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**WORKSHOP ON THE SITUATION IN THE STEEL INDUSTRY IN THE NIS
RESTRUCTURING OF THE STEEL SECTOR IN RUSSIA**

Note by the Government of the Russian Federation

The Workshop will be held in Paris on 2-3 November 1999.

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RESTRUCTURING OF THE STEEL SECTOR IN RUSSIA

In spite of difficult economic conditions and financial problems in the Russian ferrous metallurgy, the restructuring of companies is continuing to pursue the Federal program "Modernization and development of metallurgy of Russia for 1993-2000". As a result of technical restructuring of companies the liquidation of morally and physically outdated and excess capacity is underway. Over the period of 1992-1998 the following capacity has been removed from service: steel production capacity – 30.0 million tonnes, including 66 open-hearth furnaces, 1 converter, 3 electric furnaces; 11 rolling mills with total capacity of 17.0 million tonnes of rolled products; 5 blast furnaces with total capacity of 5.4 million tonnes of pig iron; 18 coke-oven battery with total capacity of 9.0 million tonnes of coke. While technical restructuring is underway, it is important to create an accurate optimum of excess (effective) capacities, i.e. market reserve.

The practice of development of ferrous metallurgy in many countries in the world has shown that it is exposed to cyclical downturns and upturns and in these conditions it is necessary to have a reserve of capacity. In particular, in different countries this reserve amounts to: in Japan – 40.0 %, the USA – 30.0 %, Russia – 34.0 %, i.e. in Russia the level of excess capacity is about the same, as it is in other large steel producing countries. In Russia the capacity utilisation regarding main processes in metallurgical production amounts to: in iron-ore production - 86 %, in coke production - 72 %, in cast iron production - 70 %, in steel making - 68 % and tube production - 35 %.

As a result of implementation of measures, stipulated by the Program, the technological level of ferrous metallurgy over the period of 1993-1998 has changed in the following way: a portion of continuous steel casting has increased from 35 % up to 50 %; a portion of the oxygen-converter steel making has increased from 50 % up to 60 %; the rate of electric furnace steel making has increased from 10 % up to 13 %; the rate of open-hearth process in steel production has decreased from 40 % to 27 %.

Under a new program, being developed for the period of 1998-2005, the following changes are provided to have been accomplished by 2005: full withdrawal of all open-hearth furnaces with a ratio of oxygen-converter and electric furnace steel making 80:20, correspondingly; an increase in portion of continuous casting up to 75 %; growth in capacity utilisation of rolled production – up to 70 % and that of tube production – up to 65 %. Consumption of ferrous metals in the home market is expected to increase from 37.8 % of the total production in 1998 up to 48.3 % in 2005 and export will decrease from 62.2 % to 51.7 %. By 2005, as a result of equipment modernisation and technology perfection in ferrous metallurgy of Russia, the consumption of material and energy resources is expected to decrease by 20-25 %, the industrial emissions to environment will be reduced by 50-70 % and will reach the level of the European norms and standards.

The 90.3 % of the Russian metallurgical companies are privatized. The state does not interfere into economic activities of the privatized joint-stock companies. Over the period of 1992–1998 the direct aid of the state to joint-stock companies has practically not been rendered. Though the indirect aid by way of tax credits has taken place, its value was inappreciable (less than 1 %) and moreover that aid was rendered on a competitive and returnable basis.

The scientific and technological support of the restructuring of ferrous metallurgical companies is implemented through a system of Research institutes by way of concluding Research and Development (R&D) contracts. Industry-wide R&D activities are financed by the state budget on a competitive basis. A number of industry-wide important projects, concerning a transition to the market, are financed by the EU under the "TACIS" program. On the whole, financing the R&D activities within the period of reforms has been considerably reduced (by 50-60 %), especially the fundamental research financing (by 70-75 %), including financing from the budgetary funds – by more than 30 times. This decrease was partially counterbalanced due to setting up the company's extra-budgetary funds. But in view of sharp decrease in profitability of the companies this source hardly exists anymore.

The problems of environmental protection are solved by introducing new technologies and equipment, widening the network of pollution control facilities and taking other technical measures during the restructuring. These problems are partially handled by way of creation of ecological funds, and also with the help of system of fines for violation of the norms and standards set on air and sewage pollution. To a certain extent, the ecological research in terms of diagnostics and studying the situation in companies of ferrous and non-ferrous metallurgy was financed by the World Bank. But the volume of financing was negligible and did not considerably affect the level of environmental protection. However, we estimated the obtained outcomes as essential and positive. Further environmental protection measures financing by the World Bank, worked out by this institution through research, will positively influence the ecological improvements in respective regions.

The practical solution to the social aspects of restructuring has not been found yet for lack of financial resources. As a result, the rate of staff reduction, provided for by the program, tends to lag behind that of the downswing. In particular, the program stipulates a decrease in the number of staff almost by 130 thousand people. Over the years of reforms the downswing in production in ferrous metallurgy has been 30 %, and the number of staff has decreased only by 7 %. Diversification of the basic metallurgical production is implemented rather slowly, a transfer to other industries and creation of new jobs is practically not performed due to the even greater slump in production in allied industries. In our mind, these problems should be tackled first of all by regional authorities by way of setting up special financing funds, as well as attracting the budgetary funds.

The restructuring activities of individual companies are as follows:

The Magnitogorsk iron and steel works: a new production line is being set up – a converter plant with continuous casting plant (hot-rolling mill "2000", cold-rolling mill "2000" and hot-dip aluminizing and galvanizing plant). The new complex provides an increase in capacity utilisation throughout the whole technological chain up to 80 %, augments labour productivity by 40 % and raises production profitability by 30 %.

"Severstal": the renovation and reconstruction of operating continuous casting plants are underway, as well as building of a new section continuous casting plant and off-furnace steel working plants. In electric-furnace shop a new electric furnace by the "Fox- Фyкc" corporation is being installed, as well as an own base on vessels scrap upgrading. The implementation of these projects will allow the company to increase the operating capacity utilisation up to 75 %, to augment labour productivity by 30 % and to raise production profitability by 25 %.

Nizhniy Tagil iron and steel works: renovates rail and structural steel shops and wheel rolling shops, which includes putting into operation of a new continuous casting plant with a complex of off-furnace working plants. The planned renovation will allow to increase the capacity utilisation up to 78 %, to augment labour productivity by 25 % and to raise profitability of production by 20 %.

The Kuznetsk iron and steel works: implements renovation and modernisation of steel making and rolling-mill production including putting into operation of new continuous casting plants and making rails for high-speed mains. The proposed renovation will allow to increase the capacity utilisation up to 73 %, to augment labour productivity by 20 %, to raise production profitability by 15 %.

"Mechel" – the leading producer of stainless steel and alloyed steel products. The renovation provides for the creation of fundamentally new complex on sheet stainless steel production using continuous casting plant and cold-rolling department, and the stage of hot-rolling will be carried out on the "Steckel" "Стеккеля" mill of a modern design. Such a combination will allow to increase the capacity utilization up to 76 %, to augment labour productivity by 30 % and to raise production profitability by 20 %.