ATTACHMENTA

AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE RUSSIAN FEDERATION REGARDING INTERNATIONAL TRADE IN COMMERCIAL SPACE LAUNCH SERVICES

The Government of the United States of America and the Government of the Russian Federation (hereinafter the "Parties"),

Recalling the contributions of all space-faring nations in developing space launch industries,

Taking note of the importance of access to space for peaceful purposes,

Recognizing the utility of developing multilateral principles for government involvement in commercial space launch activities.

Bearing in mind that the Russian space launch sector is in the process of transition to operation based on market principles, and

Desiring to facilitate early Russian entry into the international commercial space launch market in a manner that encourages market-oriented reform in the Russian economy, including its space-launch sector; permits Russian entities to offer commercial space launch services to international customers at fair and reasonable prices, consistent with market principles; and does not disrupt the international market for commercial space launch services,

Have agreed as follows:

ARTICLE I

DEFINITIONS

For the purposes of this Agreement,

- 1. "Commercial space launch services" means the commercially offered or provided services to launch into space any spacecraft or satellite, including but not limited to communications satellites, for an international customer;
- 2. "Russian space launch service providers" means any entity, or agent or instrumentality acting on its behalf, permitted by the Government of the Russian Federation to provide commercial space launch services or the space launch vehicles for such services.
- 3. "International customer" means: any person; or any kind of corporation, company, association, venture, partnership, or other entity, whether or not organized for pecuniary gain, or privately or governmentally owned or controlled; or any governmental body, excluding the Government of the United States of America and the Government of the Russian Federation; or any intergovernmental organization or quasi-governmental consortium, including but not limited to INTELSAT, INMARSAT and their respective legal successors, that is the ultimate owner or operator of a spacecraft or satellite or that will deliver the spacecraft or satellite to orbit for use by such ultimate owner or operator.
- 4. "Contract" means (i) to agree or commit to the provision of commercial space launch services such that a launch

is effectively removed from competition in the international market, or (ii) any such agreement or commitment.

- 5. "Comparable commercial space launch services" means commercial space launch services offered to launch a spacecraft of the weight class that is the subject of a launch competition, taking into consideration specific factors that may be considered when evaluating the price, terms and conditions of such services, including, but not limited to, intended orbit, risk management, financing, satellite lifetime on orbit and integration costs.
- 6. "Inducements" means any incentive offered or provided to influence the purchase of commercial space launch services, including, but not limited to, the provision of any resources of commercial value unrelated to the launch service competition as well as offers to participate under favorable conditions in the implementation of defense and national security policies and programs, and development assistance policies and programs.
- 7. "Unfair business practices" includes the making of any offer, a payment, a promise to pay, a promise or offer of anything of value or to authorize the payment of anything of value, or any promise to make such payment, to any official, individual, or any other entity for the purpose of obtaining or retaining business for or with, or directing business to, any person; including making payment to a person while knowing that all or a portion of the payment will be offered, given or promised, directly or indirectly, to any official, individual or

any other entity for the purposes of obtaining or retaining business.

- 8. "Geosynchronous earth orbit" means an orbit approximately 19,400 nautical miles (35,900 kilometers) above the surface of the earth at the equator in which a payload completes one Earth orbit in a 24-hour period, holding a fixed position relative to the Earth.
- 9. "Geosynchronous transfer orbit" means a temporary orbit used to reposition a spacecraft or satellite into a geosynchronous Earth orbit.
- 10. "Low earth orbit" means an orbit approximately 100 to 1,000 nautical miles (185 to 1,850 kilometers) above the surface of the Earth.
- 11. "Principal payload" means a telecommunications satellite or, in the absence of a telecommunications satellite, any other spacecraft or combination of spacecraft.

ARTICLE II

SCOPE

This Agreement applies to commercial space launch services for launches to geosynchronous earth orbit or geosynchronous transfer orbit. Except for the pricing provision set forth in Article V, paragraph 2, this Agreement applies to commercial space launch services for launches to other orbits and suborbital launches. Nothing in this Agreement applies to launches of payloads for military purposes or for use in the non-commercial,

civilian space programs of either Party, including programs using spacecraft or satellites made by and primarily for the use of members of the Commonwealth of Independent States and which are executed in accordance with existing cooperative agreements.

