





## Una manera de Bacer Europa



Line of aid for R&D projects, year 2016, for the improvement of the competitiveness of the Navarrese companies, particularized in two companies in the Industry sector advanced or Industry 4.0, Das Nano and Eseki.

**R&D Service of the Government of Navarra** 

# Programa Operativo de Navarra

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Fondo Europeo de Desarrollo Regional

Good practice of the R&D Service of the Government of Navarra within the line of aid for R&D projects, year 2016, for the improvement of the competitiveness of the Navarrese companies, particularized in two companies in the Industry sector advanced or Industry 4.0, Das Nano and Eseki.

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#### Presentation

Aid to Navarre companies for the development of research and development projects is one of the support measures that the Government of Navarra maintains as a priority because it has a direct impact on the competitiveness of the company and the creation of quality employment.

Within the line of aid convened during 2016, projects from various companies in the advanced industry or industry 4.0 sector were supported, one of the sectors considered strategic by the Government of Navarra.

The projects developed by Das-Nano and Eseki have been chosen as an example of good practice:



**Das-Nano** is a young company that develops leading and innovative technologies with different applications in the industry.

The project co-financed by the ERDF consists on the development of a technology, accessible from a mobile phone, to validate the authenticity of official documents and the identity of their bearers. The project is applied both in Public Administrations and in private companies at a national and international level.



**Eseki** is a company with extensive experience in its sector, which provides solutions in electrical installations to improve productivity, efficiency, energy savings and industrial supply.

The project, co-financed by the ERDF, develops an automatic and robotic system for the treatment of large mechanical parts, with application for parts in the wind sector, among others.

The total cost of ALL the projects CO-FINANCED BY THIS AID LINE IN THIS SECTOR amounts to 3,196,213 euros and the aid provided by the ERDF is 1,598,106 euros.

This contribution from the ERDF has meant that, among all the projects financed by this call, the 50 presented in the field of Advanced Industry or Industry 4.0 have been successfully executed, which represents 28% of the total co-financed projects.

We highlight this action as a good practice, according to the following criteria:

## 1. Action has been appropriately disseminated among beneficiaries, potencial beneficiaries and the general public.

Various information and communication actions have been developed to guarantee the publicity and transparency of the call for aid and to increase public awareness of the added value of community co-financing.

The R&D Service itself, as the body granting these aids, has carried out the dissemination of the same through the website of the Government of Navarra and the holding of various information sessions aimed at companies and organizations of research and dissemination of knowledge carried out by R&D activities in Navarra.

#### Call for aid Government of Navarra



Artículo 18. Cofinanciación con Fondos Estructurales de la Unión Europea.

1. Estas ayudas serán cofinanciables en un 50% por el Fondo Europeo de Desarrollo Regional a través del Programa Operativo FEDER 2014-2020 de Navarra, hasta alcanzar la ejecución del Objetivo Específico 1.2.1 "Impulso y promoción de actividades de I+i lideradas por las empresas y apoyo a la creación y consolidación de empresas innovadoras" del Programa Operativo (28.250.000 euros).

En la resolución por la que se apruebe la convocatoria anual de las ayudas se indicarán los criterios de selección de los proyectos que vayan a ser cofinanciados por FEDER, entre los cuales se encontrará el del encuadramiento en los sectores estratégicos de Navarra identificados en la Estrategia de Especialización Inteligente de Navarra (RIS3).

#### **Navarre Government website**

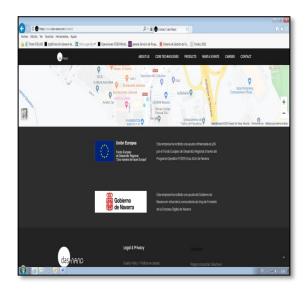




The selected companies have advertised the aid through their web pages:

#### Web Das-NANO:

#### Web Eseki:





They have placed **posters** of an adequate size in visible places:

#### Poster Das-NANO:

#### Poster Eseki:





They have included the reference to the ERDF in advertising videos:





**ERDF** project Das-Nano

**ERDF** project **ESEKI** 

#### 2. The action incorporates innovative elements.

The project developed by <u>Das-NANO</u> represents a **high degree of innovation at an international level**. Until now, systems related to document security and control (for example, <u>D.N.I.</u>) were based solely on visual inspection; therefore, it was very easy to falsify official documents to, for example, carry out commercial transactions, gain access to organizations and events or manipulate bank accounts.

The innovation consists on the development of a simple and controllable mechanism from any mobile device to verify the validity of official documents, adding security to the mere visual inspection (See Figure 1).

It should be noted that, in 2019, Das-NANO was awarded the "National Innovative Company Award". In addition, during the course of this project, a new international patent was presented, which was added to the other 6 that the company already has today.

On the other hand, <u>Eseki</u> has managed to develop an **innovative robot**, designed to adapt to the needs of each client, for the treatment of large industrial parts. (See Figure 2). With this attractive and innovative technological proposal, a process that to date had always been done manually is automated.

Figure 1: Demonstration of Das-Nano Technology



Figure 2: Robot designed by ESEKI



#### 3. Adequacy of the results obtained to the established objectives

This line of aid from the Government of Navarra has fulfilled its main objective of promoting the development of projects that incorporate technological innovations. The results achieved by each of the companies selected in this good practice are set out below.

<u>Das-NANO</u> has managed to launch a new document security and control system with features that do not exist on the market.

This innovative system is already being applied today, in different sectors, such as banking, which is very demanding in terms of security issues.



