

Activities Plan 2020: how are we are planning and looking at the future



The year 2018 was a year of survival. *Our first year, being a recent created cluster from the three previous associations, it was a time of dialogue between us, reflexion, and above all, trying to make this work, financially and operationally.*

The year of 2019 was a year of consolidation. *We strengthen our financial viability, our operational management, our reach to our members, established strong and credible networks with our national and international partners, consolidated our brand and defined our strategy, laying down the path to what we consider to be a very bright future.*

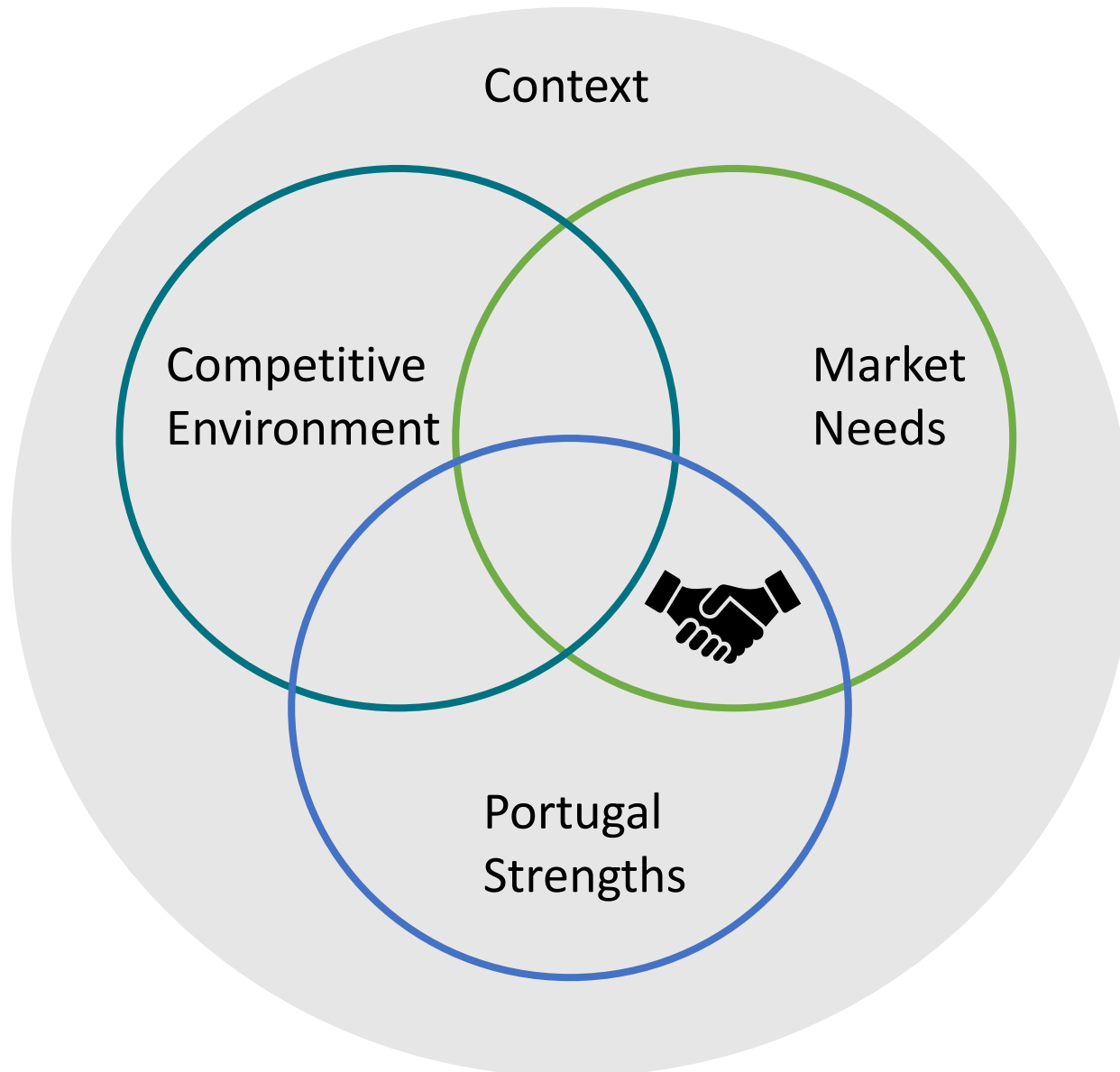
The year of 2020 is expected to be the year of execution. *We will use all the work done during 2019 and put in place a diverse range of prepared actions, that are intended to dramatically boost our ecosystem.*

