GOOD PRACTICE - ERDF O.P. 2014-2020 - "REGIONAL HEALTH LABORATORY - HOSPITAL GENERAL UNIVERSITARIO (HGU) REINA SOFÍA"

1. PRESENTATION OF THE OPERATION

The Regional Public Health Laboratory is the regional reference laboratory for public health. It is responsible for carrying out the analytical functions of public health and bromatology on samples submitted by the corresponding public health units or at the request of a party, and which requires a sanitary analysis, using the microbiological, bromatological, physicochemical and analytical quality assurance techniques that are required (Regulation Decree 117/2002 structure of the Regional Government of Health).

Until 2022, it was located on the first floor of the administrative building of the Regional Governmeth of Health, which has six floors, and where the laboratory facilities were not isolated from other enclosures, being a common area of passage between the different vertical communication links and between the horizontal communication links on the floor where it was located. On the other hand, due to the age of the building, the vertical wall fronts were in a bad state, as they were not smooth or easily washable, which made cleaning and disinfection difficult. In general, the laboratory presented functional and physical space deficiencies that conditioned and hindered the analytical requirements, as well as the expansion of new lines of research needed by the Regional Government of Health.

Special mention should be made of the safety conditions required by the current applicable legislation, in terms of accessibility, fire, sanitation, etc., since the existing facilities, due to their age, had deficiencies that have become even more evident with the health crisis caused by the COVID-19 pandemic. Thus, their superficial size made it impossible to comply with the minimum interpersonal distances to minimise the probability of contagion by COVID, while the rooms, changing rooms and toilets were insufficient.

It should be noted that among the functions carried out in these facilities is the handling and treatment of biological elements, so the requirements of the workplace in terms of environmental isolation are quite restrictive. It must be ensured that there is no risk of contamination of samples or risk of possible intoxication of other personnel living in the building, so it should be ensured that access to the area is restricted to the exclusive use of authorised personnel.

Given the availability of a suitable location in the maintenance building of the Hospital General Universitario Reina Sofía, which could meet the needs described and the current regulatory requirements, it was considered appropriate to move the Regional Laboratory from the Regional Health Government-building to the hospital. Thanks to the execution of the works and the instalation of the planned equipment, completed in 2022, it has been possible to set up the Public Health Laboratory of the Regional Government of Murcia in the appropriate conditions, which has meant:

- on the one hand, the guarantee of a sufficient degree of isolation from other enclosures and the availability of the necessary facilities to reduce the risks of exposure to biological and chemical agents in terms of work spaces, storage, clothing and hygiene of workers, which allow compliance with current regulatory requirements in terms of safety, health and functionality,
- and, on the other hand, the possibility of implementing new lines of work for the investigation of bacteria and viruses (including COVID-19) in food, environmental and clinical samples, allergens and GMOs (using PCR-based methods), and for the investigation of pollutants and environmental waste (based on chromatographic techniques). In this regard, it should be noted that Regulation nº 21/2020, on urgent measures of prevention, containment and coordination to deal with the health crisis caused by COVID-19, in its second final provision, modifies article 65 of Law 16/2003, on cohesion and quality of the National Health System, framing the reinforcement of the Network of Public Health Laboratories within

the coordinated actions in public health and food safety, which allows a response to situations of special risk or alarm for public health.

These actions, amounting to 1,728,642.67 euros, have been 80% financed (1,382,914.14 euros) by the ERDF OP 2014-2020, within the operation "REGIONAL HEALTH LABORATORY HOSPITAL GENERAL UNIVERSITARIO (HGU) REINA SOFÍA", which meets the requirements of Good Practice according to the criteria agreed by the GERIP (Spanish Group of Persons Responsible for Information and Publicity), as set out below.

2. CRITERIA FOR THE QUALIFICATION OF THE OPERATION AS GOOD PRACTICE

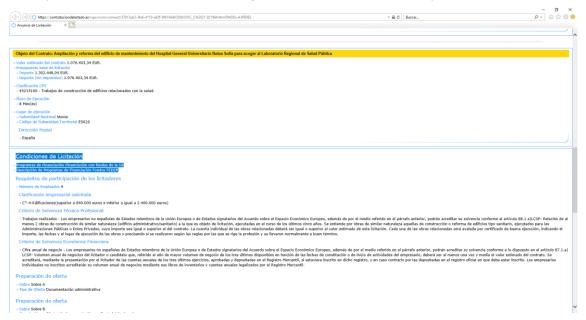
Criterion 1.- High dissemination among beneficiaries and the general public.

