

Germany avoids large projects in favour of economic payoffs

Bonn. Germany's new research minister, Matthias Wissmann, has announced a strategy that closes the door on new national space missions, large-scale research projects and high-definition television but increases support for research in eastern Germany. Although his announcement last week contained no surprises, it lays to rest lingering uncertainties inherited from his predecessor, Heinz Riesenhuber.

Wissmann, on the job for only six weeks, has a short time to prove himself before the next general election at the end of 1994. Europe's biggest economy is in trouble, and German research, once the most generously funded in Europe, is being asked to produce more economically relevant results for less money. Riesenhuber had set the stage for streamlining research, but his decade of service made it hard for him to make the necessary changes. Wissmann, a lawyer, has no such loyalties. Space research is a luxury Germany can no longer afford, and high definition television has proved to be a white elephant. Wissmann raised no eyebrows by cutting these programmes.

The new strategy includes a greater commitment to environmental research, including alternative sources of energy now that nuclear energy is no longer politically acceptable, and a strengthening of modern technologies. Wissmann is singling out biotechnology in an attempt to reverse an unfavourable climate for genetic engineering.

National research centres created to develop nuclear energy, such as those at Karlsruhe and Jülich, will come under greater pressure to redirect their efforts. Wissmann is no fan of the large-scale centres, which are held to be inefficient and inflexible; he wants to see more competition within them and closer collaboration with industry. At the same time, he wants industry to increase its share of the national research budget, which has dropped from 62.3 per cent in 1989 to 58.4 per cent in 1992.

Wissmann's aims will not be easy to realize in the short term, but one goal is to strengthen dialogue between industry and academic institutions. In an attempt to break through research inertia (what he refers to as "decrepit structures") he plans to set up "innovation colleges" in eastern Germany, where researchers from both sides of the divide work for a few years on a defined government funded project, then take back their experiences to each domain.

Wissmann also wants to establish regular meetings of an advisory group made up of six scientists and six industrialists and supervised by the research ministry. The group is not intended to "tell industry what to do" in the manner of Japan's Ministry of International Trade and Industry but instead to develop a German model of cooperation and consensus.

Alison Abbott

Swiss do well on patents but demand results

Basel. Switzerland performs better in biomedical sciences and physics than most countries and its institutions lead the world in the amount of research needed to obtain a patent, according to two recently published reports on Swiss science. But success is not uniform, and limited resources may mean that funding decisions will actually penalize successful researchers.

The reports are to be used this summer by the federal government to decide science policy for the next budget period 1996-99. The report from the science advisory body, the Swiss Wissenschaftsrat, shows that Swiss university researchers perform excellently according to bibliographic analysis. Citation rates in physics and biomedical research are comparatively high, with 64 per cent and 61 per cent of papers in those fields being cited by other scientists at least once. At the same time, the rate for clinical medicine is only 43 per cent and for mathematics it is 34 per cent.

In addition, the leading role played by industry in supporting research has not stifled the dissemination of results. "While

industry pays for 75-80 per cent of Swiss scientific research, 70 per cent of the publications come from universities", says François Da Pozzo of the advisory council.

The figures in the report will be used to grade performance and to determine funding, with success a possible indication that generous funding is no longer necessary. The result may be less money for capital-intensive fields such as physics and more for areas that, although weak, are deemed to be of national importance.

A new study from the government's economic agency, the Bundesamt für Konjunkturfragen (BfK), says that there should also be more cooperation between researchers and industry. Switzerland has more patents per inhabitant than any other country and acquires them very efficiently. A patent arises on average from research spending of only US\$1.25 million, exactly half the average for the European Communities. But the report warns that the future may not be so bright because Swiss high technology lags behind its international competitors in several fields.

Oliver Klaffke

Centocor takes the bad news with the good

Washington. Last week was bitter-sweet for the biotechnology company Centocor Inc. of Malvern, Pennsylvania. Concurrent with an announcement that the company was stopping clinical trials of its leading drug, Centoxin (or HA-1A), preliminary data from a phase-III clinical trial of a second drug, CentoRx, indicated that the drug may help to reduce complications from blood clots associated with high-risk coronary angioplasty.

The company suspended the Centoxin trials in January after an interim analysis of trial data showed that the mortality rate among patients treated with the drug who did not have Gram-negative bacteraemia exceeded the rate among patients in the same group who received a placebo (see *Nature* 361, 290; 1992). The news caused share prices to fall by just 25 cents, to \$7.25. Most stock analysts had already written off Centoxin's chances of being approved by the US Food and Drug Administration (FDA) after the agency asked Centocor last April to undertake a second phase-III clinical trial because results from the first trial had failed to prove that the drug was effective. Centoxin is a human monoclonal antibody intended for the treatment of sepsis caused by Gram-negative bacteria.

An initial analysis of results from a phase-III clinical trial of the cardiovascular agent CentoRx indicated that the incidence of blood-clot-related complications was 35 per cent lower among patients treated with the drug than among those who received a placebo. Although this news was a relief for company officials, who say they plan later this year to file a product licence application for CentoRx with the FDA, it is Eli Lilly & Company of Indianapolis, Indiana, and not Centocor that is likely to reap most of the financial rewards.

Lilly entered into a strategic alliance with Centocor last July and, in return for an investment of \$100 million, obtained the marketing rights to Centoxin and an option to obtain the rights to CentoRx for an additional \$25 million if Centoxin was approved by 1 January 1994. With that outcome highly unlikely (the company has said that it will proceed with Centoxin if a way can be found to preselect patients who might benefit from the drug), Lilly stands to acquire the rights to CentoRx for nothing.

Diane Gershon

Correction

The annual turnover of US Biochemical was incorrectly reported in a recent story about its pending sale to Amersham International plc (*Nature* 361, 199; 1993). The correct figure for last year is US\$38 million.