This Activity Plan 2020 is intended to give a brief overview of our newly defined strategy, and goes into more detailed on the subset of activities we considered a priority and that will be carried out throughout 2020.

*“...to make **Portugal** an **international reference** within the Aeronautic, Space and Defence industries...”*

*Our vision is very clear, it is to make Portugal an international reference within the Aeronautic, Space and Defence industries. We highlight two parts. First, **Portugal**. As a nationwide cluster we have the opportunity and the responsibility to convey this message, to be able to really gather all main national stakeholders together towards this objective and to show international players that we are their entry point. Second, **international reference**. We don't want to be a best partner, we want to be the best, and this is already happening. It can be seen by the growing national dynamics within all three sectors, the level of interest from major international players and by the numbers we represent. There is a big momentum building up and this is the time to use it.*

defining our Key Opportunities Areas ...



We cannot however excel within all areas of expertise, but surely within specific areas, in the intersection of market needs and Portugal strengths and as far away as possible from the intense competitive environment, we can find added value products and services that we are able to deliver to the markets.

We did this exercise and came up with a specific set, for each one of the sectors, of what we are calling Key Opportunity Areas, that define what we considered to be the areas where we can have the best chance at reaching this goal.

Aeronautics

*Aerostructures and Engines
Manufacturing & Integration*

*Interior Cabin design and
retrofitting*

MRO

Avionic Systems

Space

*Micro launchers and
satellites*

*Dual-use EO systems and
services*

Defence

*Naval systems and
subsystems*

*Maritime Surveillance
Ecosystem*

Cyberdefence

C4i

Our members...



Does this mean that we will focus solely on these key opportunity areas? Of course not, we have a wide base of members with a diversified range of expertise, that can bring numerous added value products and services to the market.

Our main job therefore is to help our members to fulfil their potential and to develop their strategies...

*“...to accelerate our members growth strategies, by **building synergies**...”*

*... and this makes our mission also very clear, it is to accelerate our members growth strategies, by building synergies. We highlighted only one part, **building synergies**. There is a tendency at this level to throw in two or three buzzwords, that normally involve innovation and internationalization, but we tried to avoid that. The reality is that our usefulness and the type and level of engagement with our members will substantially differ depending on their profile, either they are an OEM or a SME, a newcomer or a old-timer etc. The only commonality is that whatever we engage in, we will have to do it together, by developing networks within the ecosystem and by building synergies. We are too small to do it otherwise.*

It is not possible however to offer a customised engagement strategy to each member, so we had to devise an open approach, that could be easily understandable and communicated, to allow for our members to easily identify how to approach and better use the cluster...



Markets and Opportunities



Innovation and Value Creation



People and Competences



Funding and Regulatory

... we developed then a strategy map, based on the classical approach but adapted to our reality, where we defined four main building blocks, that we considered to encapsulate the needs and requirements to succeed on these complex ecosystems:

- *Funding and Regulatory*
- *People and Competences*
- *Innovation and Value Creation*
- *Markets and Opportunities*

Within this four main building blocks we defined 13 strategic objectives, that will guide the core of our activity, allow us to focus on what matters, and hopefully, allow for our members to easily understand how to better interact with AED Cluster Portugal and reap the benefits of an active participation and their investment.

