According to expert estimates, Russian transport companies placed orders for vessels construction for about 1 billion USD in the year 2006. Orders made to domestic shipyards amounted less than 6%. The situation didn't change in 2007.

Such lie of matters can be explained (in addition to other factors) by the high cost of imported component parts, which increases the price of final product by 20-25% and makes domestic manufacturing inefficient. That is why more than 90% of vessels are being constructed at foreign shipyards.

Vladimir Putin speaking at conference which took place in May 2008 in Saint-Petersburg defined the state protectionism policy and posed the direction of Russian shipbuilding development strategy. The main goal of development strategy is the creation of new competitive Russian shipbuilding industry.

The total volume of the world shipyards orders is estimated to exceed 100 billion USD (PortNews, www.business-times.asiaone.com).

Russia’s share in the world shipbuilding production is 0.2% at present time, but it should reach 2% by 2015 in accordance to development programme.

It is planned to build:

- 116 sea and transport vessels;
- 70 icebreakers and work boats;
- 117 transport river and mixes types ships;
- 180 catcher boats;
- 35 platforms for shelf development

Total volume of investments in realization of this programme will amount more than 22 billion USD.

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¹ Magazine “Sea and Oil and Gas Projects”. № 3-4 - 2006
As evaluated by specialists from ROSCABLE company (Russia, Saint-Petersburg) the share of cable components in this amount is about 2 billion USD.

Direction of activity of ROSCABLE company - promotion of modern technologies and materials and wholesale deliveries of wire and cable products. ROSCABLE possesses necessary personnel, financial, administrative and managerial potential that allows to fulfill successfully the largest and responsible projects of deliveries in cable products supplies.

Representing company ROSCABLE (www.rosable.com), it is necessary to note, that it was the first in Russia to become the official distributor of global company NEXANS in promotion on the Russian market of marine cables for civil and military shipbuilding and sea platforms.

Working with large Russian project institutes and shipyards on uses of Nexans cables, the company has already achieved the certain results. In particular, the contract on delivery of Nexans cables for a large batch of modern high-speed boats which is under construction on one of St.-Petersburg shipyards.

Also, work with other shipbuilding factories and design bureaus, both included in USC\(^2\) and the independent ones, is conducted. Successful negotiations are carried on with such companies, as «Sevmorneftegaz» (shelf platforms) and «Rosatom» (floating nuclear power plants) which have shown a high interest in Nexans products.

State Program of shipbuilding development till 2015 provides significant increase in manufacture of all types of vessels. Among them we would mark out the following groups:

**Sea vessels.**

Russian ports turnover volume dynamics shows steady growth. If in 2002 the turnover of goods was 261 million tons, in 2005 – 407 million tons, the forecast for 2015 is 647 million tons\(^3\).

At the same time the middle age of vessels of the Russian sea fleet makes more than 18 years (for comparison: Japan - 9 years, South Korea - 12 years, Taiwan - 12,7 years).

Russian president set a task to increase the Russian fleet by 1,5 times till 2010, till 2015 - by 2,2 times. Therefore it is planned to build 45 vessels annually starting from 2009.

**River vessels.**

More than 20 river shipping companies operate now in Russia. Many of them provide ability to survive for such regions where river is the only transport channel. At the same time the river fleet is in the tight condition. Now there are more than 9 thousand

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\(^2\) United Shipbuilding Corporation was registered in 2007. It consolidated more than 40 enterprises (project institutes and shipyards). A prospective portfolio of orders - 12 billion dollars

ships, which middle age is more than 28 years. Also there are not enough ships for internal transportations of passengers and cargoes. So the government places the order for construction of more than 100 new river vessels at enterprises of USC.

**The research ships and ice breakers.**

There are now 84 vessels (including 11 belonging to Ministry of natural resources, 30 to Federal Hydrometereology and Environmental Monitoring Service, 15 to Agency on Fisheries and 28 to the Russian Academy of Science). Middle age of these ships - 24 years. And by our estimation, 80 vessels are a subject to write-off by 2015 and need replacement.

**Shelf development.**

By estimations of the largest companies having resources on a shelf of the North, Far East and Caspian sea - "Gazprom", "Rosneft" and "Lukoil", shelf development will require to have modern equipment for extraction and transportation of 110 million tons of oil and 160 billion m$^3$ of natural gas by the year 2015.

In general, for successful performance of works on extraction and transportation it will be necessary to provide: 55 units of drilling offshore platforms and terminals, 85 units of specialized transport ships and about 140 service boats.

