2011 Annual Report

Informe Anual 2011. Urteko Txostena

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INDICE

CAPÍTULO UNO
- PRESENTACIÓN - [pag 4]

CAPÍTULO DOS
- ASOCIACIÓN CLUSTER – HEGAN - [pag 6]
2.1.- Organización [pag 9]
2.2.- Hegan 2011 [pag 10]
2.3.- Cuentas anuales [pag 13]

CAPÍTULO TRES
- ASOCIADOS DEL CLUSTER - [pag 14]
3.1.- Asociados [pag 16]
3.2.- Cadena de valor y capacidades [pag 18]
3.3.- Actividades 2011 [pag 20]
- Aerostructuras [pag 21]
- Motores [pag 29]
- Sistemas y equipos [pag 35]
- Espacio [pag 39]
- Mantenimiento [pag 42]
- Proyectos de I+D de ingeniería de aeronaves y espacio [pag 44]
- Proyectos de I+D de fabricación, procesos, materiales y otros [pag 51]
3.4.- Programas y clientes [pag 58]
3.5.- Estadísticas [pag 60]

CAPÍTULO CUARTO
- AGRADECIMIENTOS - [pag 64]

AURKIBIDEA

LEHENENGO KAPITULUA
-AURKEZPENA- [4. or.]

BIGARREN KAPITULUA
- KLUSTER ELKARTEA – HEGAN [6. or.]
2.1.- Antolamendua [9. or.]
2.2.- Hegan 2011 [10. or.]
2.3.- Urteko kontuak [13. or.]

HIRUGARREN KAPITULUA
- KLUSTERREKO BAZKIDEAK - [14. or.]
3.1.- Bazkideak [16. or.]
3.2.- Balio katea eta gaitasunak [18. or.]
3.3.- 2011ko jarduerak [20. or.]
- Aire egiturak [21. or.]
- Motorrak [29. or.]
- Sistemak eta ekipoak [35. or.]
- Espazioa [39. or.]
- Mantentze lanak [42. or.]
- Aireontzien ingeniaritzako eta espazioko I+G proiektuak [44. or.]
- Fabrikazioko, prozesuetako, materialetako eta beste hainbat esparrutako I+G proiektuak, [51. or.]
3.4.- Programak eta bezeroak [58. or.]
3.5.- Estatistikak [60. or.]

LAUGARREN KAPITULUA
- ESKER ONEZ - [64. or.]

INDEX

CHAPTER ONE
- PRESENTATION - [pag 5]

CHAPTER TWO
- THE CLUSTER ASSOCIATION – HEGAN - [pag 6]
2.1.- Organisation [pag 8]
2.2.- HEGAN 2011 [pag 10]
2.3.- Annual Accounts [pag 13]

CHAPTER THREE
- THE CLUSTER MEMBERS - [pag 14]
3.1.- Members [pag 16]
3.2.- Value chain and capabilities [pag 18]
3.3.- Activities 2011 [pag 20]
- Aerostructures [pag 21]
- Engines [pag 29]
- Systems and equipment [pag 35]
- Space [pag 39]
- Maintenance [pag 42]
- Aircraft and space engineering R&D projects [pag 44]
- Manufacturing, processes, materials and Other R&D projects [pag 51]
3.4.- Programmes and clients [pag 58]
3.5.- Facts and figures [pag 60]

CHAPTER FOUR
- ACKNOWLEDGEMENTS - [pag 64]

PRESENTACIÓN

Un año más, me complace enormemente dirigirme a los socios de HEGAN y a la opinión pública para presentar la memoria 2011 de esta asociación cluster del sector aeronáutico y espacial que me honra presidir. Este ejercicio ha resultado doblemente satisfactorio, tanto por la buena evolución de nuestra industria, que ha experimentado un importante crecimiento en volumen de ventas y plantilla, como por la sinergia creciente entre los miembros de nuestra asociación, que facilita la mejora de la competitividad de nuestra actividad profesional.