ARTICLE III

GENERAL PRINCIPLES

- 1. The Parties shall endeavor to ensure the application of market principles to international competition among providers of commercial space launch services, including the avoidance of below-cost pricing and unfair trade practices.
- 2. Neither Party shall engage in practices that distort competition among providers of commercial space launch services, including, but not limited to:
- a. the provision of grants or subsidies that distort the production or operation costs for suppliers of commercial space launch systems;
- b. the provision of inducements to international customers or potential international customers for commercial space launch services;
- c. the offering of additional services such as insurance or reflight guarantees except on a par with prevailing rates and practices in international markets for comparable risk;
- d. the provision of government-supported financing for commercial space launch vehicles or services except in accord

with the terms of the OECD's "Arrangement on Guidelines for Officially-Supported Export Credits."

instrumentalities, shall not engage in unfair business practices to secure contracts to provide commercial space launch services. Each Party shall also endeavor to ensure that any entity or organization, subject to its jurisdiction whether or not owned or controlled by that Party, shall not engage in corrupt business practices to secure contracts to provide commercial space launch services.

ARTICLE IV

QUANTITATIVE LIMITS

- 1. During the term of this Agreement, Russian space launch service providers may contract with international customers to provide commercial space launch services for the launch of up to eight (8) principal payloads (in addition to the INMARSAT 3 satellite) to geosynchronous earth orbit or geosynchronous transfer orbit, except that the Russian space launch service providers may not conduct more than two (2) such launches in any twelve-month period. The Russian Federation will ensure a proportionate distribution of contracts by Russian space launch service providers within any two-year period.
- 2. Up to four launches of principal payloads to geosynchronous earth orbit or geosynchronous transfer orbit may consist of two principal payloads on a single launch vehicle.

The Parties shall jointly evaluate each such launch on a case-by-case basis and, taking into account the current situation in the international commercial space launch market, may decide by mutual agreement to treat that launch as a single principal payload for the purpose of Article IV, paragraph 1.

- 3. During the term of this Agreement, Russian space launch service providers may contract to provide commercial space launch services for up to three (3) launches of satellites to low earth orbit for the Iridium system.
- 4. In the course of consultations under Article VII, paragraph 1, the Parties shall consider jointly on a case-by-case basis and decide by mutual agreement on proposals by Russian space launch service providers for commercial suborbital launches and additional commercial launches to orbits other than geosynchronous earth orbit, geosynchronous transfer orbit, and low-earth orbit for the Iridium system, where there are competing comparable commercial space launch services.

ARTICLE V

PRICING

1. The contractual terms and conditions, including the price, of commercial space launch services offered or provided by Russian space launch service providers to international customers shall be comparable to the terms and conditions, including prices, for comparable commercial space launch services offered

by commercial space launch services providers from market economy countries, including the United States.

2. A bid or offer by Russian space launch service providers to provide commercial space launch services at a price more than seven and one-half (7.5) percent below the lowest bid or offer by a commercial space launch service provider from a market economy country, including the United States, shall require special consultations between the Parties under Article VII, paragraph 2, of this Agreement.

ARTICLE VI

TECHNOLOGY CONTROLS

- 1. Notwithstanding any other provision of this Agreement, the Parties shall negotiate and conclude prior to each launch a satisfactory technology safeguards agreement for each payload subject to a United States export license. Such technology safeguards agreement will be intended to facilitate the issuance of United States export licenses and shall include requirements relating to the control of the transfer of missile technology.
- 2. Any application for a United States export license will be reviewed on a case-by-case basis consistent with United States laws and regulations. Nothing in this Agreement shall be construed to mean that the United States is constrained from taking appropriate action with respect to any United States export license. The United States will use its best efforts to assure, consistent with United States laws and regulations,

authorization and completion of technology transfers subject to this Agreement.

ARTICLE VII

CONSULTATIONS

- 1. The Parties shall hold regular consultations on an annual basis to review and examine implementation of the Agreement and market developments in commercial space launch services.
- 2. The Parties shall hold special consultations on an urgent basis, prior to the conclusion of a contract for commercial space launch services if possible, at the request of either Party, if that Party has reason to believe that such contract or pending contract is inconsistent with the terms of this Agreement.
- 3. If, after consultations provided for under this Article, either Party determines that the provisions of this Agreement have been violated by the other Party, each Party reserves its right to take any action permitted under its national laws and regulations.
- 4. If, in the course of the annual reviews provided in paragraph 1 of this Article, the Parties agree that the market for commercial space launch services has developed more favorably than anticipated and if each Party is satisfied with the other Party's compliance with terms of this Agreement, the quotas set

forth in Article IV of this Agreement may be increased, by written agreement of the Parties.

