

Polish education

Solidarity solid

Last week's Congress of Solidarity in Gdansk called on the Polish government to introduce a bill on higher education that would be acceptable to members of the academic and learned professions. This reflects a growing concern in Polish academic circles that the very considerable gains in academic autonomy won during the past year might be reduced when the negotiations between government and academics are codified in a new law.

The gains range from the right of the senate of a university to elect its own rector and dean through student participation in university government to the abolition of censorship of imported publications needed for academic study. It has also been agreed that compulsory Russian for undergraduates should be replaced by the choice of a foreign language.

So far, however, these concessions have been made piecemeal. The most comprehensive attempt to codify them — the Lodz Accords, which ended a month of student unrest last February — was expressed in terms so vague that there were considerable doubts in academic circles as to how binding they might be.

During the past six weeks, there have been several hints that the Polish authorities, while not actually reneging on their promises, are trying to draw back from the most radical demands. From the new censorship law, passed at the end of July, there seems to have been struck out the promised clause that a returning traveller could import for his or her own use one copy of any foreign publication, however controversial.

The new Independent Students' Association, legitimized by the Lodz Accords, is also concerned about apparent attempts by the authorities to whittle down student power. These include the deportation, in February, of a Czech student, Lenka Cvrckova, who had played a major part in organizing the Lodz protests. (She is now in gaol in Prague awaiting retrial on charges of passport irregularities after an acquittal by a lower court was overruled.)

The Ministry of Science, Higher Education and Technology has also refused to permit legal recognition to the student unions of Poland's three main ethnic minorities — Lithuanians, Byelorussians and Ukrainians — and it is suggested that the promised 33 per cent student representation on the senates of universities may be reduced to 20 per cent. Spokespersons for the students' association stress that during the coming academic year there are unlikely to be major clashes between students and the university governing bodies — since the rectors and deans have already been elected by the new procedures. The possibility of clashes between students and the ministry

is, however, far from remote.

So sensitive is the situation in some universities, apparently, that there have been suggestions that the opening of the academic year may be postponed — ostensibly on account of the economic crisis. Of greater significance, however, is the meeting last week between the new Minister of Science, Higher Education and Technology, Dr Jerzy Nawrocki, and representatives of the Union of Polish Teachers. This body, which includes university lecturers as well as schoolteachers, is not allied with Solidarity but is one of the old pre-1980 party-linked unions. Like Solidarity, however, this union considers that the government's draft bill on higher education shows a number of "negative deviations" from the version prepared by the "social codification commission". Minister Nawrocki has replied that apart from a few editorial changes, all the changes were "indispensable" modifications, reflecting the existing legal order and the powers of the state organs. The Union of Polish Teachers is unimpressed, and has called for further talks.

Vera Rich

UK atomic energy

Research reaction

The United Kingdom Atomic Energy Authority last year stepped up research on pressurized water and advanced gas-cooled reactors, partly in reaction to the government's commitment to a substantial programme of building thermal nuclear power stations. But fast reactor research consumed the lion's share — £82 million — of the £114 million 1980–81 nuclear research and development budget.

The authority is, however, cheerful about progress in the fast reactor division. Dr Walter Marshall, the authority's new chairman, announced last week that a new conceptual design for a commercial demonstration fast reactor will be ready shortly. The design, the latest of several drawn up by the National Nuclear Corporation in conjunction with the authority, is said to be "compact and elegant", and also cheaper than previous designs. Indeed, the authority estimates that a demonstration plant will cost only about 20 per cent more than a conventional advanced gas-cooled reactor, probably making it cheaper than France's Superphénix.

Dr Marshall seems, nevertheless, less concerned than his predecessor, Sir John Hill, that the government should agree to finance such a reactor now. The implication is that the new commitment to a thermal reactor programme will keep the authority and the rest of the nuclear industry busy for some time. Dr Marshall would prefer to wait until after the public inquiry into the Sizewell pressurized water reactor, but would appreciate a

statement of intent much sooner.

The fear that a lengthy delay in making such a commitment could jeopardize negotiations over international collaboration, in particular with the United States and France, seems to have receded. Dr Marshall, who has been talking to the US and French administrations, is optimistic that some arrangement will be possible about collaboration on fast reactors.

The authority has increased research into the safety of pressurized water reactors, in particular into the integrity of pressure vessels, the hazards of loss of coolant accidents and the impact of a major, but improbable, accident which, it says, would not release as much radioactivity as had previously been thought. The authority has also proposed that an Inspection Validation Centre be set up to train inspectors of pressure vessels, but has yet to make a formal application for the facility to the government.

Dr Marshall, who was speaking during the presentation of the authority's 1980–81 annual report, did not, however, have anything to say about the progress of the task force established earlier this year, under his chairmanship, to rethink the National Nuclear Corporation's design of a British pressurized water reactor. That design had become overcomplicated in an attempt to incorporate extra safety features.

The authority's expenditure during 1980–81 was slightly more in real terms than in the previous year. Total expenditure was about £331 million, of which £187 million came from parliamentary grant, the rest from income earned through services to industry.

Judy Redfearn

Computer memories

Bubbles burst

Washington

At the beginning of the year bubble computer memories, first developed by Bell Laboratories in the 1960s and introduced to the market four years ago, seemed poised for take-off. Although sales up to that point had been slow, they were predicted to rise sharply to about \$40 million in 1981, and four large US companies — Texas Instruments, National Semiconductors Corporation, Rockwell International and Intel — were publicizing plans to compete for a substantial share.

Now only Intel remains. National Semiconductors has announced its intention to withdraw from the bubble memory business, a decision that followed similar announcements by Texas Instruments and Rockwell earlier in the year. Intel remains confident that it can still find specialist applications in which bubble memories can meet its initial expectations. But grandiose schemes for their becoming a major competitor to conventional disk storage and silicon chips now seem unlikely to materialize.

National Semiconductors' decision was