

STEPHANIE

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STEPHANIE directs regional research and innovation policies towards photonics-based space technologies to address today's grand societal challenges.

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An interregional cooperation project for improving innovation delivery policies.

ACTION PLAN FOR THE REGION OF ANDALUSIA



Research & innovation



European Union
European Regional
Development Fund

Table of Contents

Part I – General Information.....	3
About the STEPHANIE Project.....	3
About the Action Plan of Andalusia Region.....	3
Part II – Policy context.....	5
About Andalusia region.....	5
Policy instruments addressed by Andalusia region.....	5
Part III – Details of the Actions Envisaged.....	9

Part I – General Information

About the STEPHANIE Project

Space technologies based on photonics are considered as one of Europe's areas of key industrial competence. They have huge potential to address a number of today's grand societal challenges, in particular health and wellbeing, climate action and secure societies. However, this potential will be wasted if public policy fails to address the gap between space research and its application on the ground. A long-term challenge is to ensure that R&I investments exploit the opportunities offered by space technologies (e.g. huge availability of data and signals) by ensuring that applications and services are produced to address societal challenges and that they reach the market.

Recognizing the role played by EU regions in space policy, both in strategic development and territorial impact, STEPHANIE brings together 8 partners from 7 areas to exchange knowledge on how to ensure that policy is designed to guarantee real benefits from space technology based on photonics, particularly in space and earth observation.

Partners have recognized two pillars that their ERDF policy instruments can focus on to support this R&I delivery:

- Using quadruple helix cooperation along the technological value chain at regional and interregional level;
- Coordinated and simplified funding schemes for the development of marketable and society orientated products and services.

Partners and regional stakeholders cooperate over three years of interregional learning, leading to regional Action Plans that detail concrete measures for policy improvements. They continue to cooperate while implementing these measures, using interregional exchange for further stimulus and monitoring.

Policy changes will deliver long-term impact to regional competitiveness and socio-environmental wellbeing, thanks to collaborative innovation and innovative products addressing socio-environmental needs. They will open new markets for enterprises and improve capacity of regions to direct European space policies and strategies.

About the Action Plan of Andalusia Region

Each region participating in STEPHANIE should produce an Action Plan, providing details on how the lessons learned from the interregional cooperation will be exploited in order to improve the policy instrument tackled within that region.

This document is the Action Plan of Andalusia region. The region is represented in this project by Andalusian Foundation for Aerospace Technology – Advanced Centre for Aerospace Technologies (PP06), with IDEA Agency (the Agency for Innovation and Development of Andalusia), attached to the Ministry of Economy, Knowledge, Enterprises and University of the Andalusian Regional Government, as supporting organisation. IDEA Agency is an Intermediary Body for ERDF Andalusia 2014-2020 Operational Programme, having a close contact with the Spanish Managing Authority (Ministry of Finance through the DG for European Funds).

The development of this Action Plan has been based on the principles of:

- i. **Interregional cooperation between STEPHANIE partners.** Cooperation was supported by a series of interregional learning events (ILE), bilateral exchanges of experiences, study visits and share of good practices. Through these events and exchanges FADA-CATEC hopes to identify policy improvements to foster in Andalusia region.

- ii. Involvement of the main regional stakeholders dealing with aerospace R&D, innovation support and innovation delivery to regional industry. Participation was supported mainly through setting up a Regional Stakeholder Group (RSG), with periodical meetings (at least once per semester) in order to guide the project. RSG was composed by relevant innovation actors from industry, science and the financing sector as well as from regional authorities.
- iii. Action Plan of Andalusia Region has been conceived supported by the **Andalusia Industrial Strategy (EIA2020)**, as well as the **Andalusia Innovation Strategy, RIS3 ANDALUCIA**, where KETs (and therefore Photonics) are considered one of the 8 dimensions, being also Aerospace one of the key domains included within the Priority 2 (Transport-Related Advanced Industry).

This document is structured in three parts. After this introductory section, the second part provides an overview of the territorial context and the policy instruments addressed by the Action Plan. The third part corresponds to the main part of the Action Plan, where each action is presented, specifying its background, activities, players involved, timeframe and costs.

Project	STEPHANIE: Space Technology with Photonics for market and societal challenges
Partner organisation	Andalusian Foundation for Aerospace Development (FADA)
Other partner organisations involved (if relevant)	None
Country	Spain
NUTS2 region	Andalusia
Contact person	Macarena Márquez
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Part II – Policy context

The geographical coverage of the Action Plan is the NUTS 2 region of Andalusia, Spain.

About Andalusia region

From the beginning of the STEPHANIE project, FADA-CATEC has been in contact with the Andalusian Intermediary Body for ERDF Andalusia 2014-2020 Operational Programme (which has a close contact with the Spanish MA) and Aerospace stakeholders in order to impulse an Action Plan in line with the regional priorities and the policy instrument selected in the implementation phase of the project. Firstly, it was agreed with a series of measures aiming at strengthening the collaboration between Andalusian clusters in the region based on:

- i) Regional Government's priorities.
- ii) The lesson learned by FADA from STEPHANIE project, mainly from Centre Liège Spatial (CLS) and Toscana Region partners. FADA observed that the cluster culture helps to attract financial resources. Most of the Andalusian companies are SMEs; small business owners face a variety of challenges, whether they offer products or services to their target markets. Clusters organization helps to unify knowledge and resources and to develop new industrial value chains.

