Who pays the bill?

Munich

WEST German Chancellor Helmut Kohl last week put strong pressure on the *Länder* to support an expanded science foundation for all of Germany. Speaking at the annual meeting of the West German science foundation DFG (Deutsche Forschungsgemeinschaft) in Bonn, Kohl said he supported the goal of a single science foundation for all of Germany, implying that he would back DFG's request for a large budget increase to underwrite East German research. The federal government and the *Länder* between them provide funds for DFG on a roughly equal basis.

DFG has asked for a series of increases, beginning with 9 per cent in 1991 and rising to 25 per cent in 1996, in order to handle the expected flood of grant applications from East Germany. Kohl, who appeared at the DFG meeting for the first time since 1986, did not commit himself to paying the full amount, but his speech was seen as a strong basis for negotiations in which the Bonn government will put pressure on the reluctant *Länder* to pay for at least part of the increase.

Spokeswoman Eva-Maria Streier pointed out that the increases would still be less expensive than setting up a second DFG in East Germany. The 1990 DFG budget is DM1,167 million (about \$700 million).

Streier explained that the extension of DFG to East Germany can proceed only if the East German government approves the move and the yet-to-be established *Länder* in East Germany pay at least a nominal contribution. When he visited DFG in May, East German Education Minister Hans-Joachim Meyer said that DFG grants are just what East Germany needs to improve its research, reported Streier. But there has been no official response as yet from the East German government as a whole.

DFG arrived at the 25 per cent figure by comparing the number of professors at universities in each country and assuming that East Germans would receive as many grants as West Germans do. Outside funds are sorely needed for research, especially in the academy, as previous sources, such as the soon-to-be-bankrupt state-owned companies called *Kombinate*, are drying up.

DFG has problems just supporting West German research. After years of increases that barely kept pace with inflation, DFG recently received a 5 per cent increase for 1990 and a promise from Bonn and the *Länder* that it would receive 5 per cent a year for five years, thanks to the intervention of Education Minister Jürgen Möllemann.

In a related development, Möllemann's

massive efforts on behalf of young researchers in West Germany were rewarded on 13 June when the Bonn cabinet agreed to invest at least DM4,000 million (about \$2,370 million) over ten years. If it is ultimately approved by the *Länder*, the new programme would mean an additional 12 per cent increase, apart from the 5 per cent already promised and the potential 9 per cent for East Germany, in 1991. The programme will increase stipends for both graduate students and young researchers seeking the teaching qualifications known as *Habilitation* with a special emphasis on supporting women in science. It is intended to help keep qualified young people at universities until professorships become available later in this decade.

Now that Bonn has been persuaded, DFG's chances of gaining extra funding for East Germany will turn on the attitude of the *Länder*. Both sides have to agree before a budget increase can take effect.

Hans Stender, spokesman for North Rhine-Westphalia, the most populous *Land* in West Germany, said his government supports the extension of DFG grants to East Germans. But he emphasized that the *Länder* in East Germany, which have yet to be formed, would have to pay their share out of tax revenues.

MAGLEV TRAIN

Japan bites the bullet on test track

Otsuki

DESPITE the gigantic cost, Japan's Ministry of Transport has given the official go-ahead for a project to build a test track for a high-speed magnetically levitated train through a mountain range west of Tokyo. The mountain track is essential to test the Maglev's capability to cope at speeds of 500 km per hour with the gradients, curves and tunnels that a proposed line between Tokyo and Osaka would encounter. If the line is built, it will carry passengers to Osaka in one hour, considerably less than half the time taken by the famous 'bullet' train.

The experimental track will run for 43 km between the tiny mountain villages of Sakaigawa and Akiyama near the town of Otsuki, about 90 km from Tokyo, and will cost \$2,000 million (¥304,000 million). It is expected to be completed in 1995 and will be underground for 80 per cent of its length. Until now, tests of the Maglev have been confined to a straight 7-km track on flat land in the southern island of Kyushu.

Otsuki was a natural choice because it lies on the proposed route to Osaka and its test track, which will be extremely expensive to build, could provide a foundation for the actual line. It is also no coincidence

Stender admitted that this seems unlikely, because the East German state is bankrupt and the new *Länder* will not be able to raise much in taxes until the economy gets on its feet. In that case, he said, Bonn will have to make up the difference. North Rhine-Westphalia considers all such special expenses generated by the absorption of East Germany to be "consequences of the war", and he pointed to a clause in article 120 of the West German constitution that declares that such costs must be paid by the federal government and not the *Länder*.

North Rhine-Westphalia has been the most extreme of the *Länder* in its criticism of the way science is supported in West Germany. Its Education Minister Anke Brunn made the revolutionary suggestion in February that the *Länder* should reduce their contributions to DFG from 50 per cent to 25 or even 10 per cent so that the money could be put to work closer to home.

No other *Land* took up her cause, and a Bonn Education Ministry official said that the suggestion would "bring on the ruin of the joint research funding system" that has worked so well in West Germany. A DFG official said that this plan would destroy DFG's autonomy by placing it under the thumb of the Bonn Finance Minister, who will not necessarily support the cause of science.

Steven Dickman

that Otsuki is in the constituency of Shin Kanemaru, an elder statesman of the ruling Liberal Democratic Party (LDP) who is a strong supporter of the proposed Maglev line.

Kanemaru and others are pitted against the Ministry of Finance which considers the Tokyo-Osaka Maglev line far too expensive to build — estimates range from ¥3 million million to ¥10 million million (\$20,000 million to \$67,000 million). There are still many technical hurdles to overcome before commercial operations can start, not the least of which will be finding a way to shield passengers from the strong magnetic fields of the train's superconducting magnets.

Such matters have not stopped land speculators from driving up prices in the Otsuki area. Land prices near the test track have soared to over ¥300,000 (\$2,000) per tsubo (3.3 square metres), ten times the price of five years ago. Estate agents from Tokyo have descended on the remote mountain villages near Otsuki offering wads of cash in exchange for land, but the local farmers are hanging onto their property in the belief prices will go even higher.

David Swinbanks