Our Strategic Objectives



Increase visibility of members

Maximise integration on supply chains

Attract foreign direct investment



New value added solutions

Increase innovation collaboration

Promote technology I4.0

Increase operations efficiency



Fill workforce Gap

Raise an Innovation mindset

Increase cluster intra-inter collaboration and output

Representative of AED PT ecosystem



Increase gov.-industry coordination

Facilitate access to funding



Building Block

First of all we have to ensure the right context. It is know that all three sector are highly institutionalized and therefore it is mandatory to ensure a close dialogue between government, agencies and industry, to promote the right regulatory growth context . On the other hand, these industries are very financially demanding. Either for building up infrastructures or by R&D investment requirements, in order to continue to deliver added value products and services and remain competitive, you need to invest heavily. Development cycles are also very long, thus making it harder to achieve sustainable ROIs.“

Funding and Regulatory

- :: Increase government - industry coordination
- :: Facilitate access to funding

I1, I2, I3 – action classification depending on priority status (1-higher to 3-lower)

Actions *Funding and Regulatory*

:: Increase government - industry coordination

I1 Leverage signed *Pacto Setorial para a Competitividade e Internacionalização*

This pact is a far reaching collaboration, laying down the ground for a close dialogue between the main governmental stakeholders and AED Cluster Portugal, which we will try to effectively use to promote our different agendas.

The regular commission is constituted by a member of the secretary of state of economy, secretary of state of internationalization, AICEP, IAPMEI, COMPETE2020 and ANI, but can also involve several other key governmental stakeholders.

KPI: to be defined

:: Facilitate access to funding

I2 Ensure new pluriannual budget smart specialization strategies fit

National projects cofunding will still be an anchor on the development of national technologies and products.

P2020 framework is finishing and a new pluriannual budget is coming up and we need to make sure the smart specialization strategies are in line with the member's needs.

KPI: to be defined

I1 Promote international collaborations with small consortiums

The national funding landscape is missing the ability to conduct small scale international innovation collaborations, that could be more relevant to members, instead of national programs with only national partners or large-scale international consortiums. Work is already being done together with stakeholders to promote that possibility within the new pluriannual budget. We are aiming at running a pilot project with Canada, since we have secured funding availability from their side.

KPI: 1 Canada-Portugal project submission

I3 Facilitate access to standard financial products and Venture Capital

Work will be carried out to ascertain the real needs of the members regarding private funding needs. Afterwards, possible partnerships with stakeholders will be evaluated.

KPI: to be defined



Once we have created the right growth context, we need the right people with the right set of competences to do the job. This is very much a universal problem of these sectors, namely the significant shortage of professionals and it is a absolute priority for us. But this is also not only about our members it is also about AED Management, and our ability to continuously improve and to deliver more value to you.



Building Block *People and Competences*

- :: Fill workforce Gap
- :: Raise an innovation mindset
- :: Increase cluster intra-inter collaboration and output
- :: Representative of AED PT ecosystem

I1, I2, I3 – action classification depending on priority status (1-higher to 3-lower)

Actions *People and Competences*

:: Fill workforce Gap

I1 **Submit/Win/Execute Project Dos 8 aos 80**

This project is AED Cluster Portugal answer to the need of a concerted and holistic approach to the HR challenges subjacent to these sectors. It will be developed in partnership with QSR and Forum Oceano at a first stage. It aims at 6 main objectives:

- *Continuous and integrated interconnection between Academy / Training and Industry;*
- *Broad Promotion of Aerospace Careers and Professions;*
- *R&D projects related to technological development and soft skills linked to the sector;*
- *Enhancement and promotion of the aerospace industry and training institutions linked to the sector;*
- *Integrated and continued holistic approach to the Aerospace sector promotion;*
- *Identification, characterization and active diaspora binding;*

To execute this project a transversal Working Group on HR will be created within the three commissions.

At this moment there is still an ongoing discussion on how to co-finance this project. AED Cluster Portugal own investment is not included on the proposed 2020 budget, as it will depend on final call format and economical context.