Furthermore, the new Andalusian government (out of the last regional electoral process at the end of 2018), has launched for the first time in 2019 the formulation of the Andalusian Aerospace Strategy. Thus, the development of the 1st Andalusian Aerospace Strategy was perceived as the perfect matching tool, where STEPHANIE learnings could flow into. Moreover, the Andalusian Aerospace Strategy has even a higher potential, compared with the previous focus of the Action Plan, to maximize the impact of STEPHANIE project in the policy context of the Andalusia region.

In addition, FADA has maintained a regular close link and good relationship with the regional Intermediary Body through the exchange of emails and the celebration of meetings in order to define an Action Plan in line with the new instrument including regional priorities for the sector, assuring that the work carried out within STEPHANIE and the good practices learned from partners provide useful insights for the region and within the development process of the Andalusian Aerospace Strategy.

Considering the European framework we can find three levels of decision: the European Union, the Member States and the regions. The first establishes the general rules (operation, safety, environment, etc.) and the general R&D&I programs (Clean Sky, SESAR, H2020, etc.). The Member States implement national programs on the areas of specialization of their respective national industries and their specific future interests. The regions work in a geographical area, favouring investments in their stages of specialization. It is extraordinarily difficult to update the *status quo* of specialization of regions and countries. The three levels of action are successive and complementary, and they need to be aligned. For this reason an Aerospace Strategy has been identified as essential. In fact, the new regional government has recently decided to consider the Andalusian Aerospace Action Plan (predecessor of the Andalusian Aerospace Strategy) within the framework of the existing Andalusian Industrial Strategy (EIA 2020) through a participatory, collaborative approach and co-decision process with stakeholders from the industrial ecosystem of Andalusia.

Policy instruments addressed by Andalusia region

The 1st Andalusian Aerospace Strategy (AAA 2027). The Andalusian government has started¹ the drawing and designing phases of this Strategy as the instrument for planning, executing and evaluating public

¹ According to the Government Council Agreement officially approving its formulation, published at the Andalusian Government Official Bulletin (BOJA) num. 208, 28/10/2019, pg. 16.

actions to be carried out for this economic sector, including a budget allocation. AAA2027 has been preceded by the Andalusian Aerospace Action Plan. It is important to make clear that the Strategy constitutes a further step beyond the Action Plan from the regional government to lay a solid foundation for the aerospace regional sector.

The Andalusian Aerospace Strategy will be a short-medium term map (2020-2027) that will define the objectives, strategic lines, programmes and measures of this policy field in Andalusia region. Thus, the conclusions of the previous Action Plan, drawn up by experts and professionals from the sector together with the Andalusian Government, will be the basis for the implementation of the Strategy.

At that moment, the Andalusian government has started the drawing and designing phases of this Strategy as the instrument for planning, executing and evaluating public actions to be carried out for this economic sector, including a budget allocation objective.

As regards the STEPHANIE project, the elaboration, design and implementation of the Andalusian Aerospace Strategy can be shown as divided in three phases:

- Phase 0: Definition of tendering process to develop the Andalusian Aerospace Action Plan, with the participation of *IDEA Agency* and *Hélice Cluster* (about the terms and selection of the external assistance). The result of this phase being the kick off meeting of the project that will elaborate the Andalusian Aerospace Action Plan.
- Phase 1: Diagnosis of the current situation of the aerospace sector in Andalusia and its evolution in the coming years. The analysis should identify all the agents that are part of the Andalusian aerospace industry, their shortcomings, their competitive strengths and their position at national, European and international level. National and international trends will be also analyzed to identify new opportunities for cooperation for Andalusian aeronautical companies. The result of this phase being the Andalusian Aerospace Action Plan.
- Phase 2: Design and implementation of the Andalusian Aerospace Strategy, based on the conclusions of the Andalusian Aerospace Action Plan.

Validity of the Andalusian Aerospace Strategy implementation: 7 years (2020-2027).

Figure 1, intends to show the relation between the elaboration process of the Andalusian Aerospace Strategy and STEPHANIE project phases.

