

Rating of the Russian electronic industry organizations

THE PLAYERS PUT THE CARDS ON THE TABLE: THE NEW COMPETITION RULES IN THE ELECTRONICS INDUSTRY

In the market-driven economy organizations operating in the domestic electronic industry, must have specialized competencies in the field of production, scientific research and engineering, but they must also possess developed business competencies. As noted in the materials of the State program for Development of Electronic and Radioelectronics industry for 2013-2025 period, as opposed to the global practice, the current condition of the Russian radio electronics industry is featured by insufficient level of development of advanced business models and cooperation connections between individual organizations, which impedes effective development of the industry. To secure implementation of best competition practices and project management practices adapted to the current realities of the Russian economy, it is necessary to use the experience of the Russian organizations who are on firm ground in the market. One of the pipelines for such practices to be communicated is generation of the industry ratings. This method is very popular in multiple sectors of the economy, and it is not about merely compilation of a ranked list of organizations, but also about the possibility for a comprehensive assessment of the overall market condition and positions of individual players.

The rating generated in the outcome of the work performed with the electronic industry organizations is unique for our industry. We hope that using this tool will enable the industry organizations to identify their current positions and to obtain a better understanding of their competitors' potential. In fact, by disclosing information about the volume and structure of its proceeds, each organization participating in the rating demonstrates its willingness to play in line with the market rules, thereby making the industry environment more competitive. Therewith, the therefore accumulated information about the organizations' status will be of interest not only for the market players, each of whom can use such information to search for potential partners, but it will be also interesting for any party concerned, including consumers and the industry experts.

Whether all organizations operating in the electronic industry are in fact in a position to accept the new competition rules dictated by the to the industry organizations by the market? Recalling the industry development history, it becomes obvious that the industry organizations had been existing for many years in conditions of top secrecy, and surely it will be difficult for them to drastically change their business strategy in the market. Altogether it is also obvious that without continuing development efforts it is impossible to achieve a meaningful success, and particularly so, given the incredible dynamics, which is specific for innovations sector. The radio electronics market must become more open, and how soon it will happen depends on individual efforts of each player. If an organization is not afraid to share its successes and failures with the public, this is a clear sign of its ability to take responsibility for its future, and it is also very important for organizations operating in the industry to develop such ability, as they regrettably get used to rely in everything on the government. We believe that the willingness to change is a key to successful development of the national radioelectronics industry.

Alena Fomina,
General Director of Central Research Institute Electronics

ON THE RATING

We offer for your attention the first rating of the Russian radioelectronics industry organizations.

The project is targeted to improve brand awareness of the industry enterprises, to identify key players and their role in the national economy, and to obtain the objective confirmation of the market positions of the industry companies.

This tool can make the industry more open and transparent and can also help the industry organizations to attract prospective customers and investors.

Indicator of revenue in radioelectronics segment (revenue generated from manufacture and design of radioelectronics products, R&D and other activities carried on in the field of radioelectronics) has been adopted as a key criterion for the rating.

Both some particular entities of the industry and those incorporated into holding structures were included into TOP 50 rating. Total revenues and number of personnel were indicated for all organizations, save for revenue earned in the radioelectronics segment.

Top 10 ratings of manufacturing and scientific & production organizations have been prepared similar to the main TOP 50 rating for the purpose of breakdown by business profile: organizations are ranked by their revenue indicator in radioelectronics segment with disclosed data on total revenue and the number of personnel employed.

TOP 10 ratings of organizations prepared on the basis of by revenue generated from design & engineering of products or components thereof and by revenue generated from R&D activities provide ranking of organizations by revenue generated from the said activities with indication of the share of this indicator in the total revenue.

Ratings have been separately prepared under OKVED 2 (Russian Standard Industrial Classification of Economic Activities): TOP 30 by revenue earned from manufacture of computers, electronic and optical items (OKVED 26), TOP 5 by revenue earned from manufacture of electrical equipment (OKVED 27), TOP 10 by revenue earned from manufacture or machinery and equipment items that are not included into other groups (OKVED 28 and other groups). Organisations have been ranked by volume of revenue earned from the reviewed OKVED 2 activities with indication of the share thereof in the total revenue earned. The scope of the list reflects the prevalence of the reviewed OKVED code activities. Thus, the highest number of the market players is observed in OKVED 26 code rating, which is the main rating for the industry organizations.

