

Referência da candidatura: LA/P/0109/2020

Designação: Instituto de Telecomunicações

Acrónimo: IT

Coordenador do LA: José Carlos Esteves Duarte Pedro

Nº Investigadores Doutorados Integrados: 205

Instituição de Gestão Principal: Instituto de Telecomunicações

Instituição Proponente: Instituto de Telecomunicações (IT)

Outras Unidades de I&D: -

CRITERION A

Technological capacity to sustainably support and promote the response of public policies

Rating: 5

Comments:

The thematic lines proposed by IT correspond to the main scientific branches and technologies that are key competences of the Associate Lab (Wireless Technologies; Optics and Photonics; Information and Data Sciences: Networks and Services; Basic Sciences and Enabling Technologies) and less oriented to the intervention in society, namely aligned with public policies. However, the way IT is organised internally and its governance structure make sure the Lab strategy serves well public purposes. Compared to other labs, we can think of a matrix organisation, in which public purposes and scientific organisation are in each axis and the strategy to solve a given problem is a result of the matching of the 2 dimensions: you can start with the public purposes you are supposed to achieve and find the technologies needed or, alternatively, organise yourself around technologies and find the cluster necessary to face the problem. IT is very strong scientifically and has unmatched expertise in specific areas that are crucially important in today's world. The cases presented as examples of IT impact in public policies illustrate very well what was said above (both the adequate way to use the thematic lines and the governance): A Demonstrator of a Licensed Shared Access Pilot Network In Portugal, which, among other things, has been working with ANACOM to study a Spectrum Sharing Model; The development and implementation of a set of sensing platforms (meteorological, environmental, mobile crowdsensing, vehicular network, etc.) deployed in Porto in cooperation with the public association Porto Digital and with the municipal transport network; Cooperation with top national and international IT companies, namely ALTICE, Huawei, etc. Systems and methods to assist on medical issues, with hospitals (e.g. Leiria) and local health units (USF Nova Via, and ULS Matosinhos), diabetes monitoring with the Portuguese Association for Diabetes, etc. IT lead a team with other research institutions to design a national cipher with particularly strong security guarantee for the Portuguese Cybersecurity Agency.

CRITERION B

Promotion of scientific or technical careers at doctoral level & Attraction of Talent

Rating: 5

Comments:

IT is a big institution with three main poles in Aveiro, Lisbon and Coimbra and smaller branches in other universities. Up to now, IT has already, among the 66 integrated researchers, 7 with open-ended contracts, that they plan to increase up to 20 in the next 5 years. The recruiting strategy is aggressive and well designed, both for young PhD graduates and PhD students. Moreover, IT guarantees a seed fund for young graduates, together with a 2 year fellowship for a PhD student. An internal mentoring programme is also in place for newcomers. The career model defines clearly the institutions expectations for all the stages from Junior Researcher, to Assistant, Principal and Coordinating. There is a very complete annual performance evaluation that will conclude with a 5 level classification. So far, this has worked well in attracting talented researchers and PhD students, national and internationally. The governance model is complex but it reflects the needs of a multi-institutional Associate Lab and can be better understood with the way the operational organisation is presented. All this is very well developed and, together with the capability to gather funding from various sources, sets the floor for a sustainable and promising future, for science, for the capability to be an active player in Portugals technological development and for the researchers working at IT. It is also an added value for the academic institutions ITs sites and branches are affiliated to.5

CRITERION C

International projection & Securing diversified funding

Rating: 5

Comments:

In what concerns the institutional funding, although the public share is still significant, large part of it is competitive (projects and scholarships) two shares of about 20% come either from private institutions (national and international) or from EC programmes and is basically kept for the next 5 year programming. As far as the international standing of IT, it should be stressed its participation in the 5G Infrastructure Public Private Partnership (5G PPP), a joint initiative between the European Commission and European ICT industry. This is partially the result of promoting the participation of researchers in management boards of international fora with a follow up procedure involving the Board of Directors and the General Director. The scientific prominence of a large number of senior IT researchers, namely as fellows of organisations like IEEE OSA, APS and IET, is also a sign of its international recognition and an important key to open doors at the highest level.

Overall

Rating: 100

Recommended annual funding: 928 400,00 €

Comments:

According to the comments above, the Panel recommends the award of the title of Laboratório Associado for the period of ten years. The Panel recommends complementary funding, as annual average for the period 2021-2025, of 928,400.00 , as requested.