## **Italian Space Agency Head Ends Term With a Bang**

VENICE—With only days to go before his term as special administrator in charge of Italy's space agency, ASI, comes to an end, engineer Silvano Casini has stirred up a hornets' nest by presenting a 10-year plan for ASI to a parliamentary technology committee in Rome last week. Casini's plan flies in the face of recommendations made in February by a government-appointed panel headed by physics Nobelist Carlo Rubbia, calling for expanded support of international collaborations such as the space station—exactly where the Rubbia panel suggested cutbacks. It also drew a sharp rebuke from the research ministry, ASI's paymaster, headed by newly appointed Luigi Berlinguer. In a statement, the ministry expressed "amazement" at the release of such a detailed proposal by "an administrator whose mandate expires by law in the next few days."

The plan is the latest twist in ASI's tortuous career since it was spun off from the National Research Council in 1988. Under the leadership of Luciano Guerriero, it earned a reputation for mismanagement and waste. Since 1993, the agency has twice been placed under a special administrator. Over its 8-year life, ASI has run up vast debts—more than \$650 million at the end of last year—and has suffered a number of mishaps, such as the loss of the tethered satellite flown earlier this year on the space shuttle and this month's failure of the first launch in the Ariane 5 program (Science, 14 June, p. 1579), in which Italy has a 15% stake. Such incidents "haven't helped the agency's image," says ASI spokesperson Leonardo Gagliardi. And starting this week, nine former ASI officials, including Guerriero, face trial for corruption, accused of channeling excess funds to industry and consultants and striking private deals.

The Rubbia panel, which looked at ASI's national and international projects, gave more ammunition to ASI's critics. The five-strong panel, which included Antonio Ruberti, a former research minister and European Union research commissioner, recommended that support for international collaborations be tapered off in favor of national programs that would support Italian industry, such as a small-payload launcher. It even suggested that

some international collaborations such as the logistics module, which Italy is building for the international space station, be funded by the ministry of foreign affairs, given that "the Italian commitment to the space station is principally a response to the requirements of foreign policy."

Planning for the long-term future was not part of Casini's mandate when he was appointed for 1 year to build up the ASI executive after the management board was dismissed. Nevertheless, he set about preparing a 10-year plan for the agency. Although the long-awaited plan does follow some of the Rubbia panel's suggestions, it gives much more positive support for international projects, in particular the space station, about which Casini is very enthusiastic. The plan calls for increased collaboration with both NASA and the European Space Agency; expansion of the telecommunications program; a new small launcher; and a temporary cutback on contributions to ESA while ASI maintains strong support for the space station. While ASI has been running on a static budget of just under \$600 million annually for several years, Casini wants this stepped up to \$1 billion by 2000.

Staff members at ASI have been talking up Casini's plans. "The Italian contribution to the station remains a priority," says Cesare Sodi, director of the ASI plan. Giovanni Rum, head of the space station and scientific missions department, adds that the logistics modules are still on schedule to be delivered to NASA in early 1998.

And despite Berlinguer's criticism of Casini for overstepping his mandate, Casini's proposals may get a friendly reception. Elected a month ago, the new minister has already declared his support for space research, saying that the current level of funding is "insufficient" and promising more cash and more support for international collaborations. According to Casini, this support had better arrive soon, as the agency is nearing financial collapse. "We have [\$4 million] in the coffers," he says. —Susan Biggin

Susan Biggin is a science writer in Venice, Italy.

now. Industrial contracts have already been signed, and tinkering with either could end up costing more than it would save.

Significant as these deliberations were, they were overshadowed by fears that the science directorate might be disbanded or weakened during a reorganization of ESA's management structure. The directorate is widely admired for running scientific missions efficiently, and scientists are worried that its skills will disappear if science is subsumed into a new structure.

Scientists were first alerted to possible changes in ESA's structure in late May, when *Space News* wrote about the director-general's plans for reorganizing ESA. The agency wants to improve efficiency and work within tighter budgets, but the discussions have been held "in very great secrecy," says Woltjer, and that



**Man with missions.** SPC Chair David Southwood.

"has very much irritated the scientific community." Woltjer says that scientists fear a move from a so-called vertical structure to a horizontal one. This would mean that in place of directorates such as science or Earth observation, which are responsible for projects from inception to implementation, one section would be responsible for planning all projects and another for implementing them. Telephone requests from *Science* for interviews with se-

nior ESA officials have not been returned.

Southwood, Woltjer, and others acknowledge the need for change but think there is a case for excluding science. "Science is the best bloody directorate in the agency," a senior figure in the European space industry told *Science*. During last week's SPC meeting, France and Germany, two of ESA's larg-

est contributors, instructed their delegates not to speak on the issue. "Our position is very simple. It is not the business of the SPC to discuss this issue; it has not yet been discussed by the council. They are trying to interfere in the internal organization of ESA," says CNES's Brachet. But the issue was discussed nonetheless, says Southwood, and "the meeting was very emotional."

Meanwhile in French Guyana, ESA engineers are trudging through the swamps looking for clues to the cause of the disaster and possible pieces of salvageable wreckage. "Dropping flight hardware in a swamp is not a great idea, but we are seriously investigating what might be saved," says Southwood. Europe's space scientists are also wondering whether they will soon be picking up the pieces of their much-loved science program.

-Helen Gavaghan

Helen Gavaghan is a science writer in Hebden Bridge, U.K.