The ratings are supplied by the table with details of the total revenue of the key holding structures operating in radioelectronics industry, without a more detailed breakdown. Holding structures have been ranked without assigning an appropriate position in the rating.

Further it is anticipated to conduct the rating on the annual basis.

HOW THE INFORMATION WAS COLLECTED

All organizations of the radioelectronics industry (except for distributors) have been invited to participate in the rating. Their participation in the rating was voluntary and without any fee charged. Those organizations, who have accepted the invitation, filled out the online questionnaire, wherein they indicated the organization details, its total revenue and the revenue in the electronics segment and also confirmed such details by using Accounting Statements form No. 2.

In the instances, where the total revenue earned by an organization, have not been supported by accounting statements, the data available in SPARK system of Interfax Agency have been used. In other instances appropriate comments are given in the tables.

A possibility was provided in the online questionnaire for more detailed information to be provided by way of allocation of manufacturing revenue in the breakdown into OKVED 2 groups, engineering and R&D activities.

INITIATOR OF THE RATING: Central Research Institute Electronics

PARTNERS:

- Elektronika: Science, Technology, Business, a leading branch scientific & technical journal (www.electronics.ru);
- BDO Unicon auditing and consulting company (www.bdo.ru).

RESULTS OF THE RATING

The electronic industry is dominated by major holdings: JSC Roselectronika and JSC KRAT, which are incorporated into Rostech, and JSC RTI, which is incorporated into AFK System.

The top position in TOP 50 rating of organizations operating in the Russian electronics industry by volume of revenue in electronics segment is occupied by Mikron Group of companies (9, 713, 329, 099.00 rubles), which is also the leader in the total revenue corresponding to the revenue in radioelectronics segment.

The ranking includes organizations, who are engaged not only in manufacture of electronic products but also in research and development activities. The core share of TOP 50 rating is represented by manufacturing and scientific & industrial organizations, therewith, the list included the following two R&D organizations: JSC NII Vector (holding the 9th position), JSC MERI (Molecular Electronics Research Institute) (holding the 15th position) and design bureau – JSC Special design & engineering bureau for relay equipment (35th position).

Apart from the revenue, the following details of the total revenues are presented in electronics segment for participants of TOP 50 rating: these figures are the same for less than a half of the organizations. Therefore, the majority of the organizations, including the rating leaders, develop their activities also in other fields that are not associated with radioelectronics, although their share in the total revenue is normally small, except for some particular organizations (JSC R&D center of electronic computing technology, JSC Orbita, JSC Novosibirsk semi-conductor manufacturing plant with speciality design bureau, JSC SPC NIIDAR and JSC Scientific and manufacturing company RITM). Ranking by total revenue does not always identical to ranking by revenue in the electronics segment, however the first seven top leaders of the rating are identical under the both criteria.

The rating also contains data on the number of the organizations' employees. The TOP 50 list included organizations of different scale with the number of employees varying from a few dozen (LLC FORM, JSC Scientific and Manufacturing Company Radio Service) to several thousands (JSC Izhevsk Electromechanical Plant Kupol, JSC Omsk Industrial Association Irtysh, PJSC Yaroslavl radio manufacturing plant, and others).

The leader in the TOP 10 rating of industrial organizations was Milron Group, who also took the first position in the total TOP-50 rating.

Revenue in electronics segment is the same as the revenue in the total revenues solely in the half of the participants of the TOP 10 manufacturing companies, therewith ranking by both indicators is fully similar. The table does not fully include organizations located in the territory of Moscow or St. Petersburg (solely the rating leader - Mikron Group is located in Moscow; the head office of Kraftway Corporation PLC is located in Moscow, while its manufacturing facilities are located in Obninsk town, Kaluga region), although these regions stand out among others in the number of manufacturing organizations, according to the survey titled "The portrait of the Russian electronics".

