

SECRETARÍA DE ESTADO DE PRESUPUESTOS Y GASTOS DIRECCIÓN GENERAL DE FONDOS EUROPEOS







**BUENAS PRÁCTICAS** Actuaciones Cofinanciadas

Aid line aimed at financing theimplementation of Strategic Plans of companies in R&D, in the scope of the Community of Castilla y León, and for the automotive and components sector, personalised in the subsidy granted to the company ASTI MOBILE ROBOTICS, S. A. U.

Institute for Business Competitiveness

Programa Operativo de Castilla y León

Año 2020

Fondo Europeo de Desarrollo Regional

Good Practice of the Instituto para la Competitividad Empresarial de Castilla y León (ICE) (Institute for Business Competitiveness) consisting in the aid line, aimed at financing the implementation of Strategic Plans of companies in R&D, in the scope of the Community of Castilla y León, and for the automotive and components sector, personalised in the subsidy granted to the company ASTI MOBILE ROBOTICS, S. A. U.

The aids that this good practice falls under are intended to achieve the financing of strategic plans for R & D, to be undertaken by companies for workplaces in Castilla y León and declared of special interest by the Governing Council of Castilla y León, on the initiative of the Institute for Business Competitiveness of Castilla y León (ICE), based on the strong impact they may have on the social, economic and / or industrial fabric of the Community.

Of all the aids granted to this automotive sector, a total of 34 projects, that destined to the R&D strategic plan of the ASTI MOBILE ROBOTICS, S. A. U. company has been highlighted within this good practice.

ASTI MOBILE ROBOTICS, S. A. U. is a family-owned company from Burgos that was founded in 1982, and is engaged in engineering, development, manufacturing and implementing tailormade internal logistics solutions. Its main products are: transport and handling systems (conveyor lines, automatic mini-warehouses, etc.), AGV systems - Automated Guided Vehicles (driverless vehicles for transporting loads), and computer systems (software for warehouse management, order preparation, traceability, etc.). It works for many different sectors: food and beverage, aeronautics, automotive, pharmaceutical, hospital, etc.

Its strategic plan is based on the development of new internal logistics automation systems based on Industry 4.0 design principles. One of the key technologies in the new Industry 4.0 scenario is the use of autonomous robots. Its massive deployment will increase the flexibility and modularity of production processes, enabling the introduction of these design principles in the factories of the future.

These autonomous robots, especially AGVs (automated guided vehicles), need to be coordinated by a management platform that ensures interoperability between the different machines and efficient interrelation with the rest of the subsystems of the industrial plant. So far, there is no platform of this type that allows handling a heterogeneous fleet of AGVs. The construction of this working platform is the central purpose of this R&D project.

The total amount of aid granted in the context of this call for aid, to the automotive and components sector, where the project presented as a good practice falls under, has reached a total of 18,436,024.72 euros, of which 100% corresponds to ERDF.

These aids have a very significant impact, since the automotive and components sector, which ASTI MOBILE ROBOTICS S.A.U. belongs to, is one of the most important sectors in the social, economic and industrial fabric of Castilla y León, representing an impact of 5% of the total exports.

This action is considered a good practice since it meets the following criteria:

# 1. The action has been appropriately disseminated to beneficiaries, potential beneficiaries and the general public.

The managing centre, the Institute for Business Competitiveness of Castilla y León (ICE) has mainly used social networks and its own website to inform potential beneficiaries about the funding opportunities offered by the European Funds and has made this information available to the largest possible number of potential beneficiaries.

Likewise, and in compliance with its regulatory obligations, it has made the results obtained from these activities known to the citizens and to the media.

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The Castilla y León Institute for Business Competitiveness (ICE) has also included this good practice in its web page.

https://empresas.jcyl.es/web/es/fondos-europeos/buenas-practicas.html



In addition to the above, information bulletins have been used to disseminate this aid through the electronic mailbox addressed to more than 11,500 potential beneficiaries.