ARTICLE VIII

INFORMATION EXCHANGE

- 1. The Parties shall exchange all information, including prices, terms and conditions offered for commercial space launch services, that is necessary to monitor implementation of the Agreement and carry out regular and special consultations. Such information shall be provided promptly, in any case no later than 30 days after receipt of a request by the other Party for such information, except that such information need not be provided prior to bids for commercial space launch services.
- 2. Parties shall protect the confidentiality of information exchanged, shall not use any such information for pecuniary gain and shall not release such information to third parties.

ARTICLE IX

TERM AND REVIEW

- 1. This Agreement shall enter into force upon signature and remain in force until December 31, 2000.
- 2. The Parties shall review the implementation of this Agreement after three years from its entry into force. Following such review, the Parties may, by mutual written agreement, terminate this Agreement.

- 3. Either Party may request negotiations to amend the terms of this Agreement to take account of developments in the international market for commercial space launch services and progress in the transition of Russia's space launch sector to a market basis.
- 4. Any contract entered into pursuant to this Agreement will continue to be subject to the provisions of this Agreement even if the duration of the contract extends beyond the expiration date of this Agreement. Termination of this Agreement will not affect contracts entered into pursuant to this Agreement.

DONE at Washington this second day of September, 1993, in duplicate in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

FOR THE GOVERNMENT OF THE RUSSIAN EEDERATION:

AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE RUSSIAN FEDERATION TO AMEND THE

"Agreement Between the Government of the United States of America and the Government of the Russian Federation Regarding International Trade in Commercial Space Launch Services"

The Government of the United States of America and the Government of the Russian Federation hereby agree, with respect to the Agreement Between the Government of the United States of America and the Government of the Russian Federation Regarding International Trade in Commercial Space Launch Services, signed in Washington, D.C. on September 2, 1993, as follows:

- 1. the provisions of that agreement are hereby amended as provided in the attached Appendix; and
- 2. the requirement for a review of implementation of that agreement under Article IX, paragraph 2, is deemed to have been met.

DONE at Washington this 30th day of January, 1996, in duplicate in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

FOR THE GOVERNMENT OF THE RUSSIAN FEDERATION:

APPENDIX

The Agreement Between the Government of the United States of America and the Government of the Russian Federation Regarding International Trade in Commercial Space Launch Services, signed in Washington, D.C. on September 2, 1993, is amended by

1. Amending Article I, paragraph 10, to read as follows:

ARTICLE I

DEFINITIONS

- 10. "Low earth orbit" means any orbit below geosynchronous orbit or geosynchronous transfer orbit.
- 2. Amending Articles IV, V, VII, and VIII to read as follows, and:

ARTICLE IV

QUANTITATIVE LIMITS

1. During the term of this Agreement, Russian space launch service providers may contract with international customers to provide commercial space launch services for the launch of up to fifteen (15) principal payloads (in addition to the INMARSAT 3 satellite) to geosynchronous earth orbit or geosynchronous transfer orbit. The Russian Federation shall make its best efforts to ensure a proportionate distribution of contracts by Russian space launch service

providers within any two-year period. If the average annual number of internationally competed commercial launches, including launch failures, is 24 or more over the three year period 1996 through 1998 or if the Parties, by mutual agreement, conclude that commitments for such launches indicate that an average annual number of internationally competed commercial launches of 24 or more will occur during that period, then this quantitative limit shall be raised to seventeen (17) (in addition to the INMARSAT 3 satellite). If the average annual number of internationally competed commercial launches, including launch failures, is 24 or more over the four year period 1996 through 1999 or if the Parties, by mutual agreement, conclude that commitments for such launches indicate that an average annual number of internationally competed commercial launches of 24 or more will occur during that period, then this quantitative limit shall be raised to nineteen (19) (in addition to the INMARSAT 3 satellite).