The leader of the TOP 10 research & industrial organizations was JSC Scientific Research Institute of Communication and Control Systems, which was on the third top position in TOP 50 main rating. Its revenues in radioelectronics segment amounts to 7, 668, 191, 924 rubles, which is similar to the total revenue of the organization. In the table of TOP 10 research & production organisations the more widely presented are organizations from Moscow (the leader of this rating is Research Institute of Communication, Command and Control Systems (NISSU) JSC, while the 8th top position is occupied by JSC Scientific Research Center for Electronic Computer Technology, the 10th top position is taken by JSC NPP Toriy) and on the top 5th position is NPO ZAVOD VOLNA, JSC - St. Petersburg).

In the TOP 10 rating of organizations rated by revenue generated from design of products or components thereof the leader is JSC Research Institute of Communication, Command and Control Systems (NISSU). 100% share of this indicator in the total revenue is reported solely by CJSC Experimental Design Office Karat (the top 7th position). The share of the leaders on the list is close to 100% (the 1st and the 2nd top positions) but for the majority of the organizations it is much less. Thus, for the 3rd and 4th top positions it is less than 60%, for the 5th position it is less than 50%, for the 6th and 8th positions it is even below 10%, and for the 9th and 10th positions it makes merely 1%.

In the TOP 10 organizations ranked by revenue generated from R&D activities the leader is JSC NIIME, for whom the share of this indicator in the total revenue is 100%. For JSC Scientific Research Institute of Electronics Technology, which is on the 3rd top position, it is below 56%, while for the rest of the participants on the list it is less than 50%.

Activities referred to OKVED 26 (under the Russian National Classifier of Types of Economic Activity) - manufacture of computer, electronic and optical products, is the core business for organizations operating in the electronics industry: 15 organizations reported their revenue share varying from 90 to 100% in this segment, while merely four of them have less than 50% share. The leader of the TOP 30 companies by revenue generated from manufacture of computers, electronic and optical products is JSC Izhevsk Electromechanical plant Kupol, which occupies the 2nd top position in the total TOP 50 rating. GC Mikron, which is the leader of TOP 50, rating, occupies the second position in TOP 30 rating of companies by revenue generated from manufacture of computers, electronic and optical products.

Activity referred to OKVED 27 (manufacture of electrical equipment) is a substantially smaller segment versus the activity referred to OKVED 26. This is reflected not only in the fact that the list is reduced to TOP 5, but also in the share of this segment in the total revenue – this figure is close to 100% solely for PJSC Plant Atlant, which is on the 1st top position; for JSC Irkutsk relay factory, who occupies the 2nd position, it is less than 90%, JSC Orbita (the 3-rd top position) it is already below 20%, and for JSC MEL, who in on the bottom of the rating, it is less than 10%.

TOP 10 rating of organizations rated by revenue generated from manufacture of machinery and equipment items that are not included into other groups, integrates OKVED 28 activities and other types of organizations' activities that are not included into OKVED 26, 27 and 28. The rating leader is JSC Kraftway Corporation PLC with its 34% revenue share. It is interesting that the list included both those organizations, whose revenue is referred to the reviewed segments: JSC Almetyeysk plant Radiopribor (the 2-nd top position), JSC Research Institute of precision machine manufacturing (the 4-th position), LLC NIIVS Spectr (10th position), and those organizations whose share of revenues from the reviewed segments does not even achieve 2%: JSC Izhevsk Electromechanical plant Kupol (the 6th position), PJSC Yaroslavl radio plant (the 7th top position), JSC Omsk Production Association Irtysk (the 9th position).

The biggest holdings of the radioelectronics industry

Holding	Total revenue, RUB
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JSC Ruselectronics*	150,641,312,900
JSC KRET*	139,900,000,000
JSC RTI*	50,600,000,000

* Due to the legal restrictions applicable to the scope of information disclosed by Russian legal entities, solely the information provided by the rating participant was used. But the holdings referred to above indicated their revenue figures in the statements of their parent organizations (SC Rostech and AFK System).

