

Appendix № 1
to a government contract

№ Of "" 20 ..., the

SPECIFICATIONS

to "upgrade products 83t362 Part
provide interaction with the system 15E1 "
(Code - KSSM-M)

1. NAME, code and BASE TO IMPLEMENT

WORK

1.1 Name of the work - "Modernization products 83t362 in part to ensure interaction with the system 15E1.

1.2 Product Code - KSSM-M.

> @ KCCM-ⁿ 837704M

1.3. Product index - 83t744M.

1.4. The basis for the development - the decision of the Government of the Russian Federation (GOZ 2009-2011).

1.5. Head singer works:

Determined by the results of the competition.

Note. If necessary, the head singer has the right to engage contractors established procedures.

2. PURPOSE OF PERFORMANCE

837362

2.1 The purpose of the implementation of the modernization of the product with the modernization of existing
~~83t362~~ 83t744 products based on new hardware and software interface products 83t10, 83t11 15E1M with the
product. 15E1M

3. TACTICAL AND TECHNICAL REQUIREMENTS FOR PRODUCT

3.1. The composition of the product

3.1.1. The composition KSSM-M should contain the following components:

3.1.1.1. VK600-10 product is designed to perform functional tasks KSSM-M, comprising:

- Network Switch KE2004-05 - 2 pcs;
- Block BV621-01 - 3 piece.
- Block BS678-10 - 1 piece.
- Block BU715-02 - 1 piece.
- Ventilating device UV600 - 1 piece.
- A set of assembly parts - 1 set;
- A set of operational documentation - 1 set;
- Maintenance kit, including the TRC - 1 set;

3.1.1.2. VK600-10 product is designed to interface KSSM-M 15e1M product, comprising:

- Block BV621-01 with board 4hRS232/485 - 2 piece.
- Block BS678-10 - 1 piece.
- Block BU715-02 - 1 piece.
- Ventilating device UV600 - 1 piece.
- A set of assembly parts - 1 set;
- A set of operational documentation - 1 set;
- Maintenance kit, including the TRC - 1 set;

3.1.1.3 Product ADF-M - 4 sets;

3.1.1.4 Apparatus T-226 DM - 4 sets;

3.1.1.5 PC IMM products ADF-M - 1 pc.;

3.1.1.6. Cupboard SHE604 -2 piece.

3.1.1.7. Shield SCHR606 -1 piece.



- 3.1.1.8. Filter PSPC -2 piece.
- 3.1.1.9. Suite software KSSM-M - 2 sets;
- 3.1.1.10. Set of mounting parts - 1 set;
- 3.1.1.11. Set of operational documentation - 1 set;
- 3.1.1.12. SPTA, including instrumentation - 1 set; *Spare*
- 3.1.1.13 Set pilings ISP; *Spare*
- 3.1.1.14 set of accessories.

Notes: 1. Composition and number of vehicle can be specified in the

Revised CD.

2. TC p.3.1.1.3, 3.1.1.4 come with the object of the Customer
by cerebral artist (can be supplied
newly constructed, modernized TS).

3.2. Requirements for appointment

3.2.1 KSSM-M should provide work on a protocol of interaction products 83t11 ~~15e1M~~ with the product, the reception-transmission of the following types of information:

15e1M

- Acceptance of the ~~ODS~~ ^{*SOD*} commands, queries, data marts, query service kodogramm;

kodogr is code (SOD message form.)

- The issuance of the product 15e1M orders, requests for information files taken from the ODS, as well as generated automatically;

- Receiving and processing incoming goods from 15e1M data sets and office kodogramm;

SOD

- The issuance of a pig taken from the product 15e1M data sets and office kodogramm.

3.2.2 When sending messages (kodogramm) between CSA products 83t10, 83t11 and link products 15e1M KSSM-M should provide:

3.2.2.1 Automatic conversion of message formats articles 83t10, 83t11 in message formats 15e1M products and vice versa.

3.2.2.2 priority processing messages (kodogramm) in accordance with specified in the message header, category of urgency.

