be held responsible for performance shortfalls or mission failures attributed to:

- a) Satellite malfunction or anomaly;
- b) Acts of God, war, terrorism, or other events beyond the reasonable control of Blue;
- c) Failure of Red to adhere to the agreed-upon satellite design and integration specifications



and requirements.

5. Remedies Exclusive:

The remedies provided under this Performance Guarantee are the sole and exclusive remedies available to Red for any performance shortfall or mission failure.

Exhibit 15

Transcript of testimony of Blue's person responsible for the launch

The geomagnetic storm on the day of the launch was of unprecedented scale and duration and was unpredictable. It is our understanding that there is no available technology or countermeasure that can protect the launch vehicle systems from a geomagnetic storm of that magnitude. In addition, we prepared for the launch in accordance with the established protocols to ensure that all systems were ready for launch prior to the launch. During pre-launch inspections, an anomaly was detected in the rocket's guidance system, but our inspection showed that this was due to an anomaly in the sensor of the rocket, and we fixed it. Of course, we also checked the forecast for the geomagnetic situation, and there was no forecast of a strong geomagnetic storm that would make launch impossible, although there was a forecast that there was a possibility that a geomagnetic storm of G1 magnitude might occur.

Exhibit 16

Transcript of testimony of Red's person responsible for the launch.

Blue ignored anomalies detected in the rocket's guidance system during pre-launch inspections, and cleared them up as sensor errors without a thorough investigation. Although space forecasts indicated that there was a risk of increased solar activity around the time of the launch, which could result in a magnetic storm of G1 magnitude, Blue ignored this risk. The accident was caused by Blue's gross negligence and is not excused by the Cross-Waiver Clause or force majeure.

Exhibit 17

**1. Moon Case**

(Claims of the parties)

Claim of Red: Blue Inc. shall divide the materials extracted from Area  $\beta$  in half in such manner as the arbitral tribunal determines and shall transfer a half to Red. Blue Inc. shall transfer a complete copy of the data recorded in the data recorder of Avrio to Red.

Response of Blue: The claim of Red shall be dismissed.

Counterclaim of Blue: Red shall pay 160 million USD to Blue. However, upon the sale of Area  $\beta$  extracted material to Black Company and to Arbitria, and once the payment therefor has been received in full, the amount claimed will be reduced to US\$ 110 million.

Petition for interim measures by Red: Red seeks a disposition prohibiting Blue from selling any of the material extracted from Area  $\beta$  to either Black Company or Arbitria. Red also seeks to enjoin Blue from selling the data to Arbitria.

(Points at issue)

1. Does Blue have the obligation to transfer half of the materials extracted and a complete copy of the data records obtained from Area  $\beta$  to Red? If Blue is obliged to hand over half of the substance, how should the arbitral tribunal divide and determine which half to hand over?
2. If Blue is obligated to deliver to Red half of the materials collected in Area  $\beta$  and the data, can Red refuse to make payment until Blue fulfills such obligation? If Blue does not have such obligation, how much should Red pay to Blue?
3. Should Red's petition for interim measures be granted?

\* The issue of whether the sale of \*materials and data is allowed is dealt with in Issue 3.

**2. Satellite Case**

(Claims of the parties)

Claim of Blue: Red shall pay to Blue US\$75 million, the unpaid balance of the Satellite Launch Agreement.

Response of Red: The claim of Blue shall be dismissed

Counterclaim of Red: Blue shall pay to Red US\$ 150million.

Petition of Blue: Mr. Bob Orange shall be removed as an arbitrator.

(Points at issue)

