Adviesraad voor het
Wetenschaps- en **T**echnologiebeleid

A**W**T

Human Resource Management

Summary of advisory report 22

Importance of Human Resource Management (HRM)

The quality of research in a research organisation depends on a vigorous Human Resource Management policy. The utilisation of human resources is of vital importance to every organisation. That applies especially to knowledge intensive work like research. It takes years to accumulate expertise, which is why the steering of research involves a relatively long time span. Researchers spend years becoming specialists who can contribute something to their discipline. This lengthy process, and the narrowing prospects as time progresses, mean that researchers become increasingly straight-jacketed, finding it more and more difficult to escape the confines of their profession. And yet for many researchers change is crucial to their work if they are not to fall prey to lack of motivation from spending too long in the same specialism. Researchers are not wont to bring about such change of their own accord. Pressure from above is usually needed to initiate the required changes in good time. To achieve that, a vigorous HRM policy is essential to a research organisation.

Universities lag behind

Universities are lagging behind with their HRM policy in comparison to industry and semi-public research organisations like TNO, the organisation for applied scientific research in the Netherlands. The universities need such a policy all the more because they have much fewer opportunities, than industry for example, of allowing researchers to move on to other sections of the organisation. This backlog in the universities is part and parcel of the fact that they are subdivided by law in the Netherlands into small independent units with a predetermined organisational structure and tasks, when in fact a sound HRM policy requires an integrated approach.

The government's role

The government should interfere much less with the operational management of universities and should focus much more on encouraging universities to produce an adequate number of good graduates and doctors (output financing).

At the moment the legislation governing the universities stipulates their administrative structure in detail. This has to change: universities must be given much greater freedom to determine the way they organise themselves. The point of departure must be that the top management of the universities is in a position of responsibility and can be held accordingly accountable. Universities need greater freedom, too, to determine the conditions of employment of their personnel. Only then will it be possible to conduct a proper careers policy for staff, which allows for conditions of employment to be considered as factors in determining recruitment, career planning and redundancy policy.

Not that this means that the government should withdraw altogether. Rather, the government should focus on the quality and the quantity of the products produced by the universities, in other words, those completing their graduate and postgraduate studies. As to those with PhDs, the council observes that at the moment there is little if any relationship between the number of places for postgraduates and the need in the community, either in the universities or in other organisations. This has to change in the Council's opinion.

The allocation of the training capacity to the diverse disciplines and universities ought to be arranged in agreements between the universities and the Minister of Education, Culture and Sciences. In deciding on the ultimate allocation of public sector funded training places for each discipline, account has to be taken of the quality produced by the university in question. This is not just a question of the standard of courses but also the degree to which they are relevant to the labour market: from citation index to alumni index.

The document requesting the Council to report on the subject asked for three topics in particular to be addressed: interaction, top researchers and age structure.

Interaction
The opportunities for interaction or interactive cooperation and mobility between private and public research institutions are limited by virtue of the nature of these establishments.

Most of the research in the humanities and language studies and in the social and behavioural sciences is concentrated in the universities. As a result, the opportunities for interacting with and moving into the outside world are barely available at all. Apart from research, though, there are possibilities for people to move from the universities to the allied professions outside, for instance in the legal world or consultancy, and vice versa.
In the case of the physical sciences, mathematics and engineering, much research is done outside the universities, too, in industrial R&D laboratories and (semi-)public research organisations. The opportunities for interaction and exchange here are available, albeit limited. This can be explained by the cultural differences between the diverse research organisations and the different types of researchers working for them. The discoverers of new scientific insights tend on the whole to be different kinds of people to the inventors of new products, processes and concepts, who in turn are very different again to industrial designers and developers.
The nature of the work in the physical sciences, mathematics and engineering disciplines entails that the opportunities for interaction and exchange for the universities lie notably with the major companies which themselves do basic research. But these companies primarily employ young people for their R&D, and are mainly interested in talent which they select for a career in the company. Young researchers are provided with an internal training during their time with the R&D department and subsequently have ample opportunities for a further career in other parts of the company. Older researchers from outside are only occasionally recruited.

In the case of smaller companies, if they do R&D at all, the emphasis is very much on development. These companies focus more on recruiting people with a specific expertise. They are not necessarily young people, but also older people from other companies or from the major technological institutes, including TNO. For these researchers the opportunities for internal training and growth are usually limited; they often climb the career ladder by changing employer. Naturally this requires that there be some similarity in the type of work and culture, which is why, for older researchers, career opportunities in (small) companies are better if they are coming from non-basic research-oriented laboratories such as TNO than from the more basic research-oriented university laboratories.

There are good openings for a limited intake from industry and the semi-government sector into the universities. Given the universities' teaching responsibilities, the Council considers it to be of great importance that this intake be increased, since it is precisely teachers who have work experience outside the universities who can familiarise students with the occupational practices of the relevant employers.

Top researchers
It will only be possible to attract and keep top researchers if distinctions can be made between them as regards remuneration and the provision of research facilities. This option is barely feasible within universities at the moment, if at all.

From an international point of view, an important factor in recruiting or keeping superior talent is

the ability to offer a setting which is internationally conspicuous and has a high reputation. It is impossible to achieve this for all universities in all the disciplines in which they are active. Universities need to stress their distinctive features and differentiate themselves. Consequently, universities require greater freedom to determine their conditions of employment and administrative structure.

Age structure
The age structure in the universities is not worrying enough to warrant general measures being taken at national level.

There are a lot of academic staff in their fifties in the universities as a result of the strong growth of these institutions, notably in the sixties. The figures differ depending on the discipline and the university. The universities themselves are responsible for filling their own vacancies. For this they need the freedom to develop a flexible HRM policy at local level that can be focused on specific persons within specific local situations.

The Council's recommendations in fact serve a single goal which is to bring about a cultural revolution in the universities. They have to realise that they themselves are responsible for their own situation; the government must ensure that they are in a position to live up to that responsibility.