3.2.2.3 Storage adopted by the CSA product 83t10, 83t11 requests for call data marts, bind adopted from care products 15e1M data arrays to the requirements and the issuance of the array to the CSA-requester.

?

3.2.2.4 Removing a reference to a product 15e1M orders for which the difference of time between the issuance of a sender and a willingness to transfer to 15e1M than 30 seconds.

3.2.2.5 Automatic withdrawal from the periodicity of 1 min queries cw call TCB and TSD, the issuance of actions taken on those requests arrays in VC TA.

3.2.2.6 Data entry, storage and adjustment of conditional number KSSM-M on the procedures ~~adopted in the~~ *for* articles 83t10, 83t11 and basic pig. 500

3.2.2.7 Registration and (or) documentation with reference to the current time of all incoming and outgoing *n* messages nedovedennyh (kodogramm) in two formats (product 83t11 and ~~soy~~ *coll* products 15e1M) means CORP with the possibility of current or subsequent listing on CORP.

3.2.2.8 Preservation taken (registered) kodogramm and deletion of information loss with the probability of not less than the product 83t362 at failures, intermittent power failure with subsequent recovery of data. *n*

3.2.2.9 Adjustment of time with the operator's console RMSO.

3.2.2.10 Corrections transit sign up to start functioning KSSM-M.

3.2.3 KSSM-M should provide for the exchange of information with the *kca* ~~CSA~~ product 83t10 to 4 channels of communication with the base ~~ODS~~ *SOD* rate 1200 - 9600 bps through the ~~SEC~~ *TTC* from the object.

3.2.4 KSSM-M should provide for the exchange of information with the link of the product 15e1M two directions of the two channels, each with a transfer rate of 1200 bits / sec in algorithms and message formats adopted in this product.

3.2.5. The interaction of individual VMs, comprising the product KSSM-M must be carried out by two local area networks in accordance with the network standard 802.03 IEEE Ethernet, set the TCP / IP mode deytagrammogo exchange (UDP) and protocol of the logical interface for two subscribers Networks Ethernet ». speed data over Ethernet to 100 Mbps.

3.2.6. The initial download of all the VMs from the KSSM-M should be done with floppy disks, or magneto-optical disk with the use of the boot, working interactively with the operator. Reboot (restart the VM) should be done with the hard drive. Restart the VM and restart it in the computational process must be carried out automatically when a failure occurs, as well as by commands from the subsystem administration of CSA (RMSO).

3.2.7. Shall be setup with the remote operator RMSO on the number of channels and communication routes for product 15e1M prior to the operation of the complex.

3.2.8. Should be provided with operational control of technical condition KSSM-M, and communication channels in the direction of *kssm-* SOD and product 15e1M, the issuance of these data, the operator RMSO.

3.2.9. ~~KSSM~~ *kssm-* Performance-M must enforce VVH_i processing *to* and present information in accordance with the requirements of the product in part 15e1M service units "A" product 15e1.

3.3. Requirements for survivability and resilience to external shocks

3.3.1. KSSM-M should perform its functions in continuous operation under the conditions defined by the requirements of the group 1.1 performance UHL GOST RV20.39.304-98 with the following restrictions:

- Operating temperature range of 5 ° C to plus 40 ° C;
- Range of extreme temperatures from minus 40 ° C to plus 50 ° C;
- Operating value of the ambient relative humidity to 80% at a temperature of 25 ° C;

Requirements for the effects of acoustic noise, low atmospheric pressure, low humidity, solar radiation, condensed

(Dew, frost) and precipitation (rain), salt (sea) and dynamic statistical fog of dust are not made.

3.3.2. Requirements for the Protection of KSSM-M from the effects of the components of rocket fuel, corrosive environment, degassing and polidegaziruyuschih solutions are not presented.

3.3.3. KSSM-M must keep working when exposed to electromagnetic radiation of nuclear explosion in the group stiffness IVe GOST RV20.39.305-98 with the possibility of reducing the impact from construction (filmed shell) of the *object*.