Dissemination actions have also been carried out, and thus, aids have been presented in all the provinces of the Autonomous Community with special emphasis on the participation of companies belonging to the automotive sector and ancillary industries.



The Castilla y León Institute for Business Competitiveness uses the social networks, TWITTER and FACEBOOK, to inform about the European co-financing.



The good practice has been on the ICE website.

https://empresas.jcyl.es/web/es/fondos-europeos/buenas-practicas.html

On the other hand, the ASTI company, a beneficiary of the aids, has informed of such support on the plaque installed at the entrance.



It has also used social media and its website to disseminate the project presented as a good practice.

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### 2. The actions incorporate innovative elements.

One of the key technologies in the new Industry 4.0 paradigm is the use of autonomous robots. Its massive deployment will increase the flexibility and modularity of production processes, enabling the introduction of these design principles in the factories of the future. These autonomous robots, especially AGVs (automated guided vehicles), need to be coordinated by a management platform that ensures interoperability between the different machines and efficient interrelation with the rest of the subsystems of the industrial plant. So far, there is no management platform that allows handling a heterogeneous fleet of AGVs. The construction of this working platform is the central purpose of this R&D project.

Developing such a platform would greatly reduce management costs, since a single software platform would be sufficient to govern different types of machines. It would also reduce start-up times, which translates directly into cost reductions, training costs, the profiles of the people needed to operate them, etc.

Another key advantage is that different types of automated guided vehicles could coexist in the same physical space. All this would result in an increase in the competitiveness of companies using this technology.

### 3. Adapting the results obtained to the established goals.

The Research and Development projects defined in the Strategic Plan launched by ASTI MOBILE ROBOTICS, S. A. U., aims at consolidating the company and making it grow through innovation. The aim of these projects is both the diversification of the companies' products and the improvement of their quality. This, in any case, will result in improving the company's competitiveness, its level of internationalisation (the destination of the goods or services in which the projects crystallise is the international market) and in the consolidation and/or growth of direct or induced employment.

The improvements in current processes and products, and the new solutions developed, by implementing the projects included in this strategic plan, will act as a lever of change for the effective introduction of the design principles of Industry 4.0 in the industrial fabric. AGVs (automated guided vehicles) are an essential technology to enable the evolution of the industrial fabric of Castilla y León towards the new paradigm of Industry 4.0. In addition to being a key element in industrial modernisation, its use makes it possible to increase the productivity and competitiveness of companies, with beneficial repercussions on the GDP of Castilla y León.

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

The financial support to the project, which is presented as a good practice, contributes to solving the weaknesses of our region, such as the scarce internationalisation of the Castilla y León companies and the scarce expenditure in Research and Development, far from the goals of the European Union.

This aid is aimed at strengthening the Research, Development and Innovation system, increasing the number of companies that create new products/processes or services, and increasing the private effort in these actions to accompany public aid.

The development of this strategic plan, new internal logistics automation systems based on Industry 4.0 design principles, will allow access to new target markets and geographic areas, creating new opportunities that will open the doors to new distribution channels, accelerating the company's internationalisation strategy. The internationalisation of these products, and the communication and dissemination of results of the project will contribute to obtaining a better positioning of Castilla y León in strategic sectors such as automation and industrial robotics.

The project launched by ASTI MOBILE ROBOTICS, S.A.U., shows the investment effort made by the company, and the collaboration with technological centres and/or leading technological companies in order to contribute to improve the technological infrastructure in our region.

## 5. High coverage of the target population.

ASTI acts as a driving force for other SMEs and micro-enterprises in the region. Given the strategic regional nature of this project, the work and collaboration with suppliers in the region (supplies, wiring, machining, etc.) will be especially promoted during the project's development.