The TOP 50 organizations of the Russian electronics industry by revenue in electronics segment

Position rated on the basis of 2017 results.	Organization	Number of employees	Revenues in electronics segment, RUB.	Total revenue, RUB
1	GC Mikron*	1577	9,713,329,099	9,713,329,099
2	JSC Izhevsk Electromechanical plant Kupol	8262	8,454,575,100	8,858,000,601
3	Research Institute of Communication, Command and Control Systems (NISSU), JSC	741	7,668,191,924	7,668,191,924
4	PJSC Yaroslavl radio plant	2011	7,129,262,679	7,438,914,417
5	JSC Kraftway Corporation PLC	801	5,357,288,689	5,357,288,689
6	JSC Scientific-production enterprise Polyot**	1788	4,288,127,200	4,384,271,700
7	JSC Omsk Production Association Irtysk	2643	3,306,600,389	3,601,383,000
8	JSC NPP Rubin	1345	3,215,213,073	3,228,158,559
9	JSC Research Institute Vector	1123	3,166,503,890	3,264,437,000
10	JSC Elekond	1989	2,975,602,000	3,102,103,000
11	OKB-Planeta, JSC	675	2,869,604,446	3,313,631,000
12	NPO ZAVOD VOLNA, JSC	884	2,458,673,104	2,573,492,260
13	PJSC Kovytkinsky Electromechanical plant	1139	2,270,948,000	2,270,948,000
14	NPP Almaz, JSC	1845	1,898,654,267	1,940,112,550
15	NIIME, JSC	520	1,882,833,000	1,882,833,000

16	JSC Scientific and Research Institute for electronic technology	469	1, 522, 777, 613	1, 522, 777, 613
17	JSC Scientific and research center of electronic computing technology***	585	1, 500, 577, 120	2, 075, 177, 000
18	Scientific-production Association Kvant, JSC	–	1, 384, 957, 000	1, 384, 957, 000
19	JSC NPP Toriy	870	1, 332, 294, 000	1, 408, 371, 000
20	NPP Vostok, JSC	566	1, 250, 947, 000	1, 255, 108, 000
21	Plant Atlant, PJSC	892	1, 125, 129, 584	1, 131, 199, 755
22	Ferrite-Domen Scientific Research Institute, JSC	414	961, 063, 000	961, 063, 000
23	Ryazan Metal Ceramics Instrumentation Plant, JSC	954	951, 758, 453	951, 758, 453
24	JSC Proton-Electrotex	450	924, 973, 000	924, 973, 000
25	ERKON Research-Production Association, OJSC	675	884, 212, 266	962, 491, 514
26	Corporation-Novosibirsk plant Electrosignal open joint stock company	1230	870, 636, 000	915, 760, 000
27	LLC Tekhnotech	246	786, 229, 000	786, 229, 000
28	JSC NPP Signal	486	728, 401, 410	735, 759, 000
29	JSC NPP ElTom	246	719, 446, 168	719, 476, 676
30	JSC Orbita***	675	662, 145, 600	965, 199, 000
31	VNII VEGA, JSC	381	630, 612, 100	630, 612, 100
32	NVP PROTEK, JSC		625, 855, 000	625, 855, 000
33	Scientific Research Institute of electro-mechanical devices, JSC	584	604, 806, 400	607, 502, 674
34	Plasma, JSC	641	604, 749, 000	604, 749, 000
35	Special design bureau of relay equipment, JSC,	410	600, 332, 000	600, 332, 000
36	Meteor plant, JSC	526	540, 703, 000	604, 590, 000
37	Almetyevsk plant Radiopribor, JSC	496	515, 851, 695	515, 851, 695
38	Irkutsk relay plant, JSC	511	488, 689, 720	554, 565, 000
39	LLC PLANAR	255	471, 022, 000	471, 022, 000
40	Kulon LLC	299	448, 859, 000	507, 827, 000
41	Novosibirsk Plant of Semiconductor Devices with a Specialty Design Bureau, JSC***	739	445, 682, 000	1, 130, 558, 000

42	FORM, LLC	43	361,848,000	361,848,000
43	Scientific-production firm Radio-Service, JSC	97	348,591,958	384,473,683
44	NPO Rubikon-Innovaciya, LLC	194	273,359,365	275,523,000
45	MMP-IRBIS, JSC		270,175,000	270,175,000
46	JSC MOSELEKTRONPROEKT	161	209,656,000	245,705,000
47	Kuznetsk capacitors factory, LLC	184	188,627,000	189,520,000
48	Strela, PJSC	346	176,430,000	176,430,000
49	JSC SPC NIIDAR***	993	157,106,000	758,449,000
50	JSC Scientific production company RITM***	139	155,622,000	758,449,000

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*** In open sources of information no breakdown of revenues by types of activities was presented. Information provided by the participant was used.