- 2. Up to four launches of principal payloads to geosynchronous earth orbit or geosynchronous transfer orbit may consist of two principal payloads on a single launch vehicle. The Parties shall jointly evaluate each such launch on a case-by-case basis and, taking into account the current situation in the international commercial space launch market, may decide by mutual agreement to treat that launch as a single principal payload for the purpose of Article IV, paragraph 1.
- 3 During the term of this Agreement, Russian space launch service providers may contract to provide commercial space launch services for up to three (3) launches of satellites to low earth orbit for the Iridium system
- 4 Both Parties agree that Russian participation in commercial space launch services to low earth orbit that are single launches and that are not part of the initial deployment of a satellite

constellation shall not be disruptive to the normal functioning of the market. The United States shall be guided in its assessment of the effect, or potential effect, of Russia's participation in this low earth orbit market segment by, inter alia, the extent and growth of overall Russian and U.S. participation in this market. If either Party believes that the other Party is participating, or may participate, in this market in a manner inconsistent with its commitments under this Agreement, the Parties shall meet pursuant to the consultations provided for under Article VII, paragraph 2, of this Agreement to ascertain the facts of the situation and take appropriate corrective action.

- 5. With respect to proposals to deploy satellite constellations in low earth orbit during the term of this Agreement, the United States shall assess the effect or potential effect of Russia's participation in this low earth orbit market segment relative to Russia's commitments under this Agreement in terms of the extent of participation by Russian, U.S., and third country commercial space launch services providers in the deployment. In particular, the United States will consider whether the overall level of participation by commercial space launch services providers in countries with whom the United States has concluded a bilateral commercial space launch services agreement (measured according to distribution of payloads) in the deployment of any single LEO communications satellite constellation is greater than the participation of market economy commercial space launch services providers. The following factors will, inter alia, also be taken into account:
 - a. launch scheduling requirements and the need to optimize launch vehicle selection to meet deployment or operational requirements,

- b. the availability of competitively-priced market economy launches to meet these requirements;
- c. opportunities made available to other parties for participation in the replacement market;
- d. reasonable considerations by the proposed system operator regarding commercial risk sharing; and
- e customers' requirements

If either Party believes that the other Party is participating, or may participate, in the low earth orbit satellite constellation market in a manner inconsistent with its commitments under this. Agreement, the Parties shall meet pursuant to the consultations provided for under Article VII, paragraph 2, of this Agreement to ascertain the facts of the situation and take appropriate corrective action. The criteria set forth in this paragraph may be reconsidered by the Parties. Among the events that would justify favorable reconsideration for elimination of the criteria in this paragraph would be a commercially viable project for satellite services that fundamentally changes demand for commercial space launch services.

6. In the course of consultations under Article VII, paragraph 1, the Parties shall consider jointly on a case-by-case basis and decide by mutual agreement on proposals by Russian space launch service providers for commercial suborbital launches where there are competing

comparable commercial space launch services

ARTICLE V

PRICING

- 1. The contractual terms and conditions, including the price, of commercial space launch services offered or provided by Russian space launch service providers to international customers shall be comparable to the terms and conditions, including prices, for comparable commercial space launch services offered by commercial space launch services providers from market economy countries, including the United States.
- 2. When a bid, offer or contract by a Russian space launch service provider is less than 15 percent below a bid, offer or contract by a commercial space launch services provider from a market economy country, including the United States, to provide the commercial space launch services described in Article IV, paragraphs 1 and 2, it shall be assumed, unless information is provided to the contrary, that such bid, offer, or contract is consistent with paragraph 1 above and that no special consultations are needed. When a bid, offer or contract by a Russian space launch service provider is greater than 15 percent below a bid, offer or contract by a commercial space launch services provider from a market economy country, including the United States, the United States, after taking into consideration the comparability factors described in the Annex to this Agreement, may request special consultations under Article VII, paragraph 2.