Los resultados de 2011 confirman la evolución positiva del año anterior, en el que ya se observaban los primeros pasos de una recuperación incipiente. En un contexto económico general difícil, la industria aeronáutica y espacial ha logrado mantener durante estos últimos años una estabilidad alejada de las cifras negativas de otros sectores industriales y anticipa la vuelta a una tendencia de crecimiento sostenido, si bien la inestabilidad económica internacional puede afectar a nuestra industria, basada en una utilización intensa de capital y que sufre muy especialmente la falta de financiación.

Para el tráfico de pasajeros, 2011 ha sido un buen ejercicio, con un aumento del 5,9%, en línea con las previsiones a largo plazo. También ha sido un año de récord para los grandes fabricantes en lo que respecta al número de entregas y en nuevas contrataciones. Airbus y Boeing entregaron entre los dos más de 1.000 aviones comerciales y Embraer y Bombardier, por su parte, 449 aviones regionales. En cuanto a nuevos pedidos, Boeing y Airbus contrataron conjuntamente 2.224 nuevos aviones y Embraer y Bombardier sumaron 359 nuevos pedidos.

Esta sólida cartera de pedidos representa un amplio respaldo para nuestras empresas, cuya evolución permanece ligada a la actividad de los fabricantes de aviones y a las cifras del tráfico aéreo. Los buenos resultados de los miembros de HEGAN provienen de este contexto internacional y de la esforzada inversión realizada en los últimos años -que alcanzó en 2011 el pico más alto de su historia, con 193 millones de euros destinados a I+D, el 13,6% sobre las ventas de este periodo -, así como de la estructura de producción centrada en nichos muy especializados.

Así, la cifra de facturación de los asociados en el total de sus plantas ha alcanzado 1.419 millones de euros, con un incremento del 13% sobre el año anterior. La recuperación de la actividad ha tirado igualmente del empleo, que ha aumentado un 8,7% en el total de los asociados. Por lo que respecta a la actividad en Euskadi, la facturación ha crecido un 6,4%, hasta alcanzar 705 millones de euros, y la del empleo aumentó un 2,7% para situarse en 3.840 puestos de trabajo directo, 102 más que el año anterior. Este crecimiento en Euskadi es mayor entre las empresas con menos de 250 empleos, en las que el incremento de la facturación ha sido del 12,2% y el del empleo del 5,7 %, mientras que en las grandes el aumento ha sido del 6,2% y del 3,0% respectivamente.

Por su parte, las exportaciones han aumentado un 5,75%, con lo que se han situado en el 58,3% sobre las ventas en el último año, con una cifra de 827 millones de euros, si bien la media sobre la facturación total desde 1993 ronda el 73,4%.

Las expectativas para 2012 son de una nueva mejoría, aunque quizá menor que este año, ya que el ejercicio presenta una desaceleración de la economía mundial, en el que continuará la inestabilidad política en el norte de África y Oriente Próximo, por lo que se prevé un crecimiento moderado. Las previsiones de nuestro sector hablan de un crecimiento para los próximos veinte años cercano al 5% anual, pero esta tendencia de fondo se ve rizada y, a veces, cambia temporalmente su sentido por las crisis económicas, como en la que nos encontramos actualmente.

No obstante, en esta nueva etapa confiamos en ver los frutos del posicionamiento en el mercado y del esfuerzo en muchos años de inversiones. Las buenas carteras de pedidos de Airbus y Boeing en los que trabajan nuestros socios, la entrada en servicio del Boeing 787 Dreamliner con motores Rolls Royce Trent 1000, el A350 y el CSeries de Bombardier, permiten anticipar que 2012 y los años sucesivos serán buenos para el sector aeronáutico, por lo que nuestros socios esperan seguir creciendo este año y multiplicar sus ventas actuales por 1,8 en un periodo de cuatro a cinco años.