3.4. Requirements for electronic protection

3.4.1. Industrial interference by technical means

KSSM-M should not exceed the values established by the "all-union norms permitted industrial interference (rules 11-91, the group 1.1.2).

3.5. The requirements for reliability

3.5.1. KSSM-M equipment repaired, restored immediately after failure detection, by replacing individual vehicle or removable elements of broken-down, on the healthy from the ISP.

3.5.2. Izdelie should ensure that clock work. Availability products, taking into account maintenance must be at least 0.9999.

3.5.3. The average recovery time KSSM-M does not exceed 30 minutes.

3.5.4. Lifetime KSSM-M must be at least 10 years from the date of commissioning.

3.5.5. Warranty period KSSM-M must be 5 years, calculated from the date of delivery KSSM-M representative of the customer at the customer's premises.

Note. Refusal KSSM-M to understand the events leading to the inability to perform the functions for receiving (transferring) the information between the VC and the TC product 15e1M on any of the directions of communication due to a malfunction of the vehicle ended KSSM-M.

3.6. Requirements on ergonomics and industrial design

3.6.1. KSSM-M must meet the requirements of ergonomics, engineering psychology and industrial design in accordance with GOST RV20.39.309-98.

3.7. Requirements for the operation, ease of maintenance, repair and storage

3.7.1. Means KSSM-M must perform its functions in continuous operation under the conditions defined by the requirements of the group 1.1 performance UHL GOST RV20.39.304-98 for heated buildings.

3.7.2. KSSM Power-M must be carried out by one of two independent feeders AC 220 V (+10 - 15)% 50 Hz + / - 1Hz.

3.7.3. The power consumption KSSM-M does not exceed 15.0 kVA and refined during the detailed design.

3.7.4. KSSM TC-M must enable remote power management (except for equipment T-240 PDM-226 and T DM).

3.7.5. The noise level generated KSSM-M should not exceed the values for the stationary equipment installed in industrial premises.

3.7.6. KSSM-M should be in the maintenance kit, containing blocks, detachable parts, tools, supplies and materials for restoration and maintenance KSSM-M on the site.

3.7.7. KSSM-M should be repairable.

3.7.8. KSSM TS-M to allow storage in a regular packing in the warehouses at temperatures between +5 ° to +40 ° C and relative humidity less than 80% at a temperature no higher than +25 ° C without perekonservatsii within 2 years.

3.8. Requirements for transportability

3.8.1. Means KSSM-M to allow transportation of the tare package by road, rail and air transport in accordance with GOST RV20.39.309-98.

3.9. Requirements for Security

3.9.1. KSSM-M should provide security personnel in accordance with the requirements of GOST RV20.39.309-98.

3.10. Requirements for the standardization and unification

3.10.1. Coefficient of applicability of the equipment KSSM-M at the level of assembly units must be at least 80%.

3.10.2. Calculation of standardization and unification should be conducted in accordance with GOST V15.207-90.

3.11. Requirements for manufacturability

3.11.1. Means for KSSM-M must meet the requirements of GOST manufacturability RV20.39.309-98.

3.12. Constructional requirements

3.12.1. Structurally KSSM-M must be a set of functionally complete and constructive design elements to be placed in the load-bearing structures (racks and racks), ensuring their placement and installation.

Racks for equipment T-226 DM should be placed in a separate room.

3.12.2.'s Design and labeling of subunits KSSM-M to ensure correct assembly and cabling, as well as exclude other errors personnel during the operation.

3.12.3. KSSM Design-M should provide its installation in fixed premises in an area not exceeding 15m² (specified during detailed design).

3.12.4. KSSM Design-M should provide two-way service.

3.12.5. Set of mounting parts (CPM) KSSM-M should include equipment for the placement of technical tools and resources necessary for their installation in the KSSM-M, as well as other equipment used in its deployment and operation.

3.12.6. The design documentation for KSSM-M must satisfy the requirements of GOST 2.102-68, and operational - with GOST 2.601-95 and hands UIAV.460000.012. The documentation can be placed on the storage media.

