

General Distribution
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ISOE INFORMATION SHEET
PRELIMINARY DOSIMETRIC RESULTS FOR 2000

IAEA Technical Centre - Information Sheet No. 6

Preliminary data for 2000

This ISOE Information Sheet presents the collective dose per reactor by country over the past four years (1997-2000) as well as long term trends for ISOE participants through the IAEA. Nine countries, including Pakistan for the first time, provided data for 2000 and Table 1 shows the average collective dose for operating PWRs, LWGRs and PHWRs for the period 1997 to 2000. Slovakia has become a member of the OECD and the related data was transferred to the European Technical Centre (ETC).

The PWR average collective dose per reactor, in general, followed a downward trend from 1.81 man Sv in 1997 to 1.17 man Sv in 1999 but it increased to 1.31 man Sv in 2000. For LWGR reactors, represented by two units in Lithuania and one unit in Ukraine, the dose decreased significantly, from 9.25 man Sv in 1997 to 5.94 man Sv in 2000. The average collective dose for these reactors is higher than for other types of reactors. Three countries showed upward trends: from 0.99 man Sv in 1997 to 2.60 man Sv in 2000 for Slovenia due to the steam generator replacement (reported as 1.48 man Sv for this task); from 1.68 man Sv in 1997 to 4.46 man Sv in 2000 for Pakistan due to a general high dose rate working environment; and from 0.25 man Sv in 1997 to 0.47 man Sv in 2000 for Romania.

Table 1: Average collective dose per reactor by country from 1997 to 2000

Average collective dose per reactor (man Sv)					
Country	1997	1998	1999	2000	No. of Operational Reactors
Armenia	3.41	1.51	1.58	0.96	1
Brazil	2.61	1.26	0.15	1.35	1
China	0.67	0.71	0.55	0.59	3
Slovenia	0.99	1.16	1.65	2.60	1
South Africa	1.24	0.65	0.86	0.42	2
Ukraine	2.05	1.89	1.37	1.53	13
Sub-Total (PWR)	1.81	1.52	1.17	1.31	21
Lithuania	9.25	7.53	6.40	5.35	2
Ukraine			11.47	7.12	1
Sub-Total (LWGR)	9.25	7.53	8.08	5.94	3
Pakistan	1.68	2.49	2.05	4.46	1
Romania	0.25	0.26	0.46	0.47	1
Sub-Total (PHWR)	0.97	1.38	1.28	2.47	2

The figures below show the three year rolling average collective dose per reactor by country for PWRs (except WWERs) and LWGR. The three year rolling average collective dose was calculated by taking the average of the annual value and the values from the two previous years. The two last figures show annual average collective dose per reactor and by country for PHWRs and WWERs. The peaks in the figures are recognized as the refueling outages.

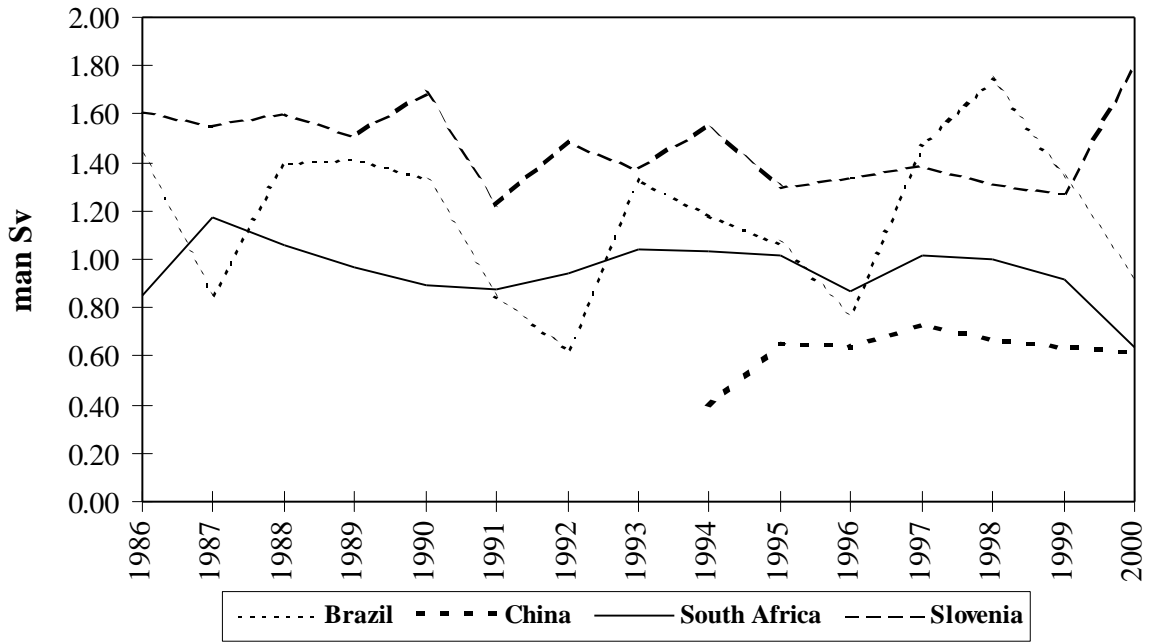
ISOE membership through IAEA

In 2000 the regulatory authority and the utilities in Slovakia changed the enrollment from the IAEA Technical Centre to the European Technical Centre and at the end of 2000 the last unit of the Chernobyl NPP shut down. Thus, as of June 2001 participation in the ISOE through the IAEA includes nine utilities in Armenia, Brazil, China, Lithuania, Romania, Russian Federation, Slovenia, South Africa and Ukraine (representing 38 operating reactors) and the regulatory authorities in Armenia, Bulgaria, China, Lithuania, Pakistan, Romania, Slovenia and South Africa.