Como otro hito importante que dará su fruto en el futuro, resaltamos la mejora de algunas empresas en su posicionamiento como suministradores estratégicos de fabricantes franceses de motores, continuando, así, con la diversificación de clientes, programas y nichos. No podemos dejar de mencionar la actividad espacial que en 2011 ha tenido una notable progresión y ha facturado por encima de los 48 millones de euros.

La industria, sin embargo, tiene un largo recorrido que desplegar en la eficiencia de sus plantas y en la mejora de la competitividad. El sector lucha con la desventaja del incremento de costes frente a competidores europeos y de países emergentes. En esta vía, los miembros de la asociación cuentan ya con 17 plantas en el exterior movidos por la necesidad de acercarse a sus clientes y de mejorar la situación competitiva, al reducir costes y evitar las fluctuaciones del Euro. La cooperación, inscrita en el ADN de la asociación HEGAN y en sus miembros, es estrategia de mejora competitiva y se da entre las empresas del clúster, y entre éstas y sus homólogos de otras latitudes, y será un elemento importante de las acciones para lograr un valor mayor que el propiciado por la suma de todas ellas.

El Cluster tiene la misión de representar y dinamizar el sector, para facilitar su competitividad a corto y largo plazo mediante la cooperación y la innovación entre empresas y otros agentes, dando respuestas en cooperación a los retos estratégicos del mismo. Generar industria aeronáutica supone impulsar riqueza, desarrollo económico y puestos de trabajo de alto valor, cada uno de los cuales arrastra 3,4 empleos indirectos o inducidos. Para ello, todos los asociados, cada uno en el lugar de la cadena de valor que ocupamos, necesitaremos seguir haciéndonos más internacionales, más globales seguir abriendo horizontes en un sector que, los que estamos en él, consideramos apasionante.

AURKEZPENA

Aurten ere, atsegin handiz zuzentzen naiz HEGANeko bazkideengana eta, oro har, jendaurrera, lehendakari naizen Euskadiko aeronautika eta espazio sektoreko elkartearen 2011. urteko txostena aurkezteko. Azken ekitaldia aski ona izan da, bi arrazoirengatik: bai gure industriak izan duen bilakaera onarengatik, hazkunde nabarmena izan baitu salmentei eta langileen kopuruari dagokienez, bai gure elkarteko kideen arteko gero eta sinergia handiagoarengatik, gure jarduera profesionalaren lehiakortasuna hobetzea bultzatzen baita horrela.

2011ko emaitzek aurreko urteko bilakaera positiboa berresten dute, iaz jada suspertzearen lehen pausoak ikus baitzitezkeen. Testuinguru ekonomiko orokorra zaila dela kontuan izanda, industria aeronautikoak eta espazialak beste industria sektore batzuek izan dituzten kopuru negatiboetatik urrun dagoen egonkortasuna lortu du azken urteetan, eta hazkunde etengaberako joeraren itzulera iragartzen du, nahiz eta nazioarteko ezegonkortasun ekonomikoak gure industriari eragin diezaiokeen, kapitalaren erabilera handia egiten baitu eta bereziki pairatzen baitu finantzazio faltaren eragina.

Bidaiarien zirkulazioaren esparruan, 2011. urtea ekitaldi ona izan da, eta % 5,9ko igoera gertatu da, epe luzeko aurreikuspenekin bat etorrita. Fabrikatzaile handientzat errekorrak hausteko urtea izan da baita ere, entrega kopuruari eta kontratazio berriei dagokienez. Airbus eta Boeing etxeek, bien artean, 1.000 hegazkin komertzial entregatu zituzten, eta Embraer eta Bombardier etxeek, beren aldetik, eskualde mailako 449 hegazkin. Eskaera berriei dagokienez, Boeing eta Airbus etxeek 2.224 hegazkin berri kontratatu zituzten, eta Embraer eta Bombardier etxeek 359 eskaera berri izan zituzten.