KPI: defined within the project

I1 **Submit/Win/Execute Project Catálogo ANQEP**

ANQEP, which is the national agency for Qualifications and Professional Training and responsible for the Catálogo Nacional de Qualificações (CNQ), will launch in the beginning of January 2020, a call for proposals for clusters and associations, to contribute for the updating of the current qualification profiles, in order to adapt it to current and future needs of the specific industries. This represents a unique opportunity for AED Cluster Portugal to tackle the existing gaps in the catalogue. The specific format of the call is still not known, but it will be cofinanced with a high %.

AED Cluster Portugal own investment is not included on the proposed 2020 budget, as it will depend on final call format and economical context.

KPI: to be defined within the project

:: Raise an Innovation mindset

I3 **Develop partnership with COTEC**

It was clearly identified that it was not only necessary to address the global shortage and suitability of HR, but also to promote a longstanding innovation mindset, that could be the basis for a continuous transformation of the national landscape. The current partnership with COTEC will be consolidated throughout 2020, in order to bring current innovation best practices to all members in the most efficient format.

KPI: to be defined



Actions *People and Competences*

:: Increase cluster intra-inter collaboration and output

I1 **Consolidate Partnerships with ASD, EUROSPACE, EACP, ENDR**

It was clearly identified by the associates the need to be present within these international forums, in order to reinforce AED global positioning and communicate at the international stage. 2020 will be the year when we will finally be able to deploy a proactive engagement towards these associations, in order to ensure useful and actionable feedback to members.

KPI: 75% survey positive feedback

I2 **Develop Partnerships with Mobinov, Forum Oceano, Plataforma Ferroviária Portuguesa, POOL-NET and TICE.PT**

As AED Cluster Portugal preaches to its members about the advantages of working together, we have to do our part also. AED Cluster Portugal is still too small to tackle some of the main industry challenges, that should be dealt together with other adjacent industries national clusters. AED Cluster Portugal has identified a subset of national clusters with whom will try to develop synergies, throughout 2020.

KPI: 5 signed protocols clearly identifying future collaborative actions

I3 **Achieve the "Gold Label" of the European Secretariat for Cluster Analysis (ECSA)**

A continuous improvement mindset for internal operations is already in place as we consolidate more and more the way we do things, to be as efficient and effective as possible and bring a better output to our members. This process will be measured against the international recognition of a Gold Label from ECSA during 2020.

KPI: successful application

:: Representativeness of AEDCP ecosystem

I1 **New members acquisition**

In order to become a more financially viable association, but particularly to enrich nominally the cluster portfolio and to allow for better turn-key collaborative solutions and improve our value proposition for global supply chains, it is critical to continue the work being done with members acquisition. This will be done with a proactive approach to existing players, but also to newcomers to these industries. Specific attention will be given to Naval Defence players.

KPI: reach 100 members



Actions People and Competences

13 Evaluate Piloting/MRO schools; Airports and Aviation possible representativeness

There are very different approaches regarding the purpose and format of international clusters within these sectors. We are currently focusing mainly on the industry side of the equation, but in reality the ecosystem is much wider and largely interdependent. Several synergies may be encountered, that can bring value to current members if we extend the scope of action within the cluster, to actively cover Piloting/MRO schools; Airports and Aviation. During 2020 efforts will be made together with key stakeholders, in order to fully understand the range of possibilities.





Building Block

“ After assuring the right context and the people with the right competences it is necessary to create value trough innovation. Business models that rely on low wages are not sustainable in a midterm future, due to the fierce international competition. It is necessary to continuously introduce new value added products and services that can disrupt the markets. This is only possible with a strong innovation collaboration between all stakeholders, doing it efficiently by following the best international standards and quickly adopting the new industry 4.0 paradigm.”

