

ANNEX ON TELEMETRIC INFORMATION TO THE PROTOCOL TO THE TREATY
BETWEEN THE UNITED STATES OF AMERICA
AND THE RUSSIAN FEDERATION ON MEASURES FOR THE
FURTHER REDUCTION AND LIMITATION OF STRATEGIC OFFENSIVE ARMS

Part One - Definitions

For the purposes of this Annex:

1. The term "providing Party" means the Party that provides telemetric information on launches of ICBMs or SLBMs, provides telemetric information playback equipment and its spare parts, conducts demonstrations of recording media and telemetric information playback equipment, or provides training in the operation and maintenance of telemetric information playback equipment.
2. The term "receiving Party" means the Party that receives telemetric information on launches of ICBMs or SLBMs, acquires telemetric information playback equipment and its spare parts, participates in demonstrations of recording media and telemetric information playback equipment, or receives training in the operation and maintenance of telemetric information playback equipment.
3. The term "trainee team" means the group of individuals assigned by the receiving Party for training in the operation and maintenance of telemetric information playback equipment on the territory of the providing Party.

Part Two - General Provisions

1. The Party conducting a launch of an ICBM or SLBM that it intends to consider for provision of telemetric information to the other Party shall, in a notification of such a launch provided in accordance with Section IV of Part Four of the Protocol, specify all frequencies expressed in megahertz to the nearest one-tenth of a megahertz and modulation methods to be used to broadcast telemetric information subject to provision to the other Party.
2. For launches of ICBMs or SLBMs specified in paragraph 1 of this Part, the Party conducting such launches shall not take any measures to deny access to the telemetric signal broadcast and shall not encrypt telemetric information that may be provided to the other Party.
3. For each launch of an ICBM or SLBM that the Party conducting such launches does not intend to consider for provision of telemetric information to the other Party, the Party conducting such launches may use any method of denying access to telemetric information that originates on board the missile and is broadcast.
4. The Parties shall begin the exchange of telemetric information in accordance with paragraphs 1, 2, 6, 7, and 9 of Part Two, and with Part Three of this Annex after agreement has been reached within the framework of the BCC on the amount of telemetric information on ICBM and SLBM launches that each Party shall provide.
5. The Parties shall not exchange telemetric information that originates in reentry vehicles or in other objects installed on an ICBM or SLBM for the purpose of being delivered into the upper atmosphere or space.
6. When exchanging telemetric information, the Parties shall provide:

(a) Recording media containing a recording of telemetric information broadcast during a launch, in the amount agreed in accordance with paragraph 4 of this Part;

(b) Summaries of the recording media specified in subparagraph (a) of this paragraph; and

(c) Interpretive data for the telemetric information.

7. No later than 60 days after the BCC takes the decision specified in paragraph 2 of Part Seven of the Protocol, each Party shall simultaneously provide to the other Party, through diplomatic channels, recording media with a recording of telemetric information, summaries of such recording media, and interpretive data. Written materials shall be provided in the English or Russian language at the discretion of the providing Party.

8. In order to make it possible for the other Party to play back the recording of the telemetric information provided, each Party shall:

(a) Conduct for the receiving Party an initial demonstration of the applicable recording media and telemetric information playback equipment in accordance with Part Four of this Annex.

(b) Conduct for the receiving Party a demonstration of the recording media and/or telemetric information playback equipment that are different from those for which a demonstration was previously conducted in accordance with Part Four of this Annex.

(c) If requested, provide the receiving Party with the opportunity to acquire the telemetric information playback equipment and spare parts for such equipment, in accordance with Part Five of this Annex.

(d) If requested, provide timely training in the operation and maintenance of the telemetric information

playback equipment to personnel of the receiving Party, in accordance with Part Six of this Annex.

(e) Use those types of modulation, methods, modes, and formats for recording, as well as methods for encoding telemetric information on recording media that, along with summaries of the recording media, allow the receiving Party to convert telemetric information to the form (format) that originates on board the missile before broadcast, using telemetric information playback equipment for which a demonstration was conducted.

