

CONSEIL DE L'ATLANTIQUE NORD  
NORTH ATLANTIC COUNCIL

EXEMPLAIRE N° 182  
COPY

N A T O C O N F I D E N T I A L

ORIGINAL: ENGLISH  
4th January, 1978

WORKING PAPER  
AC/127-WP/546

ECONOMIC COMMITTEE

URANIUM MINING IN THE COMECON COUNTRIES

Note by the German Delegation

SUMMARY

Since World War II, uranium mining in the COMECON countries has been carried out under Soviet control. In 1976 the production of natural uranium was: about 4,500 tons in the USSR, about 5,000 tons in the GDR, about 2,200 tons in Czechoslovakia, about 1,000 tons in Bulgaria, about 900 tons in Romania and about 400 tons in Hungary. Most of the ore is processed to uranium oxide in the various countries (except Romania) and is exported to the USSR. The natural uranium stocks of the USSR are at present estimated at at least 170,000 tons.

\*

\* \*

General

2. In the USSR and in the European COMECON countries, uranium mining has been carried out intensively since World War II. Originally, the USSR was alone responsible for the taking-up, expansion and execution of uranium mining in these countries; now, the countries concerned take increasing part themselves in the mining. During the past thirty years, the production of uranium in the Western countries was determined by considerably varying demands; in the COMECON countries, however, the production of uranium was steadily accelerated.

3. The Ministry for Medium Engineering of the USSR is the supreme authority responsible for uranium mining. Under it are the Main Administration for Uranium for uranium mining within the USSR and the so-called 8th Administration of the Foreign Trade Ministry for the control of uranium mining in the COMECON countries.

N A T O C O N F I D E N T I A L

AC/127-WP/5'6

-2-

4. The Soviet-German AG Wismut in the GDR, the Soviet-Czechoslovakian Mixed Uranium Commission in Czechoslovakia, the Main Administration for Rare Metals in Bulgaria (since 1962), the Banat-Oravita Mining Enterprise in Romania and the Mecsek Ore Mining Enterprise in Hungary are the corresponding controlling and/or executing organizations. In Romania, uranium mining has been withdrawn from any Soviet control - since 1962.

USSR

5. The most important uranium mining areas of the USSR are located in the following regions: Ukraine, Caucasia, the western RSFSR, the southern republics (Kazakhstan, Uzbekistan, Turkmenistan, Kirghizia and Tadzhikistan), Central Siberia and in the Far East. Uzbekistan/Tadzhikistan account for about 50%, the Ukraine for about 15%, Kazakhstan for about 8% and Caucasia and Kirghizia for about 7% each of the overall production.

6. The extracted ore is processed to uranium oxide in seven plants; an additional processing plant is under construction.

GDR

7. Uranium mining in the GDR is concentrated in five regions in the southern part of the country: Saxon Erzgebirge, Thuringia, Elbsandsteingebirge, Dresden-Gittersee and Deuben in the district of Halle. The Thuringian region accounts for about 40% and the Elbsandsteingebirge for about 20% of the uranium production. The processing of the extracted ore to uranium oxide is carried out in plants near Seelingstädt, Crossen and Königstein.

Czechoslovakia

8. Uranium mining in Czechoslovakia is spread over the whole country, but with a distinct concentration on the western half of the country. The five main regions are near the following towns: Pribram, Tachov, Jachymov, Hamr and Dolni Rozinka. The importance of the region around Pribram is steadily decreasing; that of the region around Hamr is considerably increasing. The shares of the individual mining areas in the overall production are as follows: Pribram 41%, Dolni Rozinka 11%, Tachov 14% and Hamr 27%; the remaining 7% come from smaller deposits.

9. 85-90% of the extracted ore are processed to uranium oxide in the two processing plants at Mydlovary and Dolni Rozinka.