The actions included in this operation have been adequately disseminated among beneficiaries, potential beneficiaries and the general public, through actions in accordance with the requirements of the ERDF funds in terms of information and communication.

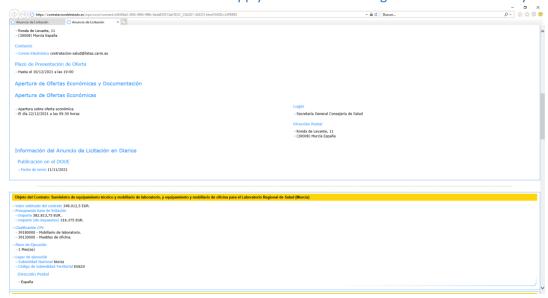
Where appropriate, the support of the Funds has been explicitly shown through the emblem of the European Union, the reference to the European Regional Development Fund and the slogan "A way for Europe". In particular, explicit mention of the Funds can be found in:

(a) tender notices for works and equipment contracts:

tenderpublication for works contracts Regional Public Health Laboratory



Announcement Tender Contract Supply Contract for the Regional Health Laboratory





b) the poster for the difusión of the works (during the period of execution of the works):



(c) The permanent commemorative plaques affixed to the new Regional Laboratory building:

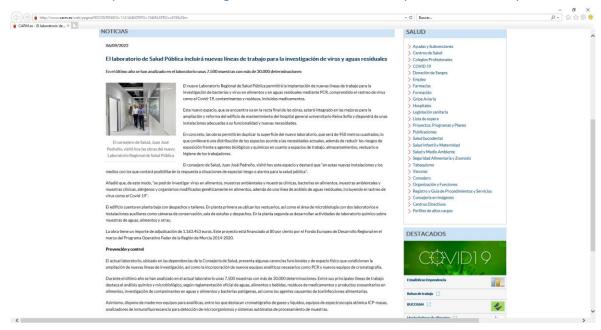


(d) The labelling of the furniture with which the Laboratory facilities have been equipped:



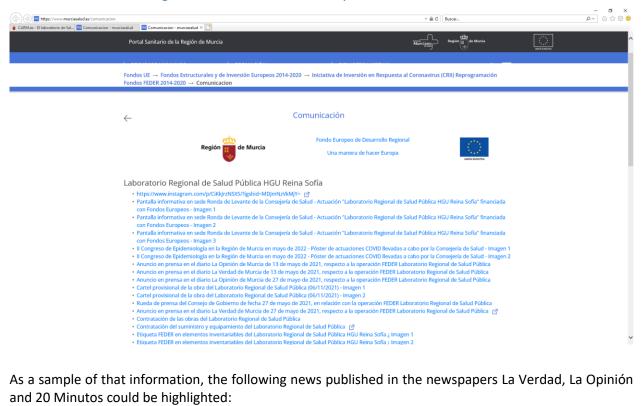
On the other hand, public acts of relevant content for communication purposes have been carried out, such as the institutional visit of the Regional Minister of Public Health to the new Laboratory facilities on 6 September 2022, disseminated through the following press release on the Regional Ministry's website, which expressly alludes to the co-financing by the ERDF:

News CARM 6 September 2022 - Regional Public Health Laboratory Work financed by ERDF 2014-2020



In addition, Murcia's Health website contains all the information related to the information and communication actions carried out by the Regional Ministry of Health regarding this operation, from its beginning to the present day, which can be accessed through the following link:

Communication of the Regional Public Health Laboratory HGU Reina Sofía in the Murciasalud Portal.