Innovation and Value Creation

- :: New value added solutions
- :: Increase innovation collaboration
- :: Implement technology I4.0
- :: Increase operations efficiency

I1, I2, I3 – action classification depending on priority status (1-higher to 3-lower)

Actions Innovation and Value Creation

:: New value added solutions

I1 Win/Execute Project Mobilizador FLY.PT

On September 2019, FLY.PT proposal was submitted on call Nº 14/SI/2019. The objective is to mobilize the national aeronautic industry to tackle the upcoming disruption on urban aerial mobility. It involves the research, development, prototyping and testing of a new urban aerial modular transportation concept, that integrates vertical and horizontal mobility, trough the combination of an autonomous electrical vehicle with a drone. The consortium has Tekever, CEIIA, AlmaDesign, INEGI, PIEP, OPTIMAL Structural Solutions, SETSA, Critical Materials, ISQ, PIEP, Codi, CONTROLAR, INESC-TEC, Universidade de Évora, IPL, ISEP (CISTER), FHP, Empordef and AED Cluster Portugal. AED will take a overall management role, together with specific activities within the dissemination/use of the results. The acceptance of the proposal will be known on January2020.

KPI: defined within project

I1 Win/Execute Project Mobilizador VIRIATO

On September 2019, VIRIATO proposal was submitted on call Nº 14/SI/2019. The objective is to develop, integrate and operate a sub-orbital vehicle to test technologies to be used on the micro-satellites launcher that will operate from the future Santa Maria, Azores Space port. It follows a set of national and international projects, where lower-level technology sub-systems to be integrated, were developed. After the development of the project, the Portuguese industry will be able to actively participate on future micro-launchers supply-chain, thus entering on a foreseeable disruptive market. The consortium has Omnidea, CEIIA, Tekever, EEA, INEGI, SPINWORKS, ISQ, EDISOFT, Universidade do Porto, +ATALNTIC, Universidade de Évora, OPTIMAL and AED Cluster Portugal. AED will take a overall management role, together with specific activities within the dissemination/use of the results. The acceptance of the proposal will be known on January2020.

KPI: defined within project



Actions *Innovation and Value Creation*

:: Increase innovation collaboration

I1 Promote participation on 3rd wave PESCO, EDIDP 2020 and FED 2021

The Defence funding paradigm has completely changed and different programs are now available to European companies to develop their products and services, namely EDIDP 2020 with 250 ME and FED 2021 with 31BE. The Portuguese industry has to take advantage of these instruments and participate on the large international consortiums that are already being created. AED Cluster Portugal intends to have a role on:

- *Information dissemination and clarification*
- *Ensure close dialogue between MoD and members (national strategy definition)*
- *Facilitate building consortiums (internally and with European clusters)*

This activity will be done in close partnership with IdD and EURODEFENSE.

KPI: to be defined

I1 Promote participation CLEANSKY 2

The Clean Sky 2 programme under the H2020 framework programme is running until 2024 and it is the largest EU research and innovation instrument in this field.

A memoranda of Understanding has already been signed between Clean Sky and Portugal, aiming at identifying common priorities. Some involvement of Portuguese entities has been taking place through the different calls and we had with PASSARO a consortium of 13 partners providing an integrated and multidisciplinary answer to the challenges of the Clean Sky 2 programme as CORE PARTNERS with ADS.

AED Cluster Portugal will actively collaborate with all stakeholders (GPPQ, MCTES etc) in order to ensure a active participation of Portugal in the Clean Sky 2.