Therefore, the synergic action of these elements will substanciate in the economic growth of three different types of players in Castilla y León: ASTI, as the developer of the project; the local and regional suppliers and partners, due to the increase in the consumption of their products or services; and finally, the user companies, since they will obtain an important productivity increase in their productive processes thanks to the introduction of the new developed technology. This increase in economic activity will translate into an increase in

regional GDP, and in a better positioning of Castilla y León in the strategic field of automation.

# 6. Consideration of the cross-cutting equal opportunities non-discrimination criteria, in addition to social responsibility and environmental sustainability.

In relation to the principle of equal opportunities, the order of call in which the project presented as good practice is included, considers equality between men and women and nondiscrimination, valuing the creation of jobs for women, young people up to 30 years of age or people with disabilities and valuing the integration of people with disabilities into the labour market.

Specifically, the company ASATI MOBILE ROBOTICS, S. A. U has 175 employees, 31 women, of which 16 hold technical positions as graduates and 16 as senior engineers. The owner and CEO of the company is a woman.

The current project is oriented towards the automation of logistics, which means the transition towards a labour market that gives more priority to the educational level, reducing the activities that involve physical effort, thus promoting gender equality in the productive fabric. The project shall comply with Directive 2006/54/EC on the implementation of the principle of equal opportunity and equal treatment of men and women in employment and occupation matters. This initiative ensures equal treatment of men and women in employment, training, promotion and working conditions. Finally, the role of women in scientific and technical work is promoted.

In terms of environmental protection, the project presented by ASTI does not involve environmental risks, nor will waste, which is harmful to the environment, be generated.

On the other hand, these AGV (automated guided vehicles) systems and their optimisation contribute to energy savings in logistics by minimising routes and automating processes. The use of this type of vehicle reduces energy consumption substantially in the chambers, as they have hardly any energy losses due to doors remaining open in warehouses or industrial buildings, laboratories and other establishments due to human oversights, as the doors are automated so that they can act, open and close, by indication of the vehicle itself, minimising leakage times and, therefore, energy consumption.

ASTI is equipped with the necessary means to recycle materials and minimise the waste generated in the processes it carries out.

### 2. Synergies with other policies or public intervention instruments.

The project, which is presented as a good practice, is defined as the "productive efficiency in transport sectors such as Automotive and Aeronautics", as one of the thematic priorities and areas of action defined in the Regional Strategy for Research and Innovation for Smart Specialisation (RIS 3).

This project, which is presented as a good practice, is also aligned with other regional strategies such as the Framework Agreement for Competitiveness and Industrial Innovation of Castilla y León 2014-2020, given the weight of the automotive and components sector in the regional economy, both in terms of maintaining and creating jobs and promoting competitiveness in the regional economy.

The Master Plan for the Industrial Promotion of Castilla y León 2017-2020, which includes the general lines and basic guidelines to be followed in the coming years by the Governing Council of Castilla y León to promote reindustrialisation and the development of industrial activity in this Autonomous Community, within the general framework of development of the commitments made by the Governing Council of Castilla y León in the Third Framework Agreement for Industrial Competitiveness and Innovation 2014-2020.

The Regional Strategy against Climate Change in Castilla y León 2009-2012-2020 and the Regional Plan for the Bioenergy Sector in Castilla y León, given the importance of the climate emergency and decarbonisation for the automotive and components sector. It should be recalled that one of the five goals of the RIS3 of Castilla y León 2014 - 2020 is to achieve 20% less greenhouse gas emissions, 20% renewable energy, and a 20% increase in energy efficiency.

On the other hand, the project presented by ASTI is in line with national strategies, such as the National Reform Programme 2014 (PNR) and the Spanish Strategy for Science and Technology and Innovation 2013 - 2020, with the same approach as the previous point a, but at national level, given the relative significance of the sector in Spain as a whole, and the Action Plan for Energy Saving and Efficiency 2011-2020 and the National Action Plan for Renewable Energies (PANER), in the same way as previously mentioned.



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Una manera de hacer Europa

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