

somewhat closer at these contacts we of course find different levels of importance and scope, according to the hierarchically level of the person or body involved. At the top, there is one institutionalized planning process in the supervisory board, which decides about the long range corner stones of the program. Members of the supervisory board come from government, science and industry, each of them providing one third of the membership. It is obvious, that these members come from the departments or industries interested in aerospace. This guaranties a very efficient control of the general direction in line with needs of government and industry, which turn are very closely interconnected too, by common programs, often financed by government. Going down through the hierarchic levels the exchange of information and agreement about plans becomes ever more detailed and ever smaller, down to the scientists desk who with his colleague in industry communicates about practical details of how to solve the common problem.

The "scientific community" influences the basic research program of DFVLR - which today makes up for a mere 15 % of total work - in the usual ways, that is acceptance of publications, invitations to conferences etc., which in turn determine which scientific analysis or development is regarded as qualified and important. Secondly, they influence the institutional setting of DFVLR by being present in the regular five yearly reviews of the R&D institutes of DFVLR, which influence the future development of every single DFVLR institute. And of course, thirdly there is the every day contact between scientist on how to solve given problems.

To sum up, DFVLR has very decentralized ways of contacts with the outside world; these contacts are various, very close and make up for a large part of the motivation of DFVLR personnel. The institutes are very independent in regard to details, but they settle these details in accordance with the plans which they found in mutual consent - more or less, of course - of all parties involved. Given these various variant contacts, there is a strong role of bottom up planning, which on one side yields a strong motivation to fill programs, but on the other side can cause a serious problem for overall control.

This informal flow of program adjustments and the informal flow of results used by this way of behavior used to affect the work process of DFVLR as well as the image and reputation of DFVLR. Despite the fact, that there were important contributions to industry's needs, nobody took notice of them, very often these contributions were even forgotten or denied, partly because at an early stage industry used to take up parallel work which of course and rightfully was counted as an industry result, than. This has led in the last half decade to a marked change in DFVLR's way of handling contacts. This change was helped by the