As a sample of that information, the following news published in the newspapers La Verdad, La Opinión and 20 Minutos could be highlighted:

Advertisement in La Verdad de Murcia of 6 September 2022 - Obra Laboratorio Regional de Salud Pública financed by ERDF

Advertisement in La Opinión de Murcia dated 6 September 2022 - Regional Public Health Laboratory work financed by ERDF (Regional Public Health Laboratory work financed by ERDF)

Advertisement in 20 Minutos de Murcia of 6 September 2022 - Regional Public Health Laboratory work financed by ERDF

Criterion 2.- Incorporation of innovative elements

The new Regional Public Health Laboratory incorporates innovative elements in environmental and energy efficiency matters, aimed at achieving the minimum environmental impact in its activity, of which the following are examples:

- Actions on the thermal envelope. In order to reduce energy demand, increase the building's energy efficiency and reduce greenhouse gas emissions, the following actions have been carried out: Installation of thermal break joinery; Installation of shading devices: louvres or sunshades; Solar factor glazing; Insulation of the external envelope and new external leaf.



- Actions in the installations, designed in accordance with sustainability and energy efficiency criteria:
- a) Energy efficiency of lighting: Lamps and luminaires with greater energy efficiency; lighting control systems and regulation of the lighting level and use of natural light.
- b) Energy efficiency in thermal installations: Cooling systems for outside air and heat recovery from renewal air; Installation of efficient air conditioning and cooling equipment; Installation of DHW through aerothermal energy; Implementation of technical management of the installations (home automation) that allows control of the operation of air conditioning, lighting, etc.; Thermal insulation of distribution and transport installations.



- c) Promotion of water saving: Implementation of water saving measures in accordance with the criteria of Law 6/2006, of 21 July, on increasing water saving and conservation measures in water consumption in the Regional Government of Murcia: timed taps with perlators or jet economisers and flow-reducing mechanism and flushing of toilet cisterns with limited volume and with the possibility of stopping the flush or a double flushing system.
- d) Promotion of renewable energies: Photovoltaic installation for self-consumption, which will contribute to the reduction of the carbon footprint.



e) Other noteworthy activities: Refrigeration rooms; freezer chamber; eye washes incorporated in sinks; installation of medical nitrogen, argon, helium, nitrogen and oxygen.

Criterion 3. Adequacy of the results obtained to the established goals

The works and equipment carried out are in line with the operation goals in that, on the one hand, the new facilities of the Regional Laboratory meet the requirements established by all the standards in force in terms of safety (in particular, those aimed to reduce the exposition to chemical and biological agents), health and functionality of the work spaces, storage, clothing and hygiene of workers (RD 664/1997 and RD 374/2001, and the corresponding INSST technical guides for the evaluation and prevention of risks to health and safety of workers), (RD 664/1997 and RD 374/2001, and the corresponding technical guides of the INSST for the evaluation and prevention of risks related to exposure to biological and chemical agents in the workplace), and on the other hand, the qualitative and quantitative improvement of these elements makes it possible to implement in the service lines of workwhich were previously unfeasible: (i) the

investigation of bacteria and viruses in food, environmental samples and clinical samples, allergens and GMOs, using PCR-based methods, including specifically SARS-CoV-2, and (ii) the investigation of environmental contaminants and residues, using methods based on chromatographic techniques.

The achievement of the planned goals is shown trhough a graphic comparison of the old laboratory facilities at the Regional Government of Health and the new facilities resulting from this action.

OLD MAINTENANCE BUILDING OF THE REINA SOFÍA HOSPITAL







OLD FACILITIES AT THE REGIONAL MINISTRY OF HEALTH HEADQUARTERS

NEW FACILITIES IN THE HGU REINA SOFÍA
MAINTENANCE BUILDING













Criterion 4. Contribution to the resolution of a problem or weakness detected in the territorial scope of execution.

The new facilities of the Regional Laboratory will allow the Regional Government of Health to overcome the main shortcomings shown by the service in the recent years, and in particular the problems related to its limited capacity. Thus, the new infrastructure provides the service with:

A larger surface area (approximately double the previous one), which allows compliance with the minimum interpersonal distances to minimise the probability of contagion of SARS-CoV-19, among other infectious agents. Una distribución de los espacios acorde a las necesidades de un laboratorio tecnificado.