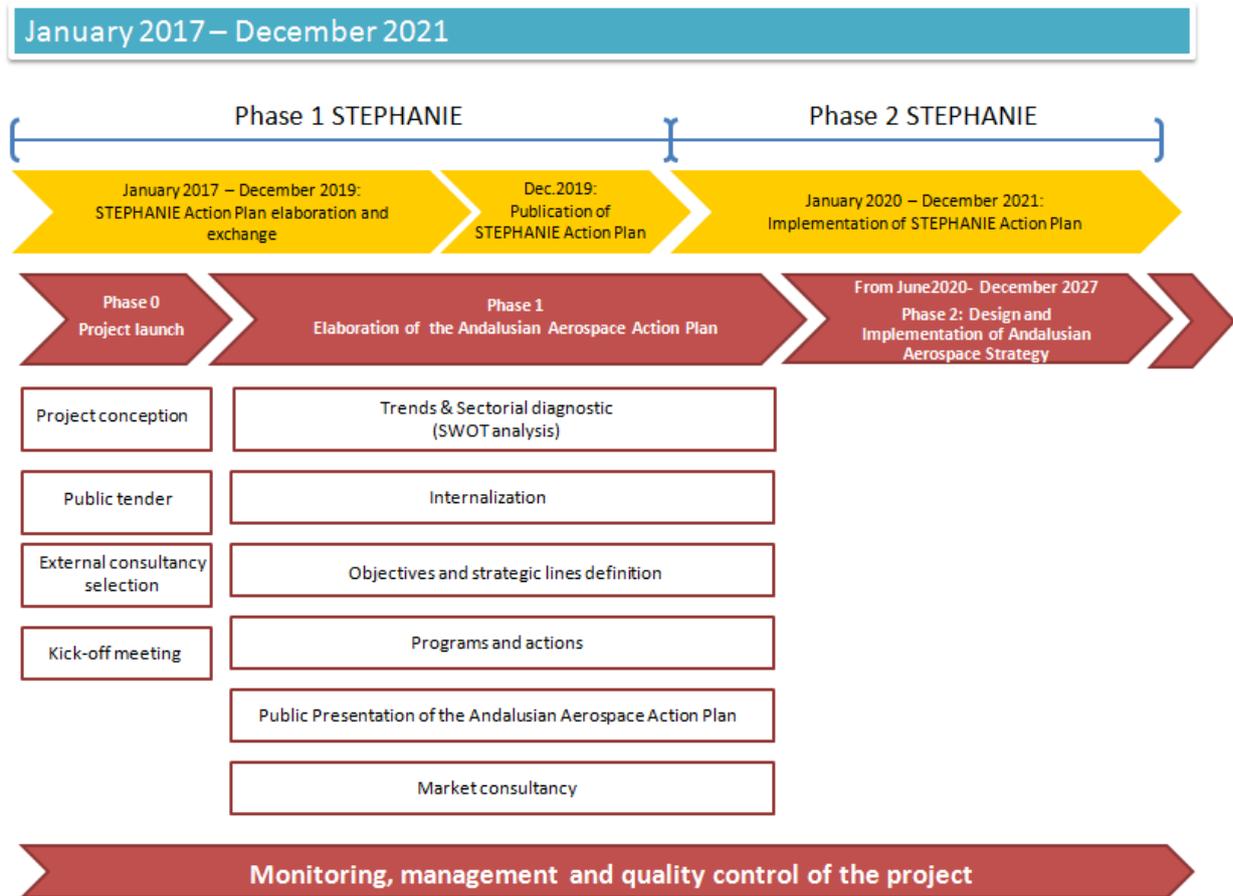


Figure 1. Phases of the Andalusian Aerospace Strategy and the relation with STEPHANIE project phases

The tendering process launching the study for the Andalusian Aerospace Action Plan was initiated in 2018 by the Aerospace *Hélice Cluster* and by the Andalusian ERDF Intermediary Body, IDEA Agency. Both of them supported the definition and development of the Andalusian Aerospace Action Plan.

The drafting process of the Andalusian Aerospace Action Plan during phase 1 of STEPHANIE was designed as a public-private collaboration initiative led by the School for Industrial Organisation (*Escuela de Organización Industrial, EOI*), the awarded entity of the elaboration of the Andalusian Aerospace Action Plan. The formulation of the Plan was an open participatory process; EOI identified a group of ‘key actors’ including companies, end-users, R&D institutions and Administrations (quadruple helix). This group of ‘key actors’ was actually an extended group of the STEPHANIE Andalusian Stakeholders group. In fact, FADA-CATEC has had an important role in the process of defining the objectives and measures to be included within the Plan and also a very active participation in all the workshops and meetings that were organized to define the Andalusian Aerospace Action Plan. Moreover, it is important to highlight that to define the objectives and measures FADA has taken into account the good practices learned from STEPHANIE partners.

On the other hand, at the beginning of phase 2 of STEPHANIE, FADA-CATEC will continue being involved in the implementation of the Andalusian Aerospace Action Plan with the aim to make sure that the proposed measures, described as action 2 and action 3 in this STEPHANIE Action Plan, are prioritized by the Andalusian Action Plan in order to maximize the allocated resources for the measures proposed by FADA during the design of the Andalusian Aerospace Strategy.

Once the Andalusian Aerospace Action Plan will be published, the implementation of the Andalusian Aerospace Strategy will begin. It is important to highlight that the empowerment of FADA, is included among the objectives of the Aerospace Strategy measures (see measure 4.1 of the Drafting document).