KPI: “PASSARO 2” proposal submission

:: Implement technology I4.0

I1 Execute Project INDUPYMES 4.0

*Project INDUPYMES 4.0 is an ongoing INTERREG project, that started on June 2019, with a budget of **59 792 Euros** for three years, with financing at 75%. The objective of the project is to help SMEs from the transportation sectors (automotive, naval and aerospace) and its supply-chain, to embrace the new concept of digital factory. This will be done by working close with the companies and identifying their real needs and by developing implementation roadmaps trough knowledge transfer and collaboration with existing R&D infrastructures. Within the consortium are Fundación Andaluza para el Desarrollo Aeroespacial, Universidade de Évora, Ningenia, Agencia de Innovacion y Desarrollo de Andalucía, Federation Empresarios del Metal, Parque do Alentejo de Ciência e Tecnologia, ADRAL; Universidade de Sevilha, Câmara de Sevilha, CEIIA and AED Cluster Portugal.*

KPI: defined within project



Actions *Innovation and Value Creation*

:: Increase operations efficiency

13 **Develop a streamlined process for certifications**

The requirements and complexity for people and processes certifications is increasing within these sectors. The objective is to have, within the cluster, a streamlined process for training, implementation consultancy and certification, that can be more cost and time-effective to all members.

KPI: signed protocol with certification entity and consultants

11 **Execute Pilot Project with SPACE Aero**

The SPACE France association offers a set of services aimed at improving industrial performance and competitiveness within the supply chain of the civil aviation industry and the space industry. Founding members were Airbus and Safran but entails now a diverse range of OEMs and Tiers1, as well as many SMEs. It has a unique toolset based on best practices industrial standards, tested and improved throughout the several projects that have been launched since its inception. Up to know it has developed more than 1000 projects, just in France.

There has been a close relationship between SPACE Aero and AED Cluster Portugal during the last year and we are now trying to kick off a pilot project in Portugal with at least one “grappe”, to introduce international best practices within our ecosystem and promote competitiveness.

At this moment there is still an ongoing discussion on how to co-finance this project. AED Cluster Portugal own investment is not included on the proposed 2020 budget, as the remaining investment will have to be assured by the participants.

KPI: successful project kick-off with a least one “grappe”

11 **Implementation of a Buying Group**

Size matters. Although most of AED Cluster members have been successfully growing their business, we are still lacking strong economy of scales that can make us more competitive for the international supply-chains.

It is necessary to once again collaborate, so that we can together achieve better procurement conditions (time and cost) for a diverse range of products and services. It is AED Cluster Portugal high priority to kick-off the implementation of a national buying group during 2020. LAUAK is leading this working group.

At this moment there is still an ongoing discussion on how to co-finance this project. AED Cluster Portugal own investment is not included on the proposed 2020 budget, as the remaining investment will have to be assured by the participants.

KPI: successful kick-off with several group purchases





Building Block

Once we have everything prepared, we have then to create the opportunities to put our products and services into the market and hopefully get some money out of it! This can only be done by putting the members on the international spotlight and showing off our competences and brand, to be able to work our way in these intricated global supply-chains by seizing also unique contextual opportunities. Foreign direct investment can also have a big say on this, as it is a strong indirect indicator of our competitiveness and promotes our competences to the world.

Markets and Opportunities

- :: Increase visibility of members
- :: Maximise integration on supply chains
- :: Attract foreign direct investment

I1, I2, I3 – action classification depending on priority status (1-higher to 3-lower)

Actions Markets and Opportunities

:: Increase visibility of members

11 Win/Execute Project SIAC Internacionalização P2020

A proposal for a SIAC Internacionalização, on call Nº 01/SIAC/2019, was submitted on October 2020, with a total eligible investment of **492 808 Euros** for two years, cofinanced at 85%. The **acceptance is foreseen to be in January 2020**, with a very high likelihood of acceptance, due to the direct involvement of AICEP on the selection process and our close relationship.

The project entails the following main activities:

- Marketing Campaign (website, social networks, public media)
- Events Participation (exhibitions, conferences, seminars and meetings at ASD, EUROSPACE, EACP and ENDR)
- International journalists and opinion-makers visits to Portugal
- SMEs promotion (members business excellence award and promotional videos)
- AED Cluster Portugal International Events (AED Days 2020/2021 and IAC2023 lobbying activities)
- Market study

For 2020, AED Cluster Portugal will be present at the following exhibitions: Aircraft Interiors (AIX) 2020, Germany; Innovation Forum, Canada; Farnborough International Air Show, UK, and Portugal Air Summit, Portugal.