TOP 10 manufacturing companies of radioelectronics industry of Russia by revenue in electronics segment

Position rated on the basis of 2017 results.	Organization	Number of employees	Revenues in electronics segment, RUB.	Total revenue, RUB
1	GC Mikron*	1577	9,713,329,099	9,713,329,099
2	JSC Izhevsk Electromechanical plant Kupol	8262	8,454,575,100	8,858,000,601
3	PJSC Yaroslavl radio plant	2011	7,129,262,679	7,438,914,417
4	JSC Kraftway Corporation PLC	801	5,357,288,689	5,357,288,689
5	Omsk production Association Irtysh, JSC**	2643	3,306,600,389	3,601,383,000
6	JSC Elekond	1989	2,975,602,000	3,102,103,000
7	PJSC Kovylkinsky Electromechanical plant	1139	2,270,948,000	2,270,948,000
8	Plant Atlant, PJSC	892	1,125,129,584	1,131,199,755
9	Ryazan Metal Ceramics Instrumentation Plant, JSC	954	951,758,453	951,758,453

10	JSC Proton-Electrotex	450	924, 973, 000	924, 973, 000
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TOP 10 scientific-production organizations of electronic industry in Russia by revenue in the segment of electronics

Position rated on the basis of 2017 results.	Organization	Number of employees	Revenues in electronics segment, RUB.	Total revenue, RUB
1	Research Institute of Communication, Command and Control Systems (NIISU), JSC	741	7, 668, 191, 924	7, 668, 191, 924
2	Scientific-production enterprise Polyot, JSC*	1788	4, 288, 127, 200	4, 384, 271, 700
3	JSC NPP Rubin	1345	3, 215, 213, 073	3, 228, 158, 559
4	OKB-Planeta, JSC	675	2, 869, 604, 446	3, 313, 631, 000
5	NPO ZAVOD VOLNA, JSC	884	2, 458, 673, 104	2, 573, 492, 260
6	NPP Almaz, JSC	1845	1, 898, 654, 267	1, 940, 112, 550
7	JSC Scientific and Research Institute for electronic technology	469	1, 522, 777, 613	1, 522, 777, 613
8	JSC Scientific Research Center for Electronic Computing Technology	585	1, 500, 577, 120	2, 075, 177, 000
9	Scientific-production Association Kvant, JSC	–	1, 384, 957, 000	1, 384, 957, 000
10	JSC NPP Toriy	870	1, 332, 294, 000	1, 408, 371, 000

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TOP 10 organizations of electronic industry in Russia by revenue from the construction product or its component parts

Position rated on the	Organization	The share of revenue from	Revenue from engineering &
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basis of 2017 results		engineering & design of products or components thereof in the total revenue, %	design of products or components thereof, RUB
1	Research Institute of Communication, Command and Control Systems (NIISU), JSC	96	7,394,434,086
2	OKB-Planeta, JSC	87	2,869,604,446
3	NPP Vostok, JSC	58	721,439,000
4	VNII VEGA, JSC	54	341,816,800
5	Special design bureau of relay equipment, JSC,	47	282,156,040
6	NPO ZAVOD VOLNA, JSC	8	204,104,433
7	Design Bureau Karat, CJS	100	40,520,000
8	CJSC MEL	3	25,540,900
9	Irkutsk relay plant, JSC	1	5,960,700
10	Plasma, JSC	1	3,000,000

TOP 10 organizations of radioelectronics industry in Russia by revenue generated from scientific activities

Position rated on the basis of 2017 results.	Organization	The share of revenues from scientific activities in the total revenue, %	Revenue from scientific activities, RUB.
1	NIIME, JSC	100	1,882,833,000

2	GC Mikron*	15	1,442,000,000
3	JSC Scientific and Research Institute for electronic technology	56	821,887,000
4	JSC Research Institute Vector	17	554,954,290
5	JSC Scientific Research Center for Electronic Computing Technology	26	539,851,810
6	JSC Scientific-production enterprise Polyot**	12	506,558,000
7	JSC NPP Rubin	14	445,198,917
8	OKB-Planeta, JSC	13	444,026,554
9	Ferrite-Domen Scientific Research Institute, JSC	33	321,269,000
9	Research Institute of Communication, Command and Control Systems (NISSU), JSC	4	273,757,843