FADA, in collaboration with STEPHANIE stakeholders, has already drafted a proposal of actions to be implemented within the Andalusian Aerospace Strategy phase 1 of STEPHANIE; build on the basis of STEPHANIE acquired best practices, taking into consideration that the rising of internationalization, diversification and technological renewal make continuous training and other type of instruments completely necessary to be more competitive.

On the other hand as a different regional instrument, the **Andalusian ERDF Operational Programme** aims at improving the competitiveness and adaptability of the Andalusian economy, creating employment and promoting integration. It therefore concentrates on four Priority Axes:

- Axis 1: Strengthening research, technological development and innovation
- Axis 2: Improving the competitiveness of SMEs
- Axis 3: Supporting measures to reduce CO2 emissions
- Axis 4: Sustainable Urban development and Cities planning / Prevention

The Andalusian Action Plan of the STEPHANIE project focuses on Priority Axis 1: Strengthening research, technological development and innovation (R&D&I), and more specifically on strategies and measures related to the field of the aerospace sector.

Name of the policy instrument addressed	Regional Operational Programme 2014-2020, Axis I: Strengthening research, technology development and Innovation Andalusian Industrial Strategy Plan (EIA 2020)
Investment for Growth and Jobs programme	YES
European Territorial Cooperation programme	NO

Part III – Details of the Actions Envisaged

Overall Topic and Description of the proposed Policy Improvement	
Overall Topic	FADA-CATEC intends to foster the 1st Andalusian Aerospace Strategy design and implementation on the basis of the Andalusian Industrial Strategy (EIA 2020).
Specific Description	<p>The Andalusian aerospace industry has a privileged position. It excels in exports and is considered one of the four aerospace European hubs, together with Toulouse (France), Madrid (Spain) and Hamburg (Germany). However, until now, the Andalusian Industrial Strategy did not include any specific Plan particularly addressing the aerospace sector.</p> <p>The Andalusian Aerospace Strategy will focus on empowering the sector in Andalusia, supporting companies in improving competitiveness, digitization towards aerospace industry 4.0, the implementation of innovation and technology in R&D activities, the development of the space and defence industry, diversification towards products with high added value, and internationalization and diversification in markets, among others.</p>
Background	<p>Since 2017 FADA-CATEC has carried out the following actions within STEPHANIE project:</p> <ul style="list-style-type: none"> - FADA has organized 6 workshops (one each semester) to evaluate the necessary measures to impulse the aerospace sector in Andalusia. These workshops were attended by stakeholders of the quadruple helix. They needed a public-private initiative helping SMEs and other types of companies to increase the technological and industrial capacity of the aerospace sector to boost the growth and development of aerospace companies in Andalusia. On the other hand, SPIA (Space and Photonics Innovation Actors) demanded to know the current aerospace situation in order to identify challenges, problems, and opportunities that must be faced in the coming years. Thanks to STEPHANIE project, FADA-CATEC informed <i>IDEA Agency</i> and <i>Hélice Cluster</i> that SPIA considers that this public-private project should emerge as the result of a participatory process involving all the stakeholders interested. - Analysis of good practices and experiences from other STEPHANIE regions (Toscana Region or Prague City) to identify measures to be implemented in the Andalusian region. · Several meetings with the Andalusian Government in order to analyze the regional priorities related to the aerospace sector. <p>As a result of these actions, the need of a specific policy tool addressing aerospace sector in the region has been identified, and then, the Andalusian Aerospace Action Plan was developed during STEPHANIE phase 1 as a first step to design the Andalusian Aerospace Strategy, still not developed after the regional industrial strategy. The development of the Andalusian Aerospace Strategy was a historical request from the regional aerospace industry.</p> <p>Thanks to the close link that FADA-CATEC has with the EOI and <i>Hélice Cluster</i>, the Foundation</p>

is having an important role in the design of the Andalusian Aerospace Action Plan, actively participating in the development of this Action Plan. Thus, during the phase 1 of the Andalusian Aerospace Strategy, FADA has participated at the different working sessions and round tables organized by EOI that were held within the framework of the elaboration of the Andalusian Aerospace Action Plan to determinate the measures to be adopted. Therefore, and from the beginning, FADA has used this privilege position to foster the prioritization of industry 4.0 and specific aerospace calls at regional level based on good practices learned within the STEPHANIE project.

Need addressed

The aerospace industry is one of the main pillars of the economic development of Andalusia, representing 1.57% of global Andalusian GDP. Andalusia is the second aerospace region in Spain, after Madrid, and represents approximately 35% percent of the turnover and national employment in this sector. Our aeronautical sector is in continuous growth, with 129 companies that invoice €2,530 million and employed directly 15,931 professionals, most of them highly qualified, according to data from 2018.

However, this sector must face a paradigm shift at a global level. Actors such as China, India or Morocco and other emerging markets, are qualifying their technologies at great speed. These countries have a higher financial muscle than western economies and lower manufacturing costs.

The way of competing in the Andalusian industry must be through productivity and activities of greater added value such us digitalization, engineering, technology, R&D developments, where training, building capacities and developing skills are going to be essential aspects. Therefore, it seems obvious that a boost, support and a complete planning is essential, agreed with all the key players, in which Administration, companies, agents of R&D (such as FADA) and social representatives go hand in hand, aligned with the rest of the economic strategies of the Andalusian government, with the European ones and with the next National Plan.