9. Telemetric information shall be exchanged for launches that the Parties conduct after entry into force of the Treaty.

Part Three - Provision of Recording Media, Summaries of
Recording Media, and Interpretive Data for Telemetric
Information

1. With respect to subparagraph 6(a) of Part Two of this Annex, each Party shall have the right to use and provide to the other Party any recording media containing a recording of telemetric information for which a demonstration was previously conducted. Such recording media shall be compatible with the telemetric information playback equipment for which a demonstration was previously conducted.

2. Summaries of each recording medium provided in accordance with subparagraph 6(b) of Part Two of this Annex shall include:

(a) Type of ICBM or SLBM, date of launch, recording medium number, recorder type, recording speed for the recording media in meters per second or in inches per second, if applicable, and type of filing system for the recording media, if applicable.

(b) Information on each recording track including recording track number, and information on the structure of the file and location of the information word bits in the file, as applicable, starting and ending times of the recording keyed to a GMT time standard, recording mode, and frequency in megahertz and modulation method used to broadcast the telemetric information.

(c) Description of the digital data encoding methods employed and description of the digital data recording formats.

(d) Identification and explanation, where possible, keyed to a GMT time standard, of those periods of time during the launch of an ICBM or SLBM for which no recording was obtained

on the recording medium or for which the recording on the recording medium is of inferior quality.

(e) Method for telemetric information playback from the recording medium that enables the conversion of information contained on the recording medium to the form (format) that originates on board the missile before broadcast.

3. The receiving Party shall provide notification in accordance with paragraph 2 of Section IV of Part Four of the Protocol if the receiving Party determines that:

(a) The recording media provided do not contain a recording of the complete set of telemetric information in the amount agreed in accordance with paragraph 4 of Part Two of this Annex; or

(b) The quality of the telemetric information recorded on the recording medium is insufficient to convert it to the form (format) that originated on board the missile before broadcast; or

(c) The information in a summary of the recording medium is insufficient to convert the telemetric information contained on such a recording medium to the form (format) that originated on board the missile before broadcast.

4. Upon receipt of the notification specified in paragraph 3 of this Part, the providing Party shall provide a notification, in accordance with paragraph 3 of Section IV of Part Four of the Protocol, containing an explanation concerning the incompleteness or insufficient quality of the recording media provided, or insufficient quality of the recording of telemetric information contained on them, or shall provide, through diplomatic channels, new recording media containing a recording of the telemetric information or new summaries of the recording media previously provided.

5. The interpretive data provided in accordance with subparagraph 6(c) of Part Two of this Annex shall contain a

description of the format of the telemetry frame and encoding methods, including, among other things:

- (a) Number of bits per standard word.
- (b) Number of standard words per frame.
- (c) Number of frames per second.
- (d) Location of synchronization words or synchronization bits.
- (e) Location of information in the frame describing its formatting.
- (f) Designation and location of each data element on the entire interval of the telemetric information provided to the other Party, and, if in a given word location a time-sharing mode is used for two or more data elements, the structure for such time-sharing mode.
- (g) Method of representing each data element, including the location of each bit in each data element, the order of the bits from least significant to most significant, and the method for representing negative values.
- (h) All information regarding encoding algorithms, including error detection and correction, data compression, and any conversion processes that are applied in the telemetry equipment to parameter values measured on board.

6. Each Party shall provide a complete set of interpretive data, in accordance with paragraph 5 of this Part, for each launch on which telemetric information is provided. References to interpretive data for other launches shall not be permitted.

7. The providing Party shall provide to the receiving Party summaries of the recording medium that, together with the playback of telemetric information on the telemetric

information playback equipment for which a demonstration was previously conducted, provide the receiving Party with the opportunity to convert the telemetric information provided to the form (format) that originated on board the missile before broadcast.

8. If the receiving Party determines that interpretive data do not meet the requirements set forth in paragraph 5 of this Part, this Party shall provide a notification in accordance with paragraph 2 of Section IV of Part Four of the Protocol.

9. Upon receipt of the notification provided in accordance with paragraph 8 of this Part, the providing Party shall provide a notification, in accordance with paragraph 3 of Section IV of Part Four of the Protocol, containing an explanation concerning the incompleteness or insufficient quality of the interpretive data or shall provide, through diplomatic channels, revised interpretive data for telemetric information.