ARTICLE VII

CONSULTATIONS

- 1 The Parties shall hold regular consultations on an annual basis to review and examine implementation of the Agreement and market developments in commercial space launch services.
- 2. In addition, each Party undertakes to enter into special consultations within thirty (30) days of a request by the other Party to discuss matters of particular concern. In particular, special consultations will be held to review the situation in which there is an absence of Western launch availability due to full manifests or launch failures during the required launch period (generally within three (3) months before and after the preferred launch date), if Russia has reached a limitation set out in Article IV, paragraph 1. If information is provided that verifies, to the satisfaction of the United States, that the situation described above exists, the United States may increase the quantitative limits on available launches established under Article IV, paragraph 1, to permit the satellite to be placed on a launch vehicle manifest for launch.
- 3. If, after consultations provided for under this Article, either Party determines that the provisions of this Agreement have been violated by the other Party, each Party reserves its right to take any action permitted under its national laws and regulations.
- 4 If, in the course of the annual reviews provided in paragraph 1 of this Article, the Parties agree that the market for commercial space launch services has developed more favorably than anticipated and if each Party is satisfied with the other Party's compliance with terms of this Agreement, the quotas set forth in Article IV of this Agreement may be increased, by written agreement of the Parties
 - 5 The Parties agree to work toward a common understanding of the application of

market principles to prices, terms, and conditions of commercial space launch services for international customers.

ARTICLE VIII

INFORMATION EXCHANGE

- 1 To facilitate the annual consultations under Article VII, the United States and Russia agree to exchange information as follows:
 - a. The United States shall each year in advance of such consultations provide to Russia such publicly releasable information as it possesses with respect to prices, terms and conditions prevailing in the international market for commercial space launch services. Russia may request that the United States provide additional publicly releasable information with respect to international prices, terms and conditions, and may in addition request United States views regarding prevailing international market conditions and likely future developments, as well as government supports or inducements. The United States shall respond to such requests within thirty (30) days. If such information cannot be provided directly because of business confidentiality, the United States shall provide such information in summary form.
 - b Russia shall in advance of such consultations provide comprehensive information to the United States regarding prices, terms, and conditions offered by Russian space launch service providers for the launch of satellites. The United States may request additional information with respect to the prices, terms, and conditions offered by Russian space

launch service providers and any government supports or inducements. Russia shall respond to such requests within thirty (30) days. If such information cannot be provided directly because of business confidentiality, Russia shall provide such information in summary form

- c. The United States and Russia shall keep all information received from each other under subparagraphs (a) and (b) strictly confidential and shall not provide it to any other government or any private person without the written consent of the other.
- d. The United States and Russia shall also provide each year, in advance of annual consultations, information on a consolidated basis concerning the commitments their space launch service providers have undertaken to provide commercial space launch services for international customers. This information may be made publicly available.
- 2. If a launch of a satellite for an international customer which is subject to the terms of this Agreement will not be performed as scheduled, Russia shall notify the United States regarding any significant change in launch scheduling affecting the implementation of this Agreement and the new date for such launch as soon as possible.

3. Adding the following Annex:

ANNEX: Pricing Comparability Factors for GEO and GTO Commercial Space Launch Services

The Parties agree to the following factors as being relevant to the comparison or evaluation of commercial launch services offered in the international market for launches to geosynchronous earth orbit or geosynchronous transfer orbit. Such factors can often explain legitimate distinctions in the price offered for the launch of a particular payload by different launch providers, and are particularly useful in comparing bids from market economy providers to those from economy-in-transition providers of commercial space launch services

Comparability Factor

Description

Intended Orbit

Based on delivery orbit for launch

provider, and the provider of perigee kick motor (PKM)

Risk Management

Addresses potential differences in insurance
for customer, based on vehicle and
scheduling reliability (and the different forms

of risk management, such as political risk

insurance)

Additional Costs

Integration Costs

Addresses different types of payload/vehicle integration costs, and software/hardware modifications necessary for the mission

Launch Support

Involves extra transportation expenses,
security costs, extra equipment, and
personnel support costs (relative to western
launches) due to launching in the New
Independent States of the former Soviet
Union

Required Vehicle Lift Capability

Ensures comparison of vehicle classes
providing similar performance that are
matched to the payload mass and that are
adequate to place the payload into the
desired orbit

Payment Conditions/Terms

Relates to various payment and financial conditions or incentives that may be offered as part of a commercial space launch services bid (governed by the provisions of any relevant trade agreements and OECD

guidelines)

Lifetime

Addresses impacts of different satellite
lifetimes (on orbit) resulting from the
commercial space launch services (this is not
always a factor - the impact varies
depending on case in question)