Relevance to STEPHANIE project	
Details of proposed Policy improvement	Links with interregional input (including details of activities, good practices and knowledge shared)
<p>The Aerospace Strategy of Andalusia aims to increase the technological and industrial capacity acquired by the Aerospace Sector and identify the necessary actions to promote the growth and future development of aerospace companies in Andalusia.</p> <p>(A) Strengthen the competitiveness of the traditional areas of competence of the Andalusian aerospace industry through digitalization to industry 4.0.</p>	<p>FADA has learnt interesting Good Practices from Stephanie partners that have been reflected within the Andalusian Aerospace Action Plan. See details below:</p> <p>(A) Last April 2019, during a Staff exchange between Toscana region and FADA, Emmanuel Fabbri and Elena Perla Simonetti had explained the importance of incorporating Industry 4.0 techniques in aerospace companies to be more competitive.</p>

<p>(B) Support tools and financial instruments for companies to foster the Space sector (Earth observation, Navigation, etc) and Disruptive technologies such as New materials, Robotics, Artificial Intelligence, Internet of things, etc.</p>	<p>Smart factory is one of the priorities in Tuscany RIS 3 Strategy. They suggested doing a mapping industry 4.0 in Andalusia as a first step.</p> <p>Tuscany region identified 7 topics: Industrial internet, cloud, additive manufacturing, cyber security, Big data & analytics, augmented reality and advanced manufacturing solutions.</p> <p>FADA will work to include the objective 'to foster companies into digitalization towards Industry 4.0' as a key priority for the Andalusian Aerospace Strategy.</p> <p>FADA will recommend developing an Andalusian aerospace diagnosis (along with Spanish and European aerospace diagnosis). This will allow to know the current situation and detect the problems and the opportunities that the sector faces in the coming years though parameter such as: type of production/added value (aircraft, aero structures, engines...), type of end user (civil / military), billing or employment.</p> <p>In addition, Toscana region has provided documents and references to be used as guidelines in Andalusia.</p> <p>(B) Thanks to Stephanie project, FADA has learnt different Good Practices related to funding schemes to be carried out by Managing authorities of Prague City.</p> <p>The participation of Andalusian companies in R&D European Space program is until now very low. They are not used to apply to this kind of European calls, therefore, good examples from other EU regions have been analysed within the STEPHANIE partnership in this field.</p> <p>For instance, the Good Practice of Czech Republic called 'ERC CZ programme' is a tool to motivate Czech companies to prepare more proposals in European calls by increasing the possibility of getting funds for the application phase (using national budget money).</p> <p>FADA will impulse the opportunity to include innovative public procurement and repayable advance programs for specific aerospace calls (using regional funds) at the Strategic Aerospace Funding schemes. These aerospace calls will be aligned to European Space R&D calls.</p> <p>FADA learnt about this Good Practice in the 4th and 5th Interregional Learning Event and Project Meeting in Dusseldorf (July 2018) and Seville (May 2019) respectively.</p>
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Players involved	
Name of Organization	Role in Action Plan Implementation
1. Agencia IDEA. Andalusian Regional Government	<i>Institution in charge of: Designing through an open and participatory process, in cooperation with HELICE cluster, of the Strategic Lines for the Andalusia Aerospace Sector in coherence with the Industrial Strategy of Andalucía 2020, EIA2020.</i>
3. Aertec	<i>Large Aerospace company that has participated as one of the leading Andalusian aerospace companies in the round tables organized by EOI to determinate the measures to be adopted in the Andalusian Aerospace Action Plan</i>
4. Technological Corporation of Andalusia	<i>Institution that is in charge of boosting the R&D activity of Andalusian companies, and has also incorporated their vision in the elaboration of the Andalusian Aerospace Action Plan</i>
5. Hélice Aerospace Cluster	<i>Designing through an open and participatory process, in cooperation with Agencia IDEA, of the Strategic Lines for the Andalusia Aerospace Sector in coherence with the Industrial Strategy of Andalucía 2020, EIA2020.</i>
6. TTI Norte	<i>SME that has participated in the group of key actors that has helped in the elaboration of the Andalusian Aerospace Action Plan</i>
7. Chambre of Commerce of Seville	<i>Business network from Seville whose goal is to further the interests of businesses.</i>
8. Andalusia Aerospace	<i>Andalusian Aerospace cluster that has provided expertise from the industry to prioritize the measures and programmes to be implemented and to support the implementation.</i>
9. Andalusian Agriculture Department	<i>End – user that has provided their vision how new aerospace technologies can help to improve their process and future needs</i>
10. Escuela de Organización Industrial	<i>External consultancy in charge of writing the Andalusian Aerospace Action Plan</i>
11. Alter Technology	<i>Large company that has provided their expertise in the space sector in the elaboration of the Andalusian</i>