Part Four - Arranging and Conducting Demonstrations of Recording Media and Telemetric Information Playback Equipment

1. With respect to subparagraph 8(a) of Part Two of this Annex, each Party shall conduct an initial demonstration of recording media and playback equipment for telemetric information from such media no later than 180 days after entry into force of the Treaty.
2. With respect to subparagraph 8(b) of Part Two of this Annex, each Party shall conduct a subsequent demonstration of a recording medium and/or relevant telemetric information playback equipment, if the recording medium, type of modulation, mode, recording format, or method of encoding telemetric information differs from that used previously and requires the use of different telemetric information playback equipment or a modification of existing telemetric information playback equipment. Such a demonstration shall be conducted no less than 60 days in advance of the beginning of the calendar year during which such recording medium is to be provided or no later than 60 days after receipt of a request provided in accordance with paragraph 4 of this Part.
3. If the differences specified in paragraph 2 of this Part do not require the use of different telemetric information playback equipment or modification of existing telemetric information playback equipment, the providing Party shall provide, through diplomatic channels, no less than 60 days in advance of the beginning of the calendar year during which such recording media are to be provided, information describing the type of modulation, mode, recording format or method of encoding telemetric information, as well as a recording medium with a recording of test telemetric information that makes it possible to ascertain that the descriptions provided are sufficient.
4. If the receiving Party believes that the information provided in accordance with paragraph 3 of this Part is

insufficient, this Party shall provide a notification containing a request to conduct a demonstration in accordance with paragraph 2 of this Part.

5. Notification of the planned date and place for conducting a demonstration of recording media and/or playback equipment for telemetric information from such media shall be provided in accordance with paragraph 4 of Section IV of Part Four of the Protocol.

6. The providing Party shall determine the location of the demonstration.

7. The amount of information in the summary of the recording medium specified in paragraph 2 of Part Three of this Annex may be supplemented with other information describing the recording medium. The content of such additional information shall be agreed by the Parties during the conduct of the demonstration of the recording medium or within the framework of the BCC.

8. Procedures for conducting demonstrations of recording media and telemetric information playback equipment shall be agreed by the Parties within the framework of the BCC.

9. The costs associated with transportation of individuals participating in demonstrations to and from the point of entry on the territory of the providing Party shall be borne by the receiving Party. Other costs associated with arranging and conducting demonstrations in accordance with paragraphs 1 and 2 of this Part shall be borne by the providing Party.

Part Five - Provision of Telemetric Information Playback
Equipment and Spare Parts

1. With respect to subparagraph 8(c) of Part Two of this Annex each Party shall, upon request, provide to the other Party the opportunity to acquire the equipment for the playback of telemetric information contained on recording media for which a demonstration was previously conducted, together with the appropriate software and technical documentation. Notification containing such a request, or a response to a request, shall be provided in accordance with paragraph 5 of Section IV of Part Four of the Protocol, taking into account the following sequence:

(a) The receiving Party shall provide notification containing a request about the possibility to acquire telemetric information playback equipment for which a demonstration was previously conducted.

(b) The providing Party that received such a request shall provide notification to the receiving Party of the estimated time frame for delivery of such equipment, its cost, and weight and size in the transport packaging.

(c) The receiving Party shall provide notification of its agreement to acquire or its refusal to acquire the requested equipment.

2. The time frame for provision of such equipment to the receiving Party shall not exceed 120 days, unless otherwise agreed by the Parties, from the date of receipt of notification provided for in subparagraph 1(c) of this Part.

3. Each Party shall, upon request, provide to the other Party an opportunity to acquire spare parts for previously purchased telemetric information playback equipment, with detailed instructions on installation of the specified spare parts. Notification containing such a request, or a response to a

request, shall be provided in accordance with paragraph 5 of Section IV of Part Four of the Protocol, taking into account the following sequence:

(a) The receiving Party shall provide notification containing a request to acquire spare parts for telemetric information playback equipment for which a demonstration was previously conducted.