Huge amount of cables should be used for their construction. As is known, domestic industry doesn’t manufacture such cable types, and on many offshore platforms (e.g. Prirazlomnaya) imported cables are installed.

**Total demand for shelf development vessels up to 2015 will make more than 500 units. Their cost is evaluated to reach 23 billion roubles (nearly 1 billion dollars)**.

**Fishery fleet.**

An increase in fish and seafood capture is forecasted by Russian fishery agencies. Now fishery fleet consists of more than 2,5 thousand various vessels (the largest is the fleet of Far East region in terms of ships quantity).

Age of more than a half of vessels exceeds 20 years. Now about 60 % of fishery ships of Russia are operated over their service life. Capacities of this fleet will steadily decrease, and there is acute need for replacement of old ships.

Also it is necessary to take into consideration demand for cable for repair needs.

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4 About the Government measures on development of the shipbuilding industry. /The report of Andrey Reus - the Deputy Minister on the industry and power of Russian Federation.-15.11.2006 - http://www.minprom.gov.ru
5 Delovoy Peterburg (Business Petersburg). - №085 – 14.05.08 – p.5
Today there is one more large-scale project - design of more than 30 floating nuclear power plants. And at present time only western manufacturers (and first of all Nexans) can meet high standards set for all components required for such types of ships.

By our calculations, to equip one ship it is required from 130 up to 1000 km of various cable.

Proceeding from it, demand for shipboard cables for the period up to 2015 under condition of fulfillment of the State Programme, will make:

Up to 2010 - about 30.000 km per year$^6$;
2010 - 2015 - about 45.000 km per year.

Not including significant amounts of cable for construction of floating nuclear power plants, offshore platforms, boats and other ship types, as well as cable for their repair.

**Can domestic manufacturers satisfy potential growth of demand for shipboard cables?**

Now in Russia marine cable is produced by 10 manufacturers. The Azov cable company, earlier borrowed 60% of the CIS shipboard market, operates in Ukraine.

Figures on volumes of output in 2007 are shown in the Table 1 and the Diagram 1 below. In 2007 the production volume has increased up to 5 101 km (22.92% higher than in 2006). But, since some factories include KG cable (rubber insulated flexible cable) in the given statistics, the real volume is about 3500 km. (at a level of 2003).

<table>
<thead>
<tr>
<th>The enterprises</th>
<th>2007, km</th>
<th>2006, km</th>
<th>Increase rate (in comparison to 2006), %</th>
<th>Ratio 2007, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sevkabel - Holding</td>
<td>973</td>
<td>308</td>
<td>215,91</td>
<td>19,07</td>
</tr>
<tr>
<td>2 Kavkazkabel</td>
<td>921</td>
<td>640</td>
<td>43,91</td>
<td>18,06</td>
</tr>
<tr>
<td>3 Amurkabel</td>
<td>617</td>
<td>436</td>
<td>41,51</td>
<td>12,1</td>
</tr>
<tr>
<td>4 Podolskkabel</td>
<td>599</td>
<td>462</td>
<td>29,65</td>
<td>11,74</td>
</tr>
<tr>
<td>5 Electrokkabel</td>
<td>525</td>
<td>643</td>
<td>-18,35</td>
<td>10,29</td>
</tr>
<tr>
<td>6 Rybinskkabel</td>
<td>513</td>
<td>742</td>
<td>-30,86</td>
<td>10,06</td>
</tr>
<tr>
<td>7 Kamkabel</td>
<td>505</td>
<td>669</td>
<td>-24,51</td>
<td>9,9</td>
</tr>
<tr>
<td>8 KPKZ</td>
<td>192</td>
<td>0</td>
<td></td>
<td>3,76</td>
</tr>
<tr>
<td>9 UGMK</td>
<td>176</td>
<td>190</td>
<td>-7,37</td>
<td>3,45</td>
</tr>
<tr>
<td>10 Ekspokabel</td>
<td>54</td>
<td>47</td>
<td>14,89</td>
<td>1,06</td>
</tr>
<tr>
<td>11 Saranskkabel</td>
<td>26</td>
<td>8</td>
<td>225</td>
<td>0,51</td>
</tr>
<tr>
<td>12 Donbasskabel</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Deutche kabel AG</td>
<td>0</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5 101</td>
<td>4 150</td>
<td>22,92</td>
<td>100</td>
</tr>
</tbody>
</table>

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$^6$ This volume can be compared to annual output of Nexans factory Kukdong Electric Wire (South Korea).
The majority of the listed factories produce narrow product range of shipboard cables. Only Sevkabel and Rybinskkabel develop this business line for today.