Eskabide-zorro sendo horrek babes handia ematen die gure enpresei, eta berorren bilakaera hegazkinen fabrikatzaileen jarduerarekin eta aireko zirkulazioaren kopuruekin lotuta dago. HEGANeko kideen emaitza onak nazioarteko testuinguru horren eta azken urteetan egindako inbertsioaren ondorio dira –2011n historiako punturik altuenera iritsi zen, 193 milioi euro zuzendu baitziren I+Gra, aldi horretako salmenten % 13,6–, bai eta oso nitxo espezializatuetan egindako ekoizpen-egituraren ondorio ere.

Hala, bada, lantegi guztiak kontuan izanda, bazkideen fakturazio kopurua 1.419 milioi eurora iritsi da, eta % 13ko igoera da hori aurreko urtearekiko. Jarduera handitzean enplegua ere handitu da, eta, bazkide guztiak kontuan hartuta, % 8,7 handitu da. Euskadiko jarduerari dagokionez, fakturazioa % 6,4 handitu da, 705 milioi eurora iritsi arte, eta enplegua % 2,7: 3.840 lanpostu zuzen daude, iaz baino 102 gehiago. Euskadin, hazkunde hori handiagoa izan da 250 langile baino gutxiago dituzten enpresetan; izan ere, horietan, fakturazioa % 12,2 handitu da, eta enplegua, berriz, % 5,7. Enpresa handietan, aldiz, hazkundea % 6,2koa eta % 3,0koa izan da, hurrenez hurren.

Bestalde, esportazioak % 5,75 handitu dira, eta % 58,3koak izan dira azken urteko salmenten gainean, 827 milioi eurora iritsiz; hala ere, fakturazio osoaren gaineko batez bestekoa % 73,4 ingurukoa da 1993. urtetik.

2012an, egoerak hobera egiten jarraitzea espero da, hobekuntza hori, beharbada, aurtengoa baino txikiagoa izango den arren, ekitaldi honetan munduko ekonomiaren dezelerazioa gertatzen ari baita, eta, Afrikako iparraldean eta Ekialde Hurbilean ezegonkortasun politikoak bere horretan jarraituko duela aurreikusten denez, hazkunde moderatua gertatzea espero da. Gure sektoreko aurreikuspenen arabera, hurrengo hogei urteetan % 5 inguruko hazkundea gertatuko da urtean, baina joera hori bihurritu edo aldatu egin daiteke krisi ekonomikoen ondorioz, une honetan gertatzen ari den bezalaxe.

Hala ere, etapa berri honetan, merkatuko kokapenaren eta inbertsio-urte askoren ahaleginaren emaitzak ikusiko diren itxaropena dugu. Airbus eta Boeing konpainien eskabide-zorro onetan lan egiten dute gure bazkideek, Rolls Royce Trent 1000 motorrekin hornitutako Boeing 787 Dreamliner hegazkinak zerbitzua eskaintzen hasiko dira, hala nola Bombardier konpainiaren Cseries eta A350; horri guztiari esker, 2012. urtea eta hurrengo urteak aeronautikaren sektorerako urte onak izango direla aurreikusten da, eta gure bazkideek handitzen jarraitzea espero dute aurten; horrez gain, lau edo bost urtean egungo salmentak 1,8 aldiz biderkatzea espero dute.

Etorkizunean fruitua emango duten gertaera garrantzitsuen artean, zenbait enpresak motorren fabrikatzaile frantziarren hornitzaile estrategiko gisa duten gero eta kokapen hobea azpimarratu behar da, hala, bezeroen, programen eta merkatu-nitxoen dibertsifikazioarekin jarraituz. Aipatu beharreko beste atal bat jarduera espaziala da, 2011. urtean aurrerapen handia egin baitu eta 48 milioi euro baino gehiago fakturatu baititu.