	<i>Aerospace Action Plan</i>
<i>12. Ayesa</i>	<i>Large company that has participated in the group of key actors that has helped in the elaboration of the Andalusian Aerospace Action Plan</i>
<i>13. FADA</i>	<p><i>Entity in charge of:</i></p> <ul style="list-style-type: none"> <i>A. Ensuring that the two actions (A) to foster industry 4.0 and (B) specific R&D calls will be prioritized in the Andalusian Aerospace Action Plan</i> <i>B. Ensuring that the Andalusian Aerospace Action Plan will be finalised on time</i> <i>C. Ensuring the dissemination of Andalusian Aerospace Action Plan</i> <i>D. Monitoring the implementation of the proposed measures in the implementation of the Andalusian Aerospace Strategy</i>
<i>14. Solarmems</i>	<i>SME that has participated in the group of key actors that has helped in the elaboration of the Andalusian Aerospace Action Plan</i>
<i>15. Dronetools</i>	<i>SME that has participated in the group of key actors that has helped in the elaboration of the Andalusian Aerospace Action Plan</i>
<i>16. Elimco</i>	<i>Large company that has participated in the group of key actors that has helped in the elaboration of the Andalusian Aerospace Action Plan</i>

Next the different actions are described:

ACTION 1

TITLE:	Andalusian Aerospace Action in the framework of the future Andalusian Aerospace Strategy 2027
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Overall Topic and Description of the proposed Policy Improvement	
Specific Description	<p>The Andalusian Aerospace Action plan include:</p> <ul style="list-style-type: none"> • Andalusian aerospace sector diagnosis within the framework of the Spanish and European scenario to identify the problems and opportunities that the sector will face in the coming years and establish an aligned strategy. • Definition of the objectives, strategic lines, programmes and measures to be implemented. • Definition of the criteria for monitoring and evolution of the Andalusian Aerospace Action Plan. <p>In fact, these points had benefit of the results and lessons learnt during STEPHANIE Phase 1 thanks to FADA important role during the elaboration of Andalusian Aerospace Action Plan.</p> <p>At the time of writing this Stephanie Action Plan, the Andalusian Aerospace Action Plan is been finalized². The aerospace sector diagnosis has been finalized and the measures and programmes to be implemented in the Andalusian Aerospace Strategy have been drawn. These measures and programmes have been submitted to relevance and coherence analysis with the objective to establish their level of adaptation to the region.</p> <p>During this process FADA has given inputs about the importance of prioritizing actions A) to foster industry 4.0 and B) space calls R&D, learned in the framework of the STEPHANIE project. The result of this process will be a list of proposed measures and programmes for their prompt implementation that will be included in the Action Plan.</p> <p>Then, the objective in the next months is to ensure that these actions are kept with high priority in the final version of the Andalusian Aerospace Action Plan.</p>

² Although during the revision and signature period of this document, the Andalusian Aerospace Action Plan has been already published.

Specific Activities and TIMEFRAME		
Activity Number	Activity Description	Timing (with details)
1	<p>The prioritization of defined STEPHANIE actions for Andalusian Region within the Andalusian Aerospace Action Plan</p> <p>Activity 1 contemplates monitoring and control measures run by FADA to ensure that the Andalusian Aerospace Action Plan includes the two actions proposed by FADA. Then, the specific actions will consists of:</p> <ul style="list-style-type: none"> • FADA will have meetings with <i>Hélice Cluster</i> addressed to ensure that actions (A) industry 4.0 and (B) specific R&D calls will be prioritized in the Andalusian Aerospace Action Plan. • To consolidate its role in the preparation of the Andalusian Aerospace Action Plan, FADA is planning to follow up the drafting phase of the document, contributing with its inputs and support to any question or comment related to the actions proposed at this Stephanie regional Action Plan. 	Until May 2020
2	<p>To contribute to ensure the Plan.</p> <p>Once the Andalusian Aerospace Action Plan has been published, this activity will focus on providing targeted information through STEPHANIE face-to-face networking events addressed to the stakeholders involved, with the objective to boost the Andalusian Aerospace Action Plan.</p> <p>Networking events are ideal platforms to disseminate the opportunities offered by the Andalusian Aerospace Plan and get connected with industry, investors and intermediaries/multipliers.</p>	June 2020-October 2020

Risk and Contingency Plans		
Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
Delay in starting the development of the Andalusian Aerospace Action Plan	Medium	Follow – up meetings with Andalusian Regional Government

Costs
<p>Action Plan costs are described in the framework of Stephanie project:</p> <ol style="list-style-type: none"> 1) Follow up of the Andalusian Action Plan. Staff costs: 15 k€ 2) A dissemination event will cost around 2,5-3,5k€.

