



## Membership dues gradation of the Northern Forum Proposal of the Northern Forum Secretariat 11.01.2016

According to comments received from all concerned participants of discussions about new gradation of membership dues, the Northern Forum Secretariat has prepared a new proposal for calculation of membership dues that excludes “Projects” category and GRP per capita. Some member regions in their comments expressed concerns about use of these parameters in the method of calculations developed by the Centre for Strategic Research of Sakha Republic and Secretariat.

In this new proposal end sum of indexes is divided into 9 subgroups in span between 5 000\$ and 25 000\$, and dues have a 2,500 USD pitch.

Hereby we propose to use as the basis parameters of “Quantity of population” and “Own budget” calculations, the data is taken from open sources of governmental statistic bodies (links provided).

For correction of data on “Purchasing-power parity” (PPP), a “Big Mac” index (as described in The Economist) is applied to “Own budget” index.

Calculations for Heilongjiang Province have been challenging.

### **For example:**

1) Population of Heilngjiang is 38m people and GRP is close to 215m USD. These rates are similar to an average Eastern European state. Therefore we had to “cut down” rates of Heilongjiang to a level equal to a second rate in size of a region in the subgroup +10%.

2) To grade influence of “accidental” deviations on “Own budget” index, the Secretariat proposes to strengthen weight of a “Population” parameter. In this model of gradation, we have used a 1,5 multiplier on deviation coefficients.

Therefore, to level influence of “accidental” deviations to economic indexes, the Secretariat proposes to strengthen weight of “Population” parameter. In this model, a double multiplier is applied for deviation coefficients on this parameter.

All of this is necessary, so the model could calculate average indexes deliberately in relation to all participants and would not destroy a “fair due” for equal-rights members with different demographic and socio-economic indexes.

*Tab. 1. PPP “Big Mac” index, as seen in “The Economist”\**

	Price, \$	NPPP (BMs for 100\$)	Deviation co-efficient by average (DC <sub>nppp</sub> )
Russia	1,88	53,19	1,80
Korea	3,76	26,60	0,90

Finland	4,49	22,27	0,75
Iceland	5,65	17,70	0,60
Alaska	4,79	20,88	0,71
China	2,74	36,50	1,24
<b>Average NPPP:</b>		29,52	

\*<http://www.economist.com/content/big-mac-index> ; <http://infographics.economist.com/2015/databank/BMfile2000-Jul2015.xls>

Therefore, used base “Own Budget” have been corrected as seen in Formula 1.

*Formula 1*

$$B_i = B_i(DC_{nppp}), \text{ for } i\text{-st region}$$

Tab. 2. Proposal of new gradation of membership dues, USD

<b>Russian Federation</b>	<b>Dues</b>
Krasnoyarsky krai	25 000,00
Sakha Republic (Yakutia)	25 000,00
Khanty-Mansiysky AO - Yugra	22 500,00
Primorsky krai	20 000,00
Yamalo-Nenetsky AO	12 500,00
Kamchatsky krai	7 500,00
Magadanskaya oblast	5 000,00
Chukotsky AO	5 000,00
Nenetsky AO	5 000,00
<b>Other states</b>	
Gangwon (Republic of Korea)	22 500,00
Akureyri (Iceland)	5 000,00
<b>Total, all member regions</b>	<b>155 000,00</b>
<b>Potential NF member regions</b>	
<b>Russian Federation</b>	
Khabarovsky krai	17 500,00
Arkhangelskaya oblast	15 000,00
Murmanskaya oblast	10 000,00
<b>Foreign</b>	
Heilongjiang (China)	25 000,00
Alaska (USA)	20 000,00
Lapland (Finland)	5 000,00
<b>Total, potential NF member regions</b>	<b>92 500,00</b>
<b>Total, all regions</b>	<b>247 500,00</b>



**Tab 3. Membership dues gradation**

Регионы	Points	Less than 0,49	From 0,5 to 0,99	From 1 to 1,49	From 1,5 to 1,99	From 2 to 2,49	From 2,5 to 2,99	From 3 to 3,49	From 3,5 to 3,99	From 4	Total
Akureyri (Iceland)	0,05	1									1
Nenetsky AO	0,16	1									1
Chukotsky AO	0,21	1									1
Lapland (Finland)	0,28	1									1
Magadanskaya oblast	0,38	1									1
Kamchatsky kray	0,84		1								1
Murmanskaya oblast	1,43			1							1
Yamalo-Nenetsky AO	1,71				1						1
Arkhangelskaya oblast	2,11					1					1
Khabarovsky kray	2,5						1				1
Alaska (USA)	3,34							1			1
Primorsky kray	3,41							1			1
Khanty-Mansiysky AO – Yugra	3,62								1		1
Gangwong (Republic of Korea)	3,69								1		1
Sakha Republic (Yakutia)	4,93									1	1
Krasnoyarsky kray	5,16									1	1
Heilongjiang (China)	11,15									1	1
	<b>Regions in group</b>	5	1	1	1	1	1	2	2	3	17
	<b>Due size</b>	5 000	7 500	10 000	12 500	15 000	17 500	20 000	22 500	25 000	-
	<b>Group total</b>	<b>25 000</b>	<b>7 500</b>	<b>10 000</b>	<b>12 500</b>	<b>15 000</b>	<b>17 500</b>	<b>40 000</b>	<b>45 000</b>	<b>75 000</b>	<b>247 500</b>