For 2021, a AED Cluster Portugal will be present at the following exhibitions: Adriatic Sea Defence & Aerospace – ASDA, Croatia; Paris Air Show e IAC Paris, France, and Portugal Air Summit, Portugal.

KPI: defined within project

:: Maximise integration on supply chains

11 Leverage BOEING future presence in Portugal

The acquisition of part of Embraer business by Boeing resulting in the property transfer of Évora's plants in Portugal is a major opportunity for the Portuguese industry. If BREXIT goes through, in addition, it will be in fact the only BOEING plants in the EU.

The first contact has already been made, assuring an active participation on 2019 AED Days, opening a period of closer collaboration. A close follow-up will be made in order to assure the inclusion of Portuguese industry in their development roadmap for Évora plants.

To reinforce our position, AED Cluster Portugal is already rallying support among members to submit an unsolicited proposal to Boeing, offering a strategic take for Portugal, taking into account members main competences and growth objectives. Finally we have to assure BOEING remains a member of the cluster.

KPI: to be defined

11 Leverage STELIA future presence in Portugal

STELIA future plant in Santo Tirso will be the first direct involvement of AIRBUS in the country, thus representing also an excellent opportunity for the Portuguese industry, both on a local level, but also as a stage to show off national competences to the group.



Actions Markets and Opportunities

The first contact has already been made, assuring an active participation on 2019 AED Days, opening a period of closer collaboration. A close follow-up will be made in order to assure the inclusion of Portuguese industry in their development roadmap. Immediate priority will be to assure all setup and tooling are made in Portugal.

KPI: to be defined

I3 Leverage Aviation players present in Portugal (Netjets, Hi-Fly, EuroAtlantic, TAP etc)

A close contact with aviation end-clients can, directly or indirectly, facilitate the industry to enter specific supply chains, as it was the case with TAP A330 neo refurbishment, with national design and leather.

Contacts with local aviation companies will be made in order to ascertain additional opportunities for the national industry, mainly within the cabin interiors design and refurbishing and MRO.

KPI: to be defined

I1 Leverage Azores Space Port initiative

Azores International Satellite Launch Program is a joint Initiative of the Government of Portugal and the Regional Government of the Azores, through FCT and EMA-Space with the technical support of ESA.

There are currently 3 consortium contenders, all involving national companies, and a final decision is still to be made.

AED Cluster Portugal will closely follow up on this topic, in order to facilitate the inclusion of Portuguese companies on the promising micro launcher and satellites new supply-chains.

KPI: to be defined

I1 Leverage LPM – Military Programming Law

The Military Programming Law (LPM) recent revision predicts an investment of €4,74bn during 2018-30. The key projects within the LPM revision proposal are KC 390 transport aircraft, ocean patrol vessels, neo-bulk vessel, frigate modernization, evacuation helicopters, cybersecurity, individual soldier equipment and PESCO projects. This context attracts of course major international players, confirmed for instance by AIRBUS Helicopters and BELL active participation on AED Days 2019 and should be used to show national competences and leveraged to increase participation on global supply-chains. This will be done in close partnership with Minister of Defense, IdD and international players.

KPI: to be defined



Actions Markets and Opportunities

I3 :: Attract foreign direct investment

Consolidate partnerships with AICEP and City Councils

Attracting foreign direct investment has been crucial to the development of the current aerospace and defence ecosystem and the enrichment of the local fabric. It is also a good measure for its international competitiveness. It is considered that investments like Stelia, Lauak or Mecachrome are essential to put Portugal on the map. Therefore, although we will always have an indirect involvement in these processes, proactive efforts will be made close to AICEP in order to assure it is fully equipped to attract the big players. Sensibilization efforts will also be made to key city councils, in order and for them to be aware of the growth dynamics of the three sectors and to facilitate future proactiveness in attracting international players.

KPI: to be defined





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