Bulgaria

10. The uranium mines of Bulgaria are located near Sofia and between the Maritsa river and the Greek border in the Rhodope and Pirin Mountains. In the last six-seven years, the main mining activity has shifted further to the south. The extracted ore is processed to uranium oxide in the only processing plant of Bulgaria at Bukhovo.

Romania

11. Uranium mining and the uranium deposits of Romania are concentrated in four mountain regions: the western part of the southern Carpathians, the eastern part of the southern Carpathians, the Forest Carpathians and the Bihar Mountains.

12. A uranium ore processing plant is being built near Feldicara and will probably start operation in 1978. The extracted ore - which was exported to the USSR until 1962 - has been stored in dumps since 1962.

Hungary

13. The Hungarian uranium mining regions are the Mecsek Mountains, the Bakony Mountains (western part of the Hungarian Central Mountains) and the eastern part of the Hungarian Central Mountains. By far the most important region is the region of the Mecsek Mountains. The whole extracted ore is processed to uranium oxide at Cserkút near Pécs.

Poland

14. At present no uranium ore is extracted in Poland. Small quantities were extracted in the Sudetes, in the Lausitzer Mountains and in the Riesengebirge until the end of the fifties.

Reserves - Production

15. The uranium reserves in the COMECON area - worthy to be extracted at \$8/1b U<sub>3</sub>O<sub>8</sub> - are estimated as follows (in tons of uranium contents):

USSR	100,000-140,000
GDR	60,000
Czechoslovakia	75,000
Bulgaria	5,000
Romania	10,000- 20,000
Hungary	5,000- 10,000
Poland	insignificant

AC/127-WP/546

-4-

16. This quantity of reserves corresponds to 21% of the world reserves (without the People's Republic of China) if it is related to the lowest cost category of \$15/1b U308 used in the West; it is thus in reality considerably higher. Possibilities of finding further important uranium reserves still exist in the USSR in the conglomerates of the Siberian Shield, in the GDR, in the Elbsandstein Mountains and in Czechoslovakia in the chalk basin of Hamr.

17. Uranium production - which generally slightly decreased during the last 6-8 years - is estimated to reach the following amounts in 1976 (in tons of uranium contents):

USSR	4,500
GDR	5,000
Czechoslovakia	2,200
Bulgaria	1,000
Romania	900
Hungary	400

18. The uranium production of the European COMECON countries thus amounts to a total of 14,000 tons or 38.9% of world production without taking into consideration the People's Republic of China.

Export - Import - Consumption - Stock-Keeping

19. All the uranium extracted in the GDR, Bulgaria, Hungary, Czechoslovakia, Romania and Poland since World War II was exported to the USSR. Since 1972 Czechoslovakia has kept about 20 tons per year for its own direct consumption of natural uranium. Romania stopped its deliveries in 1962.

20. The cumulative uranium yield achieved by the USSR from its own production and imports from World War II to 1976 inclusively is as follows:

USSR	136,000	tons of uranium
GDR	135,300	" " "
Czechoslovakia	57,400	" " "
Bulgaria	23,200	" " "
Romania	10,000	" " "
Hungary	10,800	" " "
Poland	900	" " "
	<u>373,600</u>	

21. The consumption of the Soviet nuclear power stations and of the nuclear power stations delivered by the USSR to Bulgaria, the GDR, Czechoslovakia and Finland and supplied with fuel until 1976 amounts to a total of about 14,000 tons of natural uranium. This civilian consumption has considerably increased; it rose from about 1,300 tons in 1970 to about 2,400 tons in 1976.

22. The total amount of uranium available to the USSR until 1976 from its own production and the production by the COMECON countries without the civilian consumption was thus about 360,000 tons.

23. According to reliable information, the Soviet uranium stocks amounted to 120,000 tons in 1968 while the total production until 1968 was about 260,000 tons. No reliable information can be given on the use of the balance of 140,000 tons. It is certain that it includes the military consumption. On the basis of this ratio in 1968, the Soviet uranium stocks in 1976 can be estimated at at least 170,000 tons; they will probably be larger.

NATO,  
1110 Brussels.