Funding sources
<p>The definition of funding sources for each program and measure of the AAA 2027 is subject to the MMF 2021-2027 and final budget allocations for Structural Funds, ERDF Andalusian OP, as well as the national aerospace strategy and the correspondent private funding contribution</p>

<p>Monitoring (please describe the monitoring tools and indicators that you expect to use in Phase 2 – Implementation to ensure that your Action Plan is implemented correctly)</p> <p>Indicators should also include measurement of the <u>territorial impact</u> (e.g. beneficiaries concerned, results achieved in terms of increased competitiveness or cleaner environment, etc.).</p>		
<p>Monitoring tools (description of the tools and how they will be applied)</p>	<p>Meetings with key stakeholders such as <i>Hélice Cluster</i> and the Regional Government 5 and dissemination events to monitor the impact and interest of the Andalusian Aerospace sector to the proposed actions.</p>	
<p>Indicators</p> <p>NB: The indicator included in the Application Form should be reported here, as well as any other indicator deemed necessary</p>	<p>target amounts</p>	<p>Means of Verification</p>
<p>1</p> <p>Nº of meetings with <i>Hélice Cluster</i> to ensure that actions (A) industry 4.0 and (B) specific R&D calls will be prioritized in the Andalusian Aerospace Action Plan.</p>	<p>2</p>	<p>Minutes of the meetings</p>
<p>2</p> <p>Minimum nº of follow – up meeting with Andalusian Regional Government to ensure that the Plan is being met on time and planned measures will be implemented.</p>	<p>1</p>	<p>Minutes of the meeting</p>
<p>3</p> <p>Minimum number of participants at the dissemination event(s).</p>	<p>20</p>	<p>Attendant list</p>

ACTION 2

TITLE: Industry 4.0 Implementation within the Andalusian Action Plan / Aerospace Strategy

Overall Topic and Description of the proposed Policy Improvement

Specific Description	<p>To impulse 4.0 industry within the Andalusian Aerospace Strategy, the followings programmes have been suggested:</p> <ol style="list-style-type: none"> 1. Strategic line 1: Support programmes for investment in digitalization and industry 4.0. 2. Strategic line 5: Training Programme in industry 4.0. <ul style="list-style-type: none"> ○ Awareness programme in industry 4.0. ○ Industry 4.0 diagnostic. ○ Training Programme in industry 4.0
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Specific Activities and TIMEFRAME

Activity Number	Activity Description	Timing (with details)
1	<p>To ensure that the action boosting Industry 4.0 proposed by FADA, is implemented as part of the Andalusian Aerospace Action Plan</p> <p>This activity includes the monitoring and control measures used by FADA to ensure the implementation of the actions: incorporating Industry 4.0 techniques in aerospace companies through programs for investment in digitalization and industry 4.0, training activities, workshops, seminars, etc.</p>	October 2020- December 2021
2	Implementation of the support programmes for investment in digitalization and industry 4.0 in Andalusian aerospace sector	Expected for the second semester of 2021 (depending on the Andalusian Aerospace Action Plan implementation)

Risk and Contingency Plans

Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
Delay in the implementation and	Medium	FADA will lead the identification

Andalusian Aerospace Action Plan		and coordination of Andalusian aerospace business needs together with Andalusian Aerospace cluster
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Costs
To be estimated

Funding sources
The definition of funding sources for each program and measure of the AAA 2027 is subject to the MMF 2021-2027 and final budget allocations for Structural Funds, ERDF Andalusian OP, as well as the national aerospace strategy and the correspondent private funding contribution

Monitoring (please describe the monitoring tools and indicators that you expect to use in Phase 2 – Implementation to ensure that your Action Plan is implemented correctly)
Indicators should also include measurement of the territorial impact (e.g. beneficiaries concerned, results achieved in terms of increased competitiveness or cleaner environment, etc.).

Monitoring tools (description of the tools and how they will be applied)	Meetings with the Regional Government and the Andalusian Aerospace cluster, and surveys addressed to the aerospace companies to get more detailed information about the impact of the actions proposed in Stephanie Action Plan.
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Indicators		target amounts	Means of Verification
NB: The indicator included in the Application Form should be reported here, as well as any other indicator deemed necessary			
1	Nº of follow – up meetings with Andalusian Regional Government to ensure that the Plan is being implemented on time	1	Minutes of the meeting
2	Nº of meetings with Andalusian Aerospace Cluster to get the feedback of the companies with respect to the implementation of Action 2	1	Minutes of the meeting
3	Number of companies benefiting from the specific actions proposed in Stephanie Action Plan	3	Surveys addressed to Andalusian aerospace companies

ACTION 3

TITLE: Introduction of Support tools and financial instruments to foster the Space Sector within the Andalusian Aerospace Strategy

Overall Topic and Description of the proposed Policy Improvement	
Specific Description	<p>Support tools and financial instruments for companies to foster the Space sector (Earth observation, Navigation, etc) and Disruptive technologies such as (New materials, Robotics, Artificial Intelligence, Internet of things, etc) as part of the Andalusian Aerospace Strategy:</p> <ul style="list-style-type: none"> ○ Refundable and non-refundable financial instruments (for example: specific aerospace R&D calls, Financing of innovative and technological companies, among others). ○ Innovation Public Procurement ○ Technical assistance for R&D projects: to inform about new programs or calls, to find partners for the consortium, to help during proposal preparation process, among others. ○ Fiscal instruments: tax reduction, fiscal benefits, etc. ○ Infrastructures: making available to companies different types of infrastructures where programs and actions can be developed with no need to invest in new equipment or facilities.