Industriak, aldiz, ibilbide luzea egin behar du lantegien eraginkortasuna eta lehiakortasuna hobetzeko ahaleginean. Kostuen handitzeak sortu duen desabantailaren aurka egin behar du borroka sektoreak, Europako lehiakideen nahiz goraka ari diren herrialdeen aurrean. Horretarako, elkarteko kideek 17 lantegi dituzte atzerrian, bezeroengana hurbiltzeko beharrak eta lehiakideen aurrean duten egoera hobetzeko beharrak bultzatuta, horrela kostuak murrizten baitituzte eta euroaren gorabeherak saihesten baitituzte. Lankidetza, HEGAN elkartearen eta elkarteko kideen ADNaren zati dena, lehiakortasuna hobetzeko estrategia da, eta klusterreko enpresen artean nahiz horien eta beste lurralde batzuetako homologoen artean gertatzen da, eta elementu garrantzitsua izango da enpresa guztien baturak sortzen duena baino balio handiagoa lortzeko ekintzen barnean.

Klusterrak sektorea ordezkatzeko eta dinamizatzeko helburua du, enpresen eta beste eragile batzuen arteko lankidetzaren eta berrikuntzaren bitartez lehiakortasuna bultzatzeko epe ertainean eta luzean, hala, berorren erronka estrategikoen araberako erantzunak emateko. Industria aeronautikoa sortzea aberastasuna, garapen ekonomikoa eta balio handiko lanpostuak bultzatzea da, eta lanpostu horietako bakoitzak zeharkako 3,4 lanpostu sortzen ditu. Horretarako, bazkide guztiok, bakoitzak balio-katean dagokion tokian, nazioarteko izaera handiagoa beharko dugu, globalagoak izan beharko dugu eta eremu honetan lan egiten dugunontzat zirraragarria den sektore honetan zerumuga berriak irekitzen jarraitu beharko dugu.

CHAPTER ONE

- PRESENTATION -

Once again, it gives me great pleasure to address all our HEGAN members, as well as the public at large, in this presentation of the 2011 report of the aeronautics and space sector cluster association of which I am honoured to be President. This financial period was doubly satisfactory due both to the positive development of our industry, which has grown significantly both in volume of sales and job numbers and to the increasing synergy that exists between members of our association, leading to great improvements in our competitiveness.

The results for 2011 confirm last year's upward trend in this sector and show the first signs of an incipient recovery. In a difficult economic context, the aeronautics and space industry has managed to hold its own over the last few years, unlike other industrial sectors, and foresees a return to sustained growth. However, economic instability at an international level may affect our industry, which is based on a heavy use of equity resources and is suffering especially from a lack of financing.

The favourable 5.9% increase in passenger traffic in 2011 was in line with long-term forecasts. It was also a record year for large manufacturers in terms of the number of aircraft delivered and new contracts. Airbus and Boeing together delivered more than 1000 commercial aircraft, while Embraer and Bombardier delivered 449 regional aircraft. With regard to new orders, Boeing and Airbus together signed contracts for 2224 new aircraft and Embraer and Bombardier secured 359 new orders.

The large volume of orders reported by these companies is good news for our companies, whose development remains linked to the fortunes of aircraft manufacturers and air traffic volumes. The good results of HEGAN members derive from this international context and the large investments made over recent years, which peaked in 2011 at 193 million euros in R&D, representing 13.6% over sales for this period, and with a production structure focused upon highly specialised niche markets.

Thus, the turnover of our associates, in all their plants as a whole, reached 1419 million euros, representing a growth of 13% over the previous year. The recovery in activity has also led to an increase in employment, which increased 8.7% over the association as a whole. With regard to the activity in the Basque Country, turnover increased 6.4% to 705 million euros and jobs increased 2.7% with 3840 workers in direct employment, 102 more than in the previous year. This growth in the Basque Country was greater among companies with less than 250 employees, in which there was a 12.2% increase in turnover and 5.7% in employment, while in large companies the increase was 6.2% and 3.0%, respectively.

