

**Statement by Prof. Jean-Pierre Contzen,
Chairman of the International Working Group on the Reform of the State
Laboratories**

The continued need for State Laboratories

During the last decades, the University has been the great winner among the actors on the R&D scene, not only concentrating the essential part of the public research but also creating strong synergies with the private sector.

Does this irreversible trend signify the end of the State Laboratories? Definitely not provided they succeed to adapt themselves to the new environment, concentrating on their specificity. The definition of the specificity of a State Laboratory in the 2010s is clearly an element of debate. So far, three characteristics have contributed to the definition of the role of State Laboratories:

- Primarily, State Laboratories, using a strong S&T knowledge base, should assist the Government in the **formulation and implementation of public policies**. This support to the so-called “*fonctions régaliennes*” is generally but not exclusively of a regulatory nature.
- Additionally, State Laboratories could provide **public services with a scientific and technical content** such as in meteorology or hydrology
- Finally, in particular cases, State Laboratories could host and operate **specialized S&T infrastructures** open to outside users for training, research or industrial purposes

The first function, the most important, is no longer the exclusivity of State Laboratories, other institutions provide also this type of support, e.g. in the telecommunications field, and it is desirable that a review of the overall S&T system explicates what should remain the realm of State Laboratories, taking into account what will be the challenges of the Government in the years to come. Without any doubt, there is a continued need for State Laboratories but their justification should lie in a better focus. In a period of financial austerity, wasteful duplications of functions should be avoided.

The conditions for an efficient operation of State Laboratories

Fulfilling the tasks responding to the conditions so defined should constitute the rationale for maintaining the system of State Laboratories but this system requires an efficient operation of its various components. There are 4 main conditions for guaranteeing such operation:

- 1. Establishing a clear definition of the mission of each Laboratory.** State Laboratories should privilege a “top-down” approach for the definition of their mission. They are at the service of the State and the State should clearly express

what it expects from its R&D arm. Sliding 5 years' strategic plans should be established for explicating these requirements as well as the ways and means that State Laboratories consider necessary for fulfilling them. These plans should be a tool for developing a better understanding between the supplier and the user of the required knowledge and constitute a multi-annual framework for financial planning. Such planning should in no way go against the basic principle of annual budgets but should constitute a tool for defining mid-term financial perspectives, particularly useful when new investments are envisaged.

The task is a difficult one, the Government is not always capable to perceive exactly how the S&T capability of State Laboratories can be beneficial to its operation; beyond a question of awareness, it is the issue which prevails everywhere of finding a common language between policy needs and S&T solutions. Some kind of brokerage between the two is required, how exactly it can be done remains to be determined

- 2. Ensuring a sufficient level of financial and human resources.** A subcritical level of human and financial resources leads to a waste of public money. If, in times of financial restrictions, the budgetary burden would be considered too heavy, the solution would lie in limiting the ambitions of the State Laboratories to essential priorities. It is better to do less in an efficient way than keep everything that exists in a state of mediocrity. For the priority areas, once a budget has been agreed, the corresponding credits should be made available without any further restriction. To preserve the integrity and neutrality of State Laboratories, public money should be the primary source of their financing but if the expertise they have acquired in discharging their mission or if the S&T infrastructures they have developed, could be useful for other users, they should be financially rewarded for such specific tasks through contract money and this contract money should remain theirs. The State Laboratories occupy a significant patrimony in terms of land and buildings; it might be appropriate to examine these cases where some property assets are not deemed necessary and could be used in a more profitable way
- 3. Allowing autonomy in the internal management.** The State should adopt a strategy of management by objectives for its Laboratories. It should tell them what it expects from them but not how this objective should be met. State Laboratories should have the capacity of determining the best way to discharge their duties, respecting of course the overall public legal framework. A sound management scheme is based on trust, not on micro-regulation.
- 4. Reinforcing the links with outside bodies.** The future of S&T development relies heavily on networking and it is absolutely mandatory to ensure a strong link between all components of the Portuguese S&T system. Increased cooperation, developing synergies constitute a must not only at national level but also at European and international level. At national level, it should start with a reinforcement of the ties between the State Laboratories, Higher Education Institutions, Associated Laboratories, private Research Institutes and Industry. State Laboratories can't pretend that they detain alone the broad, multi-disciplinary science base required for discharging their duties, universities being the main

provider in this respect. The setting-up of Research Consortia should be instrumental in this respect.

At European and international level, cooperation with like-minded public laboratories should be reinforced. Several State laboratories are already well inserted in multilateral networks but stronger ties should be welcomed. The European mechanisms (EU, ESA, EUMETSAT, etc.) act as facilitators in this respect but other parts of the world i.e. its industrialised components, notably the United States, its emerging components(e.g. Brazil, China, India) and its developing components, notably in Africa, should not be left out of cooperative schemes.

In conclusion

State Laboratories should continue to be an asset for the Portuguese S&T system. Their reform is an on-going process aimed at reaching ever more closely this goal. The State should develop a stronger feeling of ownership of these institutions and should assist them in adapting to the changes imposed by a world in constant evolution. Institutions engaged in a dynamic process of adaptation require more attention than static bodies living with concepts of the past.