4. Technical and economic requirements

4.1. The marginal cost of works - 90.0 million rubles (to be confirmed by the results of the competition).

The price includes the cost to refine design documentation (including PD) and ED and 83t362 83t744 products, manufacturing facilities KSSM-M, the dismantling of the customer's premises and move the required hardware from the KSSM-M, the creation of software and hardware of the stand for stand-alone and integrated testing in the enterprise - Artist works, documentation and release of the mounting assembly KSSM-M on the customer's premises, the certification requirements for information security.

5. REQUIREMENTS BY PROVIDING

5.1 Requirements for metrological

5.1.1. Metrological software must meet the requirements of GOST RV 20.39.309-98.

5.1.2. Should be carried out metrological examination.

5.2. Requirements for mathematical, software and information provision

5.2.1. The structure of CPO KSSM should include:

- The operating system INTROS-BM;

- IOO program takes into account the peculiarities of KSSM-M;

- Program SOAS, is designed to work KSSM-M product 15e1M;

- Program KSSM-M, designed to perform functional tasks (processing orders, TSV, TSD, SKDG).

Note: As part of the work must be carried out the necessary refinement of software engineering tools izd.83t362.

6. Requirements for raw materials, materials and components INTERBRANCH APPLICATIONS

6.1 Application KSSM-M component elements must comply with the requirements of GOST RV20.39.309-98.

In KSSM-M should be applied electroradioelements accessories, cable products, wire and materials that are allowed to use approved lists Customer satisfying GOST, OST, and TU on them and accepted by the representative of the Customer by the manufacturer.

6.2. Is allowed to use imported parts and materials in accordance with " the Provisional Regulation on the application elektroradioizdely and electronic modules in foreign weapons and military equipment in RD " and " 22.12.187-97 decision about which components of computers and electroradioelements foreign production of basic computer authorized for use when creating a modernized communications switching centers basic data exchange system ACS Forces " .

All imported parts must pass a special audit in the prescribed manner.

7.TREBOVANIYA TO PRESERVATION, PACKAGING AND MARKING

7.1. Marking hardware KSSM-M must meet the requirements of section 12 of GOST RV20.39.309-98.

7.2. Conservation and packing KSSM-M must meet the requirements of GOST RV20.39.309-98.

7.3. Marking packaging locations (containers) must meet the requirements of GOST 14192-77.

8. REQUIREMENTS Training facilities

8.1. The information needed to study KSSM-M and the order of its operation should be reflected in operational documents.

9. SPECIAL REQUIREMENTS

9.1 KSSM-M must satisfy the requirements of the PP-97 facilities for W 2 categories.

10. REQUIREMENTS FOR THE CONSERVATION OF STATE AND MILITARY SECRETS TO THE IMPLEMENTATION OF THE WORK.

10.1. Requirements to ensure secrecy.

10.1.1. In conducting the work must ensure that the requirements to ensure the preservation of state secrets, according to the Russian Federation Law "On State Secrets."

10.1.2. The work should be conducted in accordance with "Instructions ... № 3-1», the basic documents, acting in place of work, and in accordance with the requirements laid down in the design, and other documents used in the process.

10.2. Requirements to counter foreign technical intelligence.

10.2.1. Countering engineers, during the work should be organized in accordance with the requirements of the Regulations on the state system of information protection in the Russian Federation of foreign technical intelligence, and from leaking through technical channels (" Situation - 93 ") and documents (the regulations, guidelines, instructions, etc.) to protect the information by the company executor.

11. REQUIREMENTS FOR OBI

11.1. KSSM-M should provide classification and imitozaschitu transmitted through communication channels of information using special equipment such as T-240 PDM and T-226DM.

11.2. Remedies information KSSM-M must be certified at the request of security information in the certification system of the Defense Ministry, class of protection 2A in accordance with the EP Technical Commission of Russia. Automated systems. Protection against unauthorized access to information. Classification of automated systems and information protection requirements.

11.3. KSSM B-M should be provided protection, exclusive access to information circulating in it.