Exports increased 5.75%, representing a rise of 58.3% over last year's sales, with a figure of 827 million euros, although the average figure for exports over total turnover since 1993 stands at around 73.4%.

Further improvement is expected during 2012, although this will be somewhat lower than last year as the current financial period has seen a deceleration in the world economy, with further political instability in North Africa and the Middle East, and for this reason only moderate growth is expected. The forecasts for our sector indicate a growth over the next 20 years of about 5% per annum, but despite this general trend, there will be temporary changes in direction due to economic crises such as the one in which we find ourselves at this time.

However, over this period we expect to see the fruits of our positioning on the market and of the investment efforts made over a period of many years. The satisfactory order books reported by Airbus and Boeing, which are supplied by our members, the coming into service of the Boeing 787 Dreamliner with Rolls Royce Trent 1000 engines, A350 and Bombardier's CSeries, lead us to believe that 2012 and successive years will be good for the aeronautics sector and for this reason our members expect to continue growing this year and to increase their current sales by 1.8% over a period of four or five years.

Another major success story, the results of which will be seen in the future, is the improvement in the positioning of some of our companies as strategic suppliers of French engine manufacturers, in line with their policy of customer diversification, programmes and niche markets. We should also highlight the activity of our members in the space sector, which in 2011 showed significant growth with a turnover of more than 48 million euros.

However, our industry has a long way to go in order to improve the efficiency and competitiveness of its plants. The sector has the disadvantage of having to face an increase in costs compared to its European competitors and the emerging countries. As a result, members of our association already have 17 plants abroad, faced with the need to get closer to their customers and to improve their competitive situation by reducing costs and avoiding Euro fluctuations. Co-operation, which is written in the DNA of the HEGAN Association and its members, is a strategy of competitive improvement and is present among companies in the cluster and between these and their counterparts in other countries and this will be a major factor in the actions they take to achieve a collective value that greater than the sum of their individual parts.

The aim of the Cluster is to represent and stimulate this sector in order to ensure its competitiveness in the short and long-term through innovation and the co-operation between companies and other agents, as a response to its strategic challenges through co-operation. Generating an aeronautical industry means fostering wealth, economic development and high-value jobs, each one of which generates 3.4 indirect or induced jobs. For this reason, all our associate members, each one in their particular place in the value chain, need to continue becoming more international, more global and to continue opening new horizons in this exciting sector.

Jorge Unda
President of HEGAN

CHAPTER TWO

- THE CLUSTER ASSOCIATION – HEGAN –

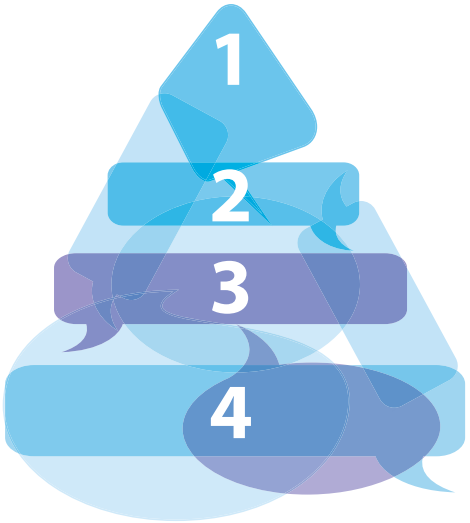
2.1.- Organisation

2.2.- Hegan 2011

- Co-operation groups (level 1)
- Challenges and Synergies (levels 2 and 3)
- Strategic Information (level 4)

2.3.- Annual accounts

- Association 2011 results
- Association Balance Sheet



2.1.- Organisation

General Assembly 2011

hegan is a private, non-profit association that groups together the Basque Aeronautics and Space sector, created with the aim of fostering, promoting and stimulating the same. As a Cluster Association, its aim is to represent and promote this sector to ensure its sustainable competitiveness through co-operation and innovation among companies and other agents, as a response to its strategic challenges.