**Tab 4.** Indexes of regions and their points (without GRP per capita index)

Regions	Population, thousands	GRP per capita Thousands roubles	Own budget profit, USD, bn	Column 2 on PPP	Column 3 on PPP	Points of deviation from average of columns			Points sum
	2012	2013	2014						
<b>Russian Federation</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>02.фев</b>	<b>03.фев</b>	<b>1`</b>	<b>2.2`</b>	<b>3.3`</b>	
Krasnoyarskiy kray	2 838,00		147,99		266,28	4,17		0,99	<b>5,16</b>
Primorskiy kray	1 951,00		81,51		146,67	2,87		0,55	<b>3,41</b>
Khanty-Mansiyasky AO - Yugra	1 561,00		197,02		354,51	2,29		1,32	<b>3,62</b>
Sakha Republic (Yakutia)	956		155,22		279,29	1,41		3,52	<b>4,93</b>
Yamalo-Nenetsky AO	537		137,93		248,19	0,79		0,92	<b>1,71</b>
Kamchatsky kray	320		55,48		99,83	0,47		0,37	<b>0,84</b>
Magadanskaya oblast	155		23,34		42,01	0,23		0,16	<b>0,38</b>
Chukotskiy AO	51		19,69		35,43	0,07		0,13	<b>0,21</b>
Nenetsky AO	42		15,09		27,14	0,06		0,1	<b>0,16</b>
<b>Other states</b>									
Gangwong (Rep. Korea)	1 542,15		422,87		381,08	2,27		1,42	<b>3,69</b>
Akureyri (Iceland)	18,29		11,3		6,78	0,03		0,03	<b>0,05</b>
<b>Potential members</b>									
<b>Russian Federation</b>									
Khabarovskiy kray	1 339,91		79,58		143,2	1,97		0,53	<b>2,5</b>
Arkhangelskaya oblast	1 148,76		62,83		113,06	1,69		0,42	<b>2,11</b>
Murmanskaya oblast	771,1		44,53		80,12	1,13		0,3	<b>1,43</b>
<b>Other states</b>									
Heilongjiang (China)	3 200,00		1 398,70		1 731,23	4,7		6,45	<b>11,15</b>
Alaska (USA)	736,73		855,6		605,31	1,08		2,26	<b>3,34</b>
Lapland (Finland)	181,82		3		2,26	0,27		0,01	<b>0,28</b>
<b>Average</b>	<b>1 020,57</b>		<b>218,33</b>		<b>268,38</b>				

## Links to Tab. 4 data

### **Russia**

[http://www.gks.ru/bgd/regl/b12\\_13/lssWWW.exe/Stg/d1/04-03.htm](http://www.gks.ru/bgd/regl/b12_13/lssWWW.exe/Stg/d1/04-03.htm)

[http://www.gks.ru/free\\_doc/new\\_site/population/uov/uov\\_11sub09-14.xls](http://www.gks.ru/free_doc/new_site/population/uov/uov_11sub09-14.xls)

[http://www.gks.ru/free\\_doc/new\\_site/vvp/vrp98-13.xlsx](http://www.gks.ru/free_doc/new_site/vvp/vrp98-13.xlsx)

[http://www.gks.ru/free\\_doc/new\\_site/vvp/dusha98-13.xlsx](http://www.gks.ru/free_doc/new_site/vvp/dusha98-13.xlsx)

<http://info.minfin.ru/isprf.php>

### **Alaska**

<http://quickfacts.census.gov/qfd/states/02000.html>

### **Finland**

<http://www.heritage.org/index/explore?view=by-variables>

### **Heilongjiang**

<http://data.stats.gov.cn/english/easyquery.htm?cn=E0103>

### **Lapland**

[http://www.stat.fi/til/index\\_en.html](http://www.stat.fi/til/index_en.html)

### **Gangwong-do**

<http://kostat.go.kr/portal/english/index.action>