Fight for resources spells trouble for Polish institutes

London. Poland's research institutes are for the first time competing for a slice of the research budget, which has shrunk by twothirds over the past five years to 19,000 billion zloty (a little over US\$1 million at today's exchange rate).

One in eight institutes has been cut off



Jan Krzysztof Frąckowiak: feeling positive about prospects for Polish science.

from state funding, and one in four has seen support reduced to well below basic running costs, following the introduction of a policy to allocate more funds to the best-performing institutes: under communism the state guaranteed the running costs of every institute.

The new policy allocates almost two-thirds

of all funding to institutes rated 'A' (international level) and one fifth to those rated 'B' (high national level). Institutes rated 'C' (need to improve) receive little money, while 'D' spells disaster — no funding.

To decide who should receive what, Poland's new committee for science research (KBN, see sidebar) ranked more than 850 university departments and research institutes according to publications, citations, and graduate output.

Almost a third of Poland's institutes fell into the bottom two categories. To avoid extinction, many have begun selling services to industry, with conspicuous success: last year they earned much of the total industrial income of Poland's institutes (Zl3,000 billion — more than a third of the research budget). But nobody knows how many institutes went to the wall.

Some complain that the assessment which they otherwise endorse — shows that the move away from communist influences is disappointingly slow: almost all the 83 institutes that previously belonged to the Polish Academy of Sciences appeared in the top two categories.

But Jan Krzysztof Frąckowiak, a former academy physicist and now secretary of the KBN, argues that the institutes were always renowned for high quality research. They were often used to house "politically incorrect" researchers, he says, who were unable to follow normal university careers.

KBN has also introduced greater competition for funding of research grants. In 1991, it began awarding grants according to a peer-review process that ignores the applicant's career status and the rating of the institute where he or she works. Under communism, a young postdoctoral fellow could rarely compete for funds with

KBN bringing democracy to Polish science

Western practices of science administration came to Poland in 1991 — two years after non-communists came to power in the first democratic elections when the government created a state committee for science research (KBN) to take over from the communist-controlled Polish Academy of Sciences. The committee has introduced a more selective system for distributing the research budget and created formal evaluation procedures.

The democratic constitution of KBN is a matter of great pride. Besides five government representatives, the committee comprises 14 scientists elected by the scientific community. KBN's two scientific commissions for basic and for applied research are also elected. They advise the committee where to spend research money using new performance-based criteria. **B.I.**

an established professor.

The major problem now facing KBN is that it does not have enough money to support fully even highly rated institutes. On average it has paid institutes almost a third less than they asked for, and has funded only a quarter of the 28,000 grant applications; good applications are sometimes held over to the next round (there have been five so far) to give them a second chance.

Science spending has dropped from a peak of 1.5 per cent of gross national product under communism, to less than 0.6 per cent this year; this compares with an average of around 2 per cent in Western Europe. Inflation has further eroded the buying power of this year's research budget of Z18,970 billion.

The shrinking budgets have also triggered an exodus from science: almost onefifth of the researchers in Poland left science last year. The uncertain prospects also mean that talented students no longer view a research career as attractive.

Scientists attitudes are also slowing reform. Too many older and established researchers find it "degrading" to have to ask for money, says Maciej Żylicz, a molecular biologist who is prorector for science at the University of Gdansk.

Nevertheless, KBN's members are optimistic. Poland is again between governments, following the defeat of Hanna Suchocka's coalition in May, and will hold a general election in mid-September. But KBN has already outlived four governments and is confident that political instability will not threaten its future. **Barbara Izdebska**

Spending on science in Poland (per cent GNP) 1974 – 1993