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TOP 30 organizations of electronic industry in Russia by revenue generated from manufacture of computers, electronic and optical products (OKVED 26)

Position rated on the basis of 2017 results.	Organization	The share of revenue generated from manufacture of computers, electronic and optical products in the total revenue, %	Revenue generated from manufacture of computers, electronic and optical products, RUB.
1	JSC Izhevsk Electromechanical plant Kupol	94	8,282,791,935
2	GC Mikron	85	8,271,000,000
3	PJSC Yaroslavl radio plant	94	6,988,361,396
4	JSC Kraftway Corporation PLC	66	3,561,848,260
5	JSC Omsk Production Association Irtysh	93	3,333,916,300
6	OKB-Planeta, JSC	87	2,866,290,815

7	JSC Research Institute Vector	80	2, 611, 549, 600
8	JSC Elekond	83	2, 556, 902, 000
9	NPO ZAVOD VOLNA, JSC	96	2, 458, 219, 590
10	NPP Almaz, JSC	86	1, 675, 253, 367
11	Scientific-production Association Kvant, JSC	100	1, 384, 957, 000
12	JSC NPP Toriy	94	1, 322, 233, 000
13	JSC Scientific Research Center for Electronic Computing Technology	46	960, 725, 310
14	Ryazan Metal Ceramics Instrumentation Plant, JSC	100	950, 142, 856
15	Corporation-Novosibirsk plant Electrosignal open joint stock company	95	870, 636, 000
16	LLC Tekhnotech	100	786, 229, 000
17	JSC Scientific and Research Institute for electronic technology	44	691, 058, 373
18	JSC Orbita	69	662, 145, 600
19	Ferrite-Domen Scientific Research Institute, JSC	67	639, 794, 000
20	Meteor plant, JSC	100	608, 590, 000
21	Plasma, JSC	100	601, 749, 000
22	NPP Vostok, JSC	42	529, 508, 000
23	Scientific Research Institute of electro-mechanical devices, JSC	79	481, 660, 800
24	LLC PLANAR	100	471, 022, 000
25	Kulon LLC	88	448, 859, 000
26	Novosibirsk Plant of Semiconductor Devices with a Specialty Design Bureau, JSC	39	445, 682, 000
27	FORM, LLC	100	361, 848, 000
28	Scientific-production firm Radio-Service, JSC	91	348, 591, 958
29	MMP-IRBIS, JSC	100	270, 175, 000
30	Kuznetsk capacitors factory, LLC	100	188, 627, 000

TOP 5 organizations of the Russian radioelectronics industry rated by revenue generated from manufacture of electrical equipment (OKVED 27)

Position rated on the basis of 2017 results.	Organization	The share of revenue generated from manufacture of electrical equipment in the total revenue, %	Revenue from manufacture of electrical equipment, RUB
1	Plant Atlant, PJSC	100	1, 125, 129, 584
2	Irkutsk relay plant, JSC	89	488, 689, 720
3	JSC Orbita	18	168, 639, 500
4	Scientific Research Institute of electro-mechanical devices, JSC	14	85, 883, 900

5	CJSC MEL	7	47,811,700
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TOP 10 organizations of the Russian radioelectronics industry rated by revenue generated from manufacture of machines and equipment items that are not included into other groups (OKVED 28 and others)

Position rated on the basis of 2017 results.	Organization	The share of revenues generated from manufacture of machines and equipment items that are not included into other groups, in the total revenue, %	Revenue generated from manufacture of machines and equipment items that are not included into other groups, RUB.
1	JSC Kraftway Corporation PLC	34	1,795,440,429
2	Almetyevsk plant Radiopribor, JSC	100	515,851,695
3	JSC Elekond	13	408,700,000
4	Research Institute of precision machine manufacturing, JSC	100	240,347,000
5	JSC MOSELEKTRONPROEKT	85	209,656,000
6	JSC Izhevsk Electromechanical plant Kupol	2	175,400,300
7	PJSC Yaroslavl radio plant	2	140,901,283
8	Scientific-production enterprise Polyot, JSC	3	127,095,200
9	JSC Omsk production Association Irtysh*	2	55,382,600
10	NIIVS Spektr, LLC	100	54,793,507

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