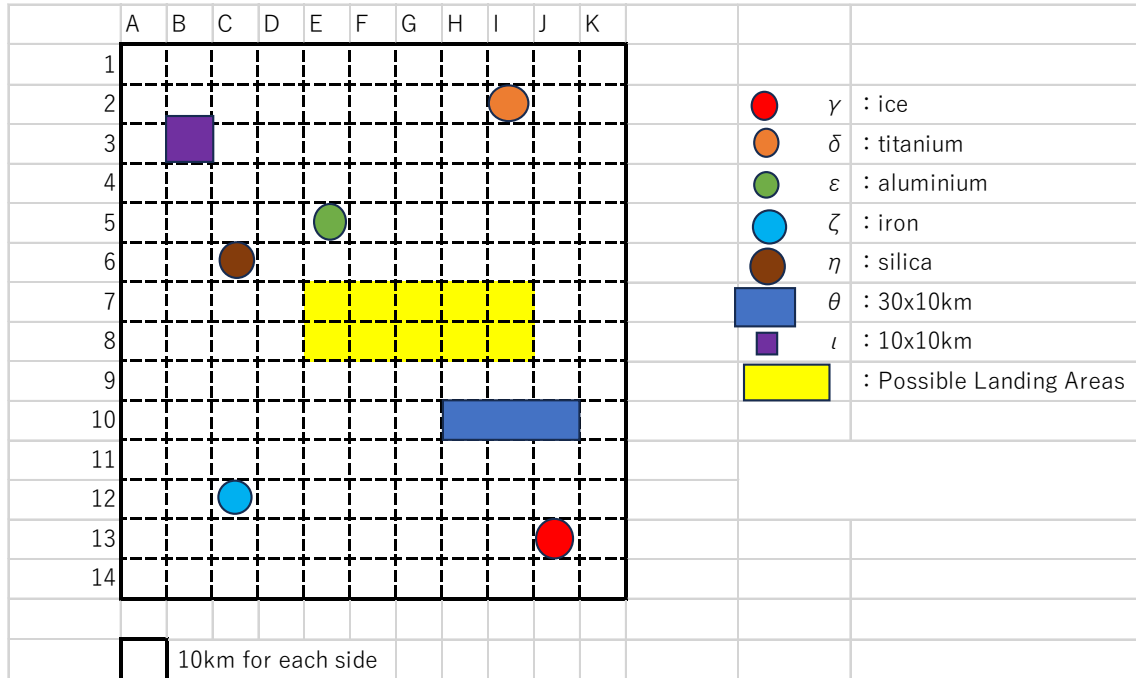
1. Does Red have the obligation to pay US\$75 million to Blue?
2. Is Blue obliged to pay US\$150 million to Red for the failure of launch under the Satellite Launch Agreement?
3. Should Bob Orange be removed?

## Exhibit 18

### Summary of findings.

- "Area  $\gamma$ ": there is a 60% possibility that there is a significant amount of water ice that could be used to acquire the water needed for long-term human activity on the Moon or to establish a base on the Moon in the future. However, there is also a 40% possibility that the amount of water ice is small.
- "Area  $\delta$ ": there is about a 75% chance that a significant amount of titanium is buried where it is not deep below the surface and can be easily mined. However, there is also a 15% possibility that titanium reserves are very small, and a 10% possibility that titanium reserves are sufficient but in areas that are difficult to mine.
- "Area  $\epsilon$ ": there is about a 75% possibility that there are rich deposits of aluminium underground, in locations that are not considered to be very difficult to mine. However, there is also a 10% possibility that only very small amounts of aluminium reserves exist, and a 15% possibility that aluminium reserves are abundant but in locations that are more difficult to mine.
- "Area  $\zeta$ ": there is a 90% chance that rich iron deposits exist underground, where they can be easily mined. However, there is also a 10% possibility that the amount of iron is not so great.
- "Area  $\eta$ ": there is about an 80% chance that there is an abundance of good quality silica that can be used to make semiconductors underground, where they can be easily mined. However, there is also a 20% chance that it is not present at all.
- "Area  $\theta$ ": a huge cavity, 30 km long and 10 km wide, exists underground at a depth deep enough to block direct sunlight, radiation, etc.
- "Area  $\iota$ ": a cavity 10 km long and 10 km wide, exists underground at a depth deep enough to block direct sunlight, radiation, etc.

Exhibit 19



- For various reasons, the possible landing sites for the second project are limited to one of the yellow areas.
- The rover can only travel along the squares and not across them (for example, if a rover is launched from a probe that lands at E7, it can only choose to move first to 6E, then to 6D, then to 6C, or first to 7D, then to 7C, then to 6C; it cannot move to 7D and then diagonally across the square to 6C). The time required for the rover to travel is based on the centre of the square. Thus, a rover traveling at 10 km/h would take 2 hours one way to travel from point 7E to point 5E, and from point 7E to point 6C would take 3 hours one way.
- You can enter the underground space from any square in the Area  $\theta$ , but you must exit from the same square when you leave.
- It is possible to pass through any of these areas without exploration.

Exhibit 20

Service offerings of Blue Link in Arbitria.

- Start-up kit: USD 500
  - Cost of satellite antenna, attachment stand, modem, router, etc.
  
- Monthly fee: USD 100 (unlimited data usage)
  
- Communication speed results
  - Download speed: 50Mbps to 150Mbps
  - Upload speed: 20Mbps to 40Mbps
  
- Blue currently does not distinguish service offerings based on whether the customer is an individual or a corporation.