Specific Activities and TIMEFRAME		
Activity Number	Activity Description	Timing (with details)
1	<p>To ensure that the actions proposed by FADA are included and implemented by as part of the Andalusian Aerospace Strategy</p> <p>This activity includes the monitoring and control measures used by FADA to ensure that the implementation of the actions: support tools and financial instruments for companies to foster the Space sector (Earth observation, Navigation, etc) and Disruptive technologies such us (New materials, Robotics, Artificial Intelligence, Internet of things, etc) are implemented and, if they have not been implemented, that there is a commitment date for its implementation.</p>	October 2020- December 2021
2	Financial and instruments available for the aerospace companies	Expected for second semester of 2021 (depending on the Andalusian Aerospace Strategy)

		implementation)
3	Infrastructures available for aerospace companies	Expected for the end of 2021 (depending on the Andalusian Aerospace Strategy implementation)

Risk and Contingency Plans		
Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
Delay in the implementation and of the Andalusian Aerospace Strategy	Medium	FADA will lead the identification and coordination of Andalusian aerospace business needs together with Andalusian Aerospace cluster

Costs
To be estimated

Funding sources
The definition of funding sources for each program and measure of the AAA 2027 is subject to the MMF 2021-2027 and final budget allocations for Structural Funds, ERDF Andalusian OP, as well as the national aerospace strategy and the correspondent private funding contribution

Monitoring (please describe the monitoring tools and indicators that you expect to use in Phase 2 – Implementation to ensure that your Action Plan is implemented correctly)		
Indicators should also include measurement of the territorial impact (e.g. beneficiaries concerned, results achieved in terms of increased competitiveness or cleaner environment, etc.).		
Monitoring tools (description of the tools and how they will be applied)	Meetings with the Regional Government the Andalusian Aerospace cluster, and surveys addressed to the aerospace companies to get more detailed information about the impact of the actions proposed in Stephanie Action Plan.	
Indicators	target amounts	Means of Verification
NB: The indicator included in the Application Form should be reported here, as well as any other indicator deemed necessary		
1 Nº of follow – up meetings with Andalusian Regional Government to ensure that the Plan, is being	1	Minutes of the meeting

	implemented on time.		
2	Nº of Meetings with Andalusian Aerospace Cluster to get the feedback of the companies with respect the implementation of Action 3.	1	<i>Minutes of the meeting</i>
3	Number of companies benefiting from the specific actions proposed in Stephanie Action Plan	2	<i>Surveys addressed to aerospace companies in Andalusia</i>



Agency of Innovation and Development of Andalusia (IDEA) Statement

Seville, 8th May 2020

IDEA Agency, the Agency for Innovation and Development of Andalusia, public regional entity attached to the Ministry of Economy, Knowledge, Enterprises and University of the Andalusian Regional Government, is an Intermediary Body for ERDF Andalusia 2014-2020 Operational Programme, having a close contact with the Spanish Managing Authority (Ministry of Finance through the DG for European Funds).

IDEA Agency has had the opportunity to collaborate with the Andalusian Foundation for Aerospace Technology – Advanced Centre for Aerospace Technologies FADA-CATEC, the Andalusian partner (PPO6), within the framework of the INTERREG EUROPE STEPHANIE Project (the Space TEchnology with Photonics for market and societal challenges), as regional government supporting organisation. Recognizing the role played by EU regions in space policy, both in strategic development and territorial impact, STEPHANIE brings together 8 partners from 7 areas to exchange knowledge on how to ensure that policy is designed to guarantee real benefits from space technology based on photonics, particularly in space and earth observation.

Thus, IDEA Agency has cooperated with STEPHANIE partners and regional stakeholders over three years of interregional learning, resulting into the correspondent regional Action Plans including concrete measures for policy improvements to foster in our region. Following INTERREG EUROPE guidelines, the STEPHANIE Action Plan for Andalusia region has been based on the principles of interregional cooperation between STEPHANIE partners and involvement of the main regional stakeholders dealing with aerospace R&D, innovation support and innovation delivery to regional industry. Participation was supported mainly through setting up a Regional Stakeholder Group (RSG), with periodical meetings composed by relevant innovation actors from industry, science and the financing sector as well as from regional authorities.

Furthermore, the Action Plan of Andalusia Region has been conceived in line with the Andalusia Industrial Strategy (EIA2020), the Andalusian Aerospace Strategy and is supported by the Andalusia Innovation Strategy, RIS3 ANDALUCIA, where KETs (and therefore Photonics) are considered one of the 8 dimensions, being also Aerospace one of the key domains included within the Priority 2 (Transport-Related Advanced Industry).

In this context, we endorse the Action Plan for the region of Andalusia submitted by FADA-CATEC within the framework of INTERREG EUROPE STEPHANIE Project.

Yours sincerely,

Fernando Casas Pascual
General Director
Agency for Innovation and Development of Andalusia

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