GERMANY

Agencies Tout Reforms, Seek Greater Support

BERLIN—Stung by criticism from an international panel, the leaders of Germany's DFG basic research funding agency and the prestigious Max Planck network of research institutes last week outlined initiatives to make Germany's research system more flexible, better coordinated, and more open to fresh ideas and top researchers from abroad. The reforms also include plans for closer relations between Max Planck researchers and their university counterparts and increasing diversity among DFG peer reviewers. But DFG president Ernst-Ludwig Winnacker and Max Planck president Hubert Markl say that they can only do so much: The German government, they argue, must do its part by easing federal regulations and boosting spending.

With one voice. Teamwork and flexibility are the hallmarks of proposed reforms by, from left, Helmholtz's Ganten, DFG's Winnacker, and Max Planck's Markl.

The Max Planck and DFG initiatives, announced at an unprecedented joint press conference here, follow a separate move last month by the Helmholtz Association, which represents the country's 16 federally funded national research centers, to centralize some decision-making and foster work in six interdisciplinary areas. All three research organizations are responding in part to outside pressure. The Max Planck and DFG initiatives follow a report in May by an international evaluation commission that criticized the quality of German university research, branded the DFG as stodgy, and urged Max Planck to move more swiftly into new research areas (*Science*, 4 June, p. 1595). Helmholtz was recently jolted by the government's decision to shift one of its centers to the Fraunhofer applied science network, with hints of further changes. Together, the actions of these major research players signal an openness to reform as the country heads into the new millennium. "We want to become more flexible in pursuing fresh new research fields, more cooperative in our work with universities, and more attractive to top international scientists," Markl told *Science*.

At Max Planck, the strengthening of a research planning panel and reforming the way institutes are evaluated should allow it to move more swiftly into new fields. Chagrined by the recent loss of three top scientists to international competitors, Markl also intends to strengthen overseas recruitment efforts. This summer Max Planck will make its first real foray into education by opening several international research schools that will offer advanced scientific degrees in tandem with German universities. Markl is also preparing to launch a program to create interdisciplinary teams from several institutes, starting with three projects in such areas as mixed-phase catalysts for fuel cells and materials analysis.

Winnacker would like to open up the DFG's peer-review system to more women and younger scientists by wrestling some control over appointments from Germany's scientific societies. In an effort to make the system more transparent, DFG will soon publish a first-ever list of its approximately 5000 outside reviewers. It also plans to attract foreign scientists by supporting focused research programs at several universities.

The reforms deviate somewhat from the recipe laid out last spring by the international panel, led by materials scientist Richard Brook, chief of Britain's Engineering and Physical Sciences Research Council. For example, Winnacker rejected the group's suggestion that the DFG use more of a "top-down" approach in setting research priorities for its university grantees. Such directed research, he says, should be limited to nascent fields such as bioinformatics. Markl and Winnacker also noted that the reforms need to be combined with larger changes to the research enterprise. "It's difficult to make reforms when you are handcuffed by over-regulation and limited by a lack of funds," said Winnacker, noting that Germany is falling behind the United States and Japan in the share of its economy devoted to research.

Although she has not responded directly to their challenge, federal Research Minister Edelgard Bulmahn has expressed support for reforming employment practices and has pledged to lobby for increased spending after the current round of budget cutting ends in 2003. "We plan to relieve research institutions and universities from some of these bureaucratic restrictions and strengthen their independence," she said in a statement. An expert panel that includes Winnacker will begin a study early next year on how to solve such bureaucratic problems.

Some changes already are under way. At a recent meeting, Helmholtz president Detlev Ganten, who directs the Max Delbrück Center for Molecular Medicine, and the Helmholtz oversight board were given more power "to improve the coordination of research" among its facilities, which are intended to meet national needs. Although the six strategic areas cover such broad topics as the "structure of matter and basic physics" and "health research and life sciences," Ganten says that the government has made it clear that "no center can do just what it wants to do anymore." This spring the science council will conduct a systematic evaluation of Helmholtz and its centers, which range from Hamburg's DESY synchrotron to Potsdam's research in geosciences. Ganten predicts that the review "will lead to significant changes" in the association and its components.

–ROBERT KOENIG

ASTRONOMY

New Tragedy Hits French Observatory

Disaster has struck the Institute of Millimetric Radioastronomy (IRAM) in France for the second time this year. On 15 December, a helicopter en route to the mountain observatory crashed, killing at least three people on board. The passengers—one IRAM technician and three employees of a subcontractor—and the pilot were on a service mission to the observatory, which sits atop the 2552-meter Bure plateau in the French Alps. "We are still entirely in shock," says IRAM astronomer Michel Bremer.

In July, a cable car servicing the observatory came loose from its cable, plummeting 80 meters to the ground and sending 20 IRAM staff and subcontractor employees to their deaths (*Science*, 9 July, p. 181). It's not clear what caused last week's crash.

The observatory, which is currently accessible only by helicopter because of wintry conditions, has been operated by a small crew since the July accident, says Bremer. Run jointly by the French basic research agency CNRS, Germany's Max Planck So-

CREDITS: (LEFT TO RIGHT) GANTEN; DFG; R. STONE