- A distribution of spaces in accordance with the needs of a technified laboratory.
- A lower risk of exposure to biological and chemical agents, in terms of work spaces, storage, clothing and hygiene of workers.
- Analysis rooms adequate in size and functionality, according to current analytical techniques, and sufficient for present and future needs.
- The automation and digitalisation of the laboratory by means of a LIMS (laboratory information management system or software).
- The implementation of at least one wastewater analysis line, including the tracking of viruses such as SARS-CoV-19.

This will make it possible to implement three new lines of work: Investigation of bacteria and viruses in food, environmental samples and clinical samples, based on PCR techniques; Investigation of allergens and GMOs in foodstuffs; Research in wastewater, including the tracking of viruses by PCR and contaminants and waste (including drugs) by chromatographic techniques.

In short, the infrastructure will allow the expansion, both qualitative and quantitative, of the analyses carried out by the Laboratory, as well as the adaptation to the needs that may arise due to emerging demands in the field of public and environmental health, ultimately contributing to the greater efficiency of the surveillance systems and preservation of public health.

Criterion 5. High degree of coverage of direct beneficiaries and the general population.

Due to its impact on occupational health and safety measures, the operation directly affects the Regional Public Health Laboratory, which is part of the Directorate General for Public Health and Addictions of the Regional -government of Health, but its impact reaches all the services of the same Directorate that uses it to carry out analyses whose function is the prevention of diseases and the detection of health infractions of various kinds, such as those occurring in the fields of food safety and environmental health.

The Laboratory also analyses samples in cases of food poisoning, health alerts or complaints, and performs analyses for the general public, according to a pre-determined rate.

The impact on the control of COVID-19 and possible future pandemics deserves special mention.

The new Laboratory 9ill increase all the above-mentioned analytical capabilities, thereby improving public health prevention and control functions and, through them, the quality of life of the population. The operation therefore has a high impact, both on the direct beneficiaries of the operation and on the population at large.

Criterion 6. Application of the horizontal criteria of equal opportunities and non-discrimination and environmental sustainability and social responsibility.

The specifications of the tenders processed for the implementation of the actions that make up this operation expressly provides that the contracts must be subject to the provisions of the Treaty on European Union and the acts established thereunder, and be consistent with Community activities, policies and priorities for sustainable development and environmental improvement, and must promote growth, competitiveness, employment and social inclusion, as well as equality between men and women, in accordance with the provisions of Regulation (EU) No. 1303/2013 of the European Parliament and of the Council, of December 2013, laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development, the European Agricultural Fund for Rural Development, the European Social Fund, the European Cohesion Fund, the European Agricultural Fund for Fisheries and Aquaculture, and the European Agricultural Fund for Fisheries and Aquaculture. No 1303/2013 of the European Parliament and of the Council of 17 December laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund, and repealing Council Regulation (EC) № 1083/2006.

Consequently, in the different phases of the processing of the contracts carried out—in the manner and to the extent in keeping with the nature of the actions carried out—and in the results obtained—the crosscutting principles of equal opportunities and non-discrimination and of environmental sustainability and social responsibility are present—in the work and equipment carried out—

In both the tender for the works contract and the supply contract, social criteria were established for resolving possible cases of a tie between several bids. On the other hand, in both contracts, the successful bidders have accredited the possession of an Equality Plan, which covers the execution of the contracts.

As regards the principle of environmental sustainability, the works contract imposed on the contractor the obligation to comply with the following environmental criteria in relation to the products to be used for the execution of the works: primary packaging of the products, harmlessness of the components, biodegradability, recycled materials, possibility of reuse and recycling, after-sales service for the collection and recycling of materials, packaging, wrapping, rubbish and all types of waste generated, products manufactured under an environmental management system.

Likewise, the adoption of the measures dictated by good environmental management practices to avoid unwanted liquid spills, polluting emissions into the atmosphere, noise and the abandonment of any type of waste, and in particular those classified as hazardous, was considered a special condition of performance of the contract for the purposes of the provisions of article 202.3 of Law 9/2017, of 8 November, on public sector contracts. Specifically, the contractor was subject to the following obligations: Cleaning and final removal of parts, equipment, containers, packaging, rubbish and all types of waste generated in the work area, storage and proper handling of chemical products and hazardous goods or waste, prevention of leaks, spills, contamination of the ground, manholes or watercourses, with a ban on uncontrolled dumping, use of closed and marked containers and drums, segregation of the waste generated, restoration of the altered environment.