It should be noted that, after completing this project, Das-NANO has set up a company together with BBVA, with the aim of having BBVA implement the technology designed by Das-NANO in its offices and central services. From this moment on, all BBVA employees are identified by bringing their face close to a device and as a result of this collaboration, in 2016 BBVA was the first Spanish financial institution to offer the possibility of becoming a customer through a selfie. This alliance has been a very important milestone for Das-NANO, demonstrating that with young and local talent it is possible to offer technological

solutions at the level of the best in the world.

Currently, in addition to BBVA, Das-NANO has clients all over the world such as Airbus, Siemens-Gamesa, or the European Central Bank.

In <u>Eseki</u>, from the beginning a series of critical questions and very ambitious objectives were raised about which there were doubts about their achievement; however, in conclusion and with the robot already in operation for two years, the great innovation and success that the development of this project has represented for the entire industrial sector has been confirmed. It has been shown that Eseki has designed a very robust robot, with great durability and with the capacity to meet market demands, both nationally and internationally.

## 4. Contribution to the resolution of a problem or weakness detected in the territorial area of implementation.

The results achieved with both projects co-financed with the ERDF have contributed to resolving a weakness detected in each of their areas of execution.

Currently, the number of operations carried out by the citizen that require the presentation of an official identity document has been increasing for most services, both from the Public Administrations to the citizen (education, health, bureaucratic procedures, etc.), and from private companies (banking, shopping, transportation, etc.). For all these services, it is necessary to have document validation mechanisms that guarantee that the identification document used is authentic and that its bearer is really the person identified by said document.

Until now, the identification process was based on the exchange of the document through which the face of the person in the photo was compared with the face of the person who presented it; There is no guarantee that a valid document was being used by a person other than its actual owner.

**Das-NANO**, aware of this problem, has developed a reliable and simple method to increase the level of security in document control processes.

**Eseki** has designed a robot with intelligent maintenance, for the treatment of large mechanical parts. Therefore, it has been able to automate a process that to date had always been done manually. It has been possible to improve the quality of the pieces; energy consumption has been improved since, the shorter the duration of the part treatment process, the more energy savings; In addition, hard and unhealthy manual work is avoided, which can have serious effects on the worker's health.

#### 5. High degree of coverage on the target population

The technology designed by **Das-NANO** can be applied in any of the market sectors that currently carry out security inspections of identity documents. These sectors include: Public Administration services for citizens, banking and finance, commerce, tourism and travel, etc.

Das-NANO already has a significant presence on the map and continues to expand its portfolio of international clients. It has been awarded the title of "regular exporting company" by the Government of Navarra in 2019. This recognition is an impulse to continue taking quality technology made in Navarra throughout the world.

In addition, both large companies and Public Administrations are promoting the use of systems that increase the safety of citizens and customers or workers, respectively. Therefore, this type of system is expected to experience great growth in the coming years.

In the case of **Eseki**, the robot for the treatment of the surface of large industrial parts, has a high degree of coverage over the entire industrial sector. Eseki, well versed in the sector and specialized in these processes, knew that it was essential to automate. As a consequence, the quality of the parts has been improved and the operator has been prevented from having to carry out work with possible harmful effects on his health. The robot is intended to be used mainly for parts of the wind sector, but it can also cover other sectors

### 6. Consideration of the horizontal criteria for equal opportunities and non-discrimination, as well as social responsibility and environmental sustainability.

The gender approach is always present in the assessment of the projects likely to receive aid within the calls managed by the Research & Development. Service of the Government of Navarra. The two projects selected as good practice have received a very good score in terms of the participation of women in the research team.

They also receive a positive assessment for being part of the area of the advanced industrialization or industry 4.0, considered one of the priority sectors of the Smart Specialization Strategy of Navarra, which aims at sustainable development in the region.

In addition, Eseki, in its commitment to quality and continuous improvement, has put into practice a model of **Corporate Social Responsibility**, which commits it to caring for workers, trying to continuously improve their well-being and safety; prioritizes the incorporation of workers from the area into its workforce and is supplied, as far as possible, from nearby suppliers; On the other hand, this company, in its commitment to the environment, is part of the 3E Group, an energy consultancy that offers advice and comprehensive solutions in the field of energy saving and efficiency.

Das-NANO S.L. has implemented a **Quality Management System**, with the aim of maintaining the quality of its products, minimizing the environmental impact.

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

The Government of Navarra is firmly committed to investment in R&D to position the Autonomous Community as a leader in innovation at a European level. For this reason, an important part of the ERDF resources assigned to Navarra, in the 2014-2020 programming period, has been allocated to promoting the carrying out of R&D projects such as those developed by the companies presented in this good practice.

The solutions developed by Das-NANO and Eseki are in line with the **Europe 2020 Strategy**, which establishes the promotion of research, technological development and innovation as one of the priority aspects of the European Union.

In the field of regional policies, we highlight the consistency of the Das-Nano and Eseki projects with the **Science**, **Technology and Innovation Plan of Navarra 2017-2020**. Both companies have supported the research and development of innovative projects allowing Navarra to compete and offer solutions to the challenges that society demands at this time.

In addition, they have contributed to attracting talent to Navarra since, for the development of the projects explained above, qualified researchers, trained in Navarra, but who were pursuing their professional careers abroad, have been hired.

Lastly, it should be noted that both projects are aligned with Navarra's **Smart Specialization Strategy 2016-2030**. Specifically, they contribute to the development of industry 4.0, detected as a strategic priority for the economic development of the Autonomous Community.







## Una manera de hacer Europa



Fondo Europeo de Desarrollo Regional