(b) The providing Party that received such a request shall provide notification to the receiving Party of the estimated time frame for delivery of spare parts, their cost, and weight and size in the transport packaging.

(c) The receiving Party shall provide notification of its agreement to acquire or its refusal to acquire the requested spare parts.

4. The time frame for provision to the receiving Party of spare parts for telemetric information playback equipment shall not exceed 90 days, unless otherwise agreed by the Parties, from the date of receipt of notification provided for in subparagraph 3(c) of this Part.

5. In the event of two or more malfunctions of the same components of the telemetric information playback equipment, the providing Party shall, upon receipt of a request from the receiving Party with a detailed description of the malfunction and the conditions in which it occurred, provide detailed explanations with an analysis of the possible cause of the malfunction of the equipment and recommendations for the prevention of such malfunctions in the future. Such requests and responses to them shall be provided through diplomatic channels.

6. The costs associated with the acquisition of the telemetric information playback equipment and/or its spare parts, including delivery and installation, shall be borne by the receiving Party.

Part Six - Training in the Operation and Maintenance of
Telemetric Information Playback Equipment for Personnel of the
Receiving Party

1. With respect to subparagraph 8(d) of Part Two of this Annex, training in the operation and maintenance of telemetric information playback equipment for personnel of the receiving Party shall be conducted on the territory of the providing Party.

2. With respect to the number and list of team members assigned for training and the provision of visas:

(a) The team shall not exceed 14 individuals.

(b) The receiving Party shall provide, through diplomatic channels, a list of team members in advance of their arrival on the territory of the providing Party. The provisions of paragraph 6 of Section II of Part Five of the Protocol on an objection to an individual included on the list of inspectors, shall apply to an objection to a team member. The providing Party shall provide notification of its objection no later than 15 days after receipt of such list.

(c) The providing Party shall provide visas, and, where necessary, other documents to each team member to whom it has not objected, as may be required to ensure that each team member may enter and remain on the territory of this Party throughout the training period.

3. With respect to the trainee team:

(a) The providing Party shall provide necessary assistance, including safety briefings, to the trainee team members.

(b) The providing Party shall provide to each trainee team member necessary training materials in the language of

the receiving Party, and shall also provide one set of training materials for the entire team in the language of the providing Party.

(c) The provisions of paragraph 7 of Part One of the Annex on Inspection Activities on movement, travel, and emergency evacuation shall apply to the trainee team leader and representatives of the providing Party.

(d) Throughout the in-country period, the providing Party shall ensure that the trainee team can be in communication with the embassy of the receiving Party, located on the territory of the providing Party, using telephonic communications provided by the providing Party.

(e) The providing Party shall treat with due respect the trainee team members on its territory and shall take all appropriate measures to prevent any attack on their person, freedom, and dignity.

4. With respect to arrangements for air transportation:

(a) The Parties shall use inspection airplanes, airplanes making regularly scheduled commercial flights, or Open Skies airplanes.

(b) The receiving Party shall provide notification to the providing Party of the expected arrival of trainee team members no less than 72 hours in advance of the estimated time of arrival of the trainee team members at the point of entry located on the territory of the providing Party. Such notifications shall include:

(i) The date and estimated time of arrival at the point of entry; and

(ii) The name, date of birth, place of birth, and passport number of each trainee team member.

5. With respect to the report and confidentiality requirements:

(a) Before departing the location where training in operation and maintenance was conducted, the trainee team leader and a representative of the providing Party shall record in a written report the training activities that were carried out and shall confirm the completion of such activities.

(b) The receiving Party shall ensure that trainee team members not publicly disclose information obtained during training except with the express consent of the receiving Party. Such consent shall be granted only with the express consent of the providing Party.

6. Throughout the in-country period, the providing Party shall provide meals, lodging, work space, transportation, and, as necessary, medical and other urgent services for the trainee team.

7. Training materials provided for the training period shall be furnished to the receiving Party at no cost.

8. Costs associated with transportation to and from a point of entry on the territory of the providing Party and costs associated with implementation of paragraph 6 of this Part shall be borne by the receiving Party.