Report from Bonn by Rainer Apel

Moving into a 21st 'maglev' century

Germany's Transrapid maglev technology is becoming an attractive option for other countries, too.

On June 14, the Transrapid pilot project for a maglev rail line that will connect the nation's two biggest cities, Berlin and Hamburg, by the year 2005, cleared the Bundesrat, the chamber of the 16 states, the last parliamentary hurdle for its realization. This means that the engineering and funding process needed to start construction, in spring 1998, can go ahead on schedule.

Transportation Minister Matthias Wissmann, in a statement at the conclusion of the Bundesrat session, welcomed the vote, for sending out a long-overdue signal for "Germany's capability for innovation," and for "making the Transrapid the symbol of a new departure" into the future. Wissmann said that with this project finally under way, maglev rail had a good chance to become attractive for the new projects in the Europe of the coming century. In this context, he welcomed the fact that the Berlin-Hamburg Transrapid rail line has recently been put on the official European Union map of the designs for the 21st century continental infrastructure grid. The Berlin-Hamburg project is not funded by the EU, but other such projects may be, and many here expect they will get funding.

Will there be such projects? Shortly after the vote, the debate about extension of the maglev rail grid beyond Berlin-Hamburg acquired new momentum. A good dose of long-missed technological optimism is suddenly becoming visible.

Christoph Atzpodien, the chairman of the maglev rail planning association in Schwerin, under whose auspices the Berlin-Hamburg project will be carried out, said on June 15 that he is convinced that the maglev technology for high-speed rail, which today is still living the life of a seemingly "exotic" prototype, will come to play a key role in the transportation of the future. Looking ahead at the Germany of 30 or 50 years from now, one would find the maglev technology a widely accepted, important means of travel.

Atzpodien outlined a convincing vision for maglev grids in the three most populated regions of Germany, Berlin-Hamburg, the area around Dresden and Leipzig, and the Rhineland urban regions, which would see the Transrapid connecting the largest cities of those regions. Sometime in the first half of the coming century, these regional grids would also be interconnected, and would cross the borders to other European countries, as well.

Is this a realistic perspective for a Europe whose individual governments today seem to be firmly committed to use conventional wheels on rail, on their planned high-speed railway grids? The EU's official planning maps do not project any maglev trains yet—beside the one that is going to be built with national funding in Germany.

Ironically, the EU program for high-speed rail, the designs of which date from the early 1980s, did not get passed before December 1994, and the projects that *were* authorized, were only one-third of the total number originally proposed. Thus, ironically, the EU bureaucratic delay of today will work to the benefit of maglev tomorrow, as a researcher at the Berlin Institute of Railway Technology once elaborated to this author.

In 2005-10, all European governments will be faced with whether to modernize their high-speed rail tracks. And because of the immense investments that will be required for a thorough overhaul of the infrastructure grid, the question will be, whether the money would not be better used for the construction of maglev rail, instead of sinking tens of billions of dollars into outmoded, conventional wheel-based technology. This will be the hour of the Transrapid.

Indeed, a number of governments are already looking to maglev. Thyssen Industrie, the main producer of the Transrapid, reported interest in the technology in the United States, where, after decades of automotive concepts, there is now a renewed debate about the return of public transportation for urban, densely populated areas. For example, a maglev grid connecting San Francisco, Bakersfield, Los Angeles, and San Diego is being discussed, although no decision has yet been taken.

Similarly, a Brazilian project for a maglev rail line connecting Rio de Janeiro, São Paolo, and Campinas is being discussed. Brazil's Transportation Minister Odacir Klein met with Wissmann in Frankfurt-on-Main on June 12, concerning such projects. A joint group of experts has been formed, to design future high-speed rail projects in Brazil, and the maglev technology is one of the options mentioned in a June 13 newsletter of the German Ministry of Transportation.

Furthermore, the possibility is being looked at for a Transrapid line between Thailand's capital, Bangkok, and its southern industrial region of Rayong. In Australia, Thyssen has its sights on a similar project between Sydney and Canberra. Germany's Minister of Economics Guenter Rexrodt, who will visit Australia in August, reportedly will offer maglev rail technology to his hosts.