**The question of ability of domestic manufacturers to provide adequate supply arises quite naturally, as there is a number of problems in industry.**

1. **Quality.**

   The Russian cable factories use out-of-date technologies. All factories manufacture cables with traditional rubber insulation. Main disadvantages of such cables are low temperature of continuous work (65°C) and short operation period.

   Till the present moment manufacturers did not have stimulus to launch new materials and technologies, as demand for shipboard cables was insignificant.

2. **Quantity.**

   Only one Sevkabel (not stopping manufactures of a flexible cable) can produce more than 3000 km of shipboard cable per year. Rybinskkabel, Kamkabel and Amurkabel possess potential capacities and resources.

   But these enterprises will need to increase volumes by 5-7 times within 3-7 years to gain new emerging market. That is scarcely probable, considering, that it is necessary not only to provide quantitative growth, but also serious reequipment.

   In 2007 the output volume covered only 1/5 from potential market demand.

   The group of potential shipboard cable consumers across the Russian Federation counts 326 enterprises, including repair, construction and installation enterprises. Most of them are situated in the Northwest region.

   Only in Saint-Petersburg there are 57 enterprises of shipbuilding industry:
27 industrial enterprises;

· 30 scientific and design organizations (that is 40 % of manufacturing capacity 75 % applied science of this industry).

So why in the situation of obvious nonsaturation of demand and more attractive price of domestic products foreign cable is purchased?

Speaking about the problem of quality mentioned above, it is necessary to keep in mind influence of an environment, namely the following.

In connection to occurrence of modern projects of vessels for sea and river fleet, the requirements for shipboard cables are changing. Requirements for electrical and mechanical characteristics, environment resistivity, reliability and fire safety become tougher.

The engineering specifications on domestic shipboard cables were developed in 70th years of the last century and did not change many decades.

Owing to use of modern materials which domestic chemical industry unfortunately does not produce, and also to the modern design of cables, especially of halogen-free and fire-resistant types, the foreign cable today has higher competitive advantages in comparison to domestic.

Despite of technological lag, domestic enterprises possess several competitive advantages: lower price, smaller logistics costs, certificates of Russian Register of Shipping.

Now, as it was noted, the foreign cable has a number of advantages. And if a real competition with the Russian manufacturers is a question of 5-7 years, the competition with other foreign suppliers exists today already. Among them we would like to mention the companies: Prysmian, LS Cable, TeleFonika, General Cable, Draka MOG, Kerpen, Helkama which successfully compete in terms of the price, delivery conditions, processing of orders, industrial flexibility with Nexans.

Summarizing all said above, it is necessary to emphasize the following.

The market of shipboard cables - growing market, with potential volume (by our calculations) up to 2,0 billion USD a year.

The competition increases according to rising attractiveness of this market for manufacturers and in 5-7 years will become especially strong. It will happen when domestic manufacturers will develop qualitatively as well as quantitatively.

At the given stage foreign suppliers win on quality and product range (losing as it was already marked, on the price, Russian certification and lead time). And now they compete for an opportunity to occupy steady strategic position on the Russian market of marine cables.

It is necessary to consider also that fact, that for the large world companies the Russian market is far not unique and until recently was not regarded as perspective. For example, from dozens of factories of the world leader - company Nexans, only few
specialize in manufacture of shipboard cables, therefore their capacities are loaded without prospective 30-45 thousand km per year for Russian market.

Thus, in view of a growing demand and competition becoming stronger, an ability to provide the offer of competitive products comes on the foreground.

The decision of a problem of competitiveness development is possible only on the basis of a correct choice of competitive strategy. We would like to draw attention to what is the most interesting and perspective decision in our opinion. As we believe, construction of specialized manufacturing facility can provide realization of the shipbuilding program in terms of supplies of modern shipboard cable.

The analogue of such enterprise is factory Kukdong Electric Wire (South Korea) belonging to Nexans.

As is known from world experience, marine cable produced by this enterprise located in the center of Korean shipbuilding, is used by the largest world shipyards, such as Hyundai Heavy Industries, Samsung Heavy Industries, Daewoo Shipbuilding Marine Engineering, and meets all the highest requirements of ship builders.

Therefore the main competitive advantages of such enterprise will be the implementation of the advanced technologies and a beneficial location - in the center of Russian shipbuilding - Saint-Petersburg or Leningrad region. And as region obtained status of the basic shipyard and design center, it is possible to speak about great prospects of starting manufacture of shipboard cables here.

We are sure, that development of this business cannot be steady without creation of necessary capacities.

Stable partner relations being created between company ROSCABLE, USC and other shipbuilding companies will lead future factory to produce only quality products of high demand.