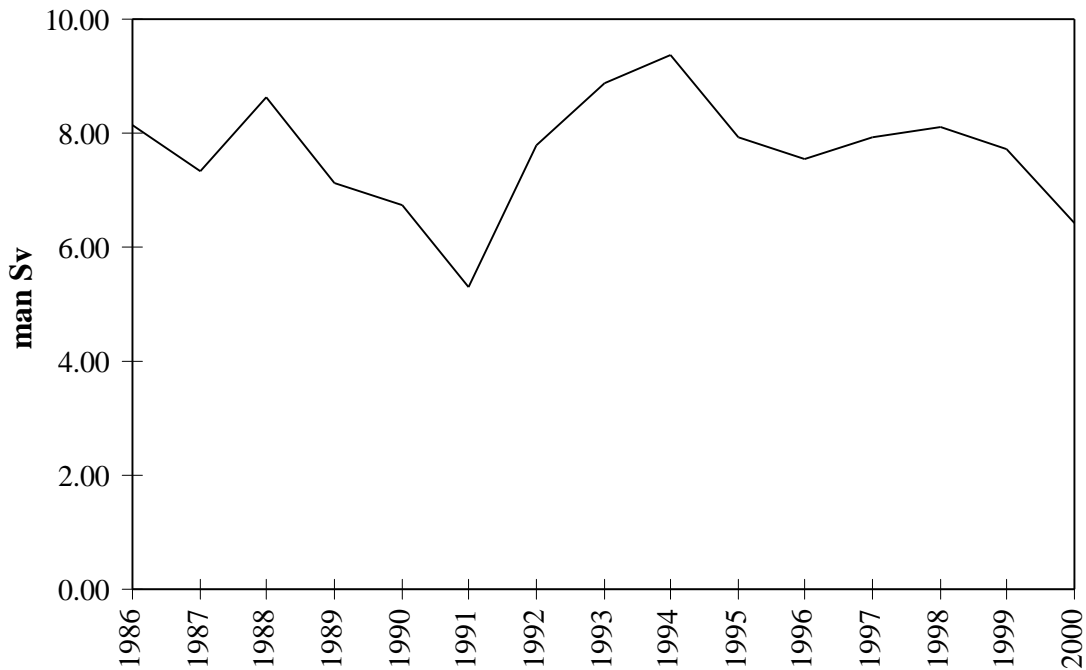
Additional information

The reader is encouraged to visit the web site where further information on the IAEA ISOE Technical Centre as well as the IAEA Radiation and Waste Safety programme is found: <http://www.iaea.org/ns/rasanet>. Information on IAEA Publications, including guidance on how to order, is given under: <http://www.iaea.org/worldatom/books>.

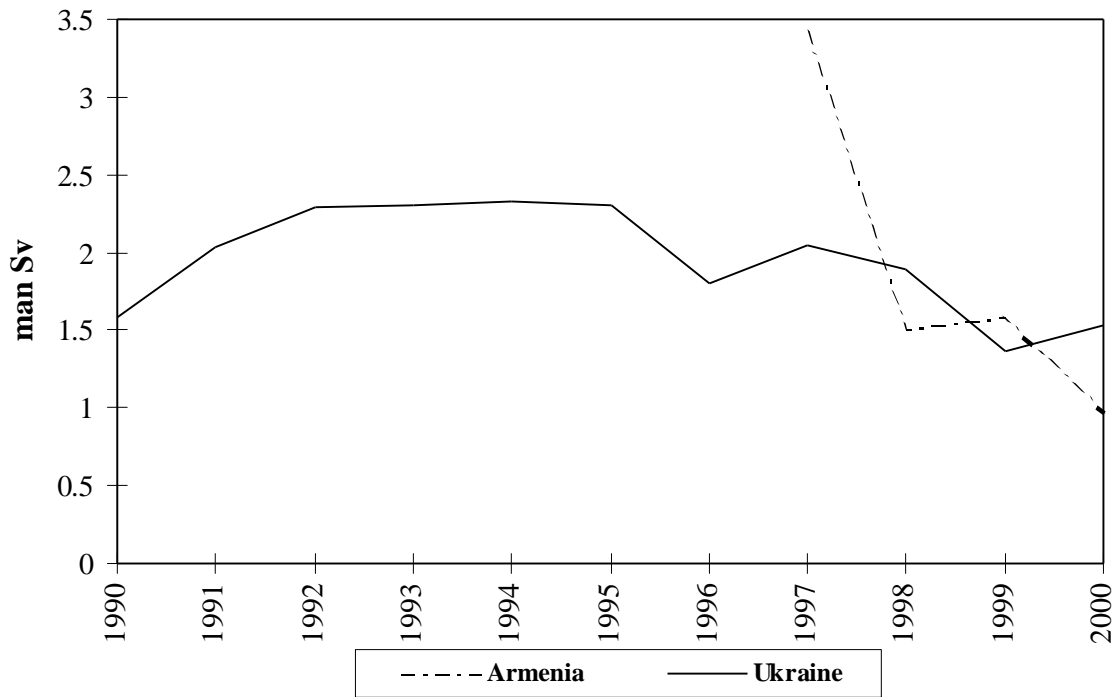
**Evolution of PWRs Three Year Averaged Collective Dose per Reactor by Country
(1986-2000)**



**Evolution of LWGRs Three Year Averaged Collective Doses per Reactor in
Lithuania
(1986-2000)**



Evolution of WWERs Average Collective Dose per Reactor by Country (1990-2000)



Evolution of PHWRs Average Collective Dose per Reactor by Country (1997-2000)