The contractor was also obliged to immediately inform the contract manager of any environmental incidents that might occur and to answer for them.

In general, the contractor was required to adopt the appropriate measures to ensure compliance with legislation on atmospheric emissions, discharges into the sewage system and noise, which must also be taken into account in the use and operation of the machinery.

For its part, the supply contract included an environmental clause of similar characteristics.

The architectural project and its equipment were conceived under criteria of sustainability, energy quality and architectural quality, thanks to which the result of the operation is a facility capable of guaranteeing: Maximum comfort conditions; physical, cognitive and sensory accessibility in accordance with DA DB-SUA/2 of the CTE, thanks to the installation of signage, texturisation, routing, acoustic or visual warnings and improvements to the building's circulation scheme; the safety of professionals in terms of air quality, thanks to air renewal systems that minimise the risk of disease transmission; the healthiness of working conditions, thanks to adequate insulation and air and water tightness; sustainability, thanks to the use of renewable energies, in accordance with Directive (EU) 2018/2001, and to the reduction of the building's energy consumption.

In short, the Regional Laboratory is an accessible infrastructure, due to the absence of architectural and social barriers, respectful of the principles of equality and non-discrimination, thanks to non-sexist signage and adapted to people with visual and hearing disabilities, sustainable and energy efficient.

Criterion 7. Synergies with other policies or instruments of public intervention

Regulation 21/2020, of 9 June, on urgent prevention, containment and coordination measures to deal with the health crisis caused by COVID-19, in its second final provision introduces the modification of Article 65 of Law 16/2003, of 28 May, on the cohesion and quality of the National Health System, framing the reinforcement of the Network of Public Health Laboratories within the coordinated actions in public health and food safety, in order to:

- 1. Respond to situations of special risk or alarm for public health.
- 2. To comply with international agreements, as well as programmes derived from the requirements of the regulations issued by the European Union, when their compliance and development must be homogeneous throughout the whole of Spain.

On the other hand, the Laboratory plays a crucial instrumental role in the health prevention and protection policies developed by the different services of the Directorate General for Public Health and Addictions, and thanks to this, the operation has synergies with public interventions in the field of food safety and environmental health:

The Food Safety and Zoonosis Service takes official samples for the control of "Process hygiene criteria" (sampling in processing companies, including the slaughterhouse) and for the control of "Food safety criteria" (sampling at points of sale), as established by Regulation (EC) 2073/2005 on microbiological criteria for foodstuffs. Official samples are sent to the Regional Public Health Laboratory to investigate the presence of Salmonella spp, Campylobacter spp, E. coli, Listeria monocytogenes, coagulase positive Staphylococci, Histamine, Enterobacteriaceae, Bacillus cereus, Aerobic Colony Count.

Samples cover all types of food: fresh meat, fish, ready-to-eat foods, processed foods, foods intended for infants, etc., with the selection of companies based on risk, prioritising those with the highest production volume and those exporting to EU and non-EU countries.

In terms of Environmental Health, the Laboratory is an essential element of the inspection and control programmes, carrying out the analysis of samples taken on the basis of routine sampling programmes and those carried out for investigation of cases of non-compliance with quality standards. To this end, it is accredited by AENOR. It therefore plays an important role in the following programmes: Control of water for human consumption, Prevention and control of Legionellosis, Control of bathing water (sea and river), Control of spas and thermal waters, Control and surveillance of public swimming pools.

Finally, it was mentioned that the architectural project of the Regional Laboratory complements the actions of the Regional Ministry of Health aimed at the renovation and improvement of the Primary Care building stock, foreseen in the CRESAP plan (Strategic Plan for Sustainable Construction and Rehabilitation in Primary Care 2022-2026), which links this Regional Ministry with the achievement of the sustainable development objectives of the 2030 Agenda.