General assembly
This is the main body of the Association. It is made up of all Members and is therefore the body that represents their needs.

Board of directors
This is the Collegial Body of Administration and Management. Appointed by the General Assembly, its members in 2011 were as follows:

- Jorge Unda -President- SENER
- José Luis Osoro - replaced by Pedro Fuente since February 2012- (VicePresident), AERNNOVA
- Ignacio Mataix (Secretary), GRUPO ITP
- Inmaculada Freije, BASQUE GOVERNMENT
- Juan José Martín, AEROMEC
- Xabier Berasategi, GRUPO TTT
- Lara Cuevas, SPRI
- José Juez Langara, HEGAN

Executive Committee
This committee, delegated by the Board of Directors, acts as executive body in the activities pursued by the Cluster. It meets on a two-monthly basis and its members in 2011 were as follows:

- Javier Viñals (President), SENER
- Alfredo Esquisabel, AERNNOVA
- Juan José Martín, AEROMEC
- Armando Jiménez – ALFA MICROFUSIÓN
- Juan Miguel López Uria – BASQUE GOVERNMENT
- Plácido Márquez, GRUPO ITP
- Xabier Berasategi, GRUPO TTT
- Ángel Alonso - NOVALTI
- Susana Larrea - SPRI
- José Juez Langara - Managing Director of HEGAN
- Martín Fdez. Loizaga - Deputy Director of HEGAN

Working groups
As of 2005, the permanent committees of HEGAN were restructured in temporary and flexible working groups engaged in a number of specific tasks, reporting to the Executive Committee. These working groups are created and dissolved according to the needs of the Members and in accordance with their specific views at each moment on time. In 2011, the most active working groups were the 'Opportunities Project WG', the 'Funding WG' and the 'Competitive Intelligence System Working Group', who worked in support of the two key activities in 2010.

HEGAN's team
Employees of the Cluster Association permanent team are as follows:

- Mentxu Díaz, Administration Supervisor
- Martín Fdez. Loizaga, Deputy Director
- Jose Juez Langara, Managing Director
- Ana Rodríguez, Head of Operations

And has the permanent support of:

- Adeli Gutiérrez, Communications
- Ana Villate, European Projects and Innovation.

2.1- Organización

hegan es una asociación privada sin ánimo de lucro que agrupa al sector aeronáutico y espacial vasco, creada con el fin de potenciarlo, promoverlo y estimularlo. Su misión, como Asociación Cluster, es el de representar y dinamizar el sector, para facilitar su competitividad a corto, medio y largo plazo mediante la cooperación y la innovación entre empresas y otros agentes, dando respuestas en colaboración a los retos estratégicos del mismo.

Asamblea General
Es el máximo órgano de la Asociación. Está integrada por todos los socios y es, por tanto, el foro de expresión de la voluntad de éstos.

Junta Directiva
Es el Órgano Colegiado de Administración y Dirección. Sus miembros 2011, designados por la Asamblea General, fueron:

- Jorge Unda (Presidente), SENER
- José Luis Osoro – sustituido por Pedro Fuente en febrero de 2012 – (Vicepresidente), AERNNOVA
- Ignacio Mataix (Secretario), GRUPO ITP
- Inmaculada Freije, GOBIERNO VASCO
- Juan José Martín, AEROMEC
- Xabier Berasategi, GRUPO TTT
- Lara Cuevas, SPRI
- José Juez Langara, HEGAN

Comité Ejecutivo
Este comité, delegado de la Junta Directiva, actúa como órgano ejecutivo en las actuaciones de la Asociación Cluster, se reúne bimestralmente y sus miembros 2011 fueron:

- Javier Viñals (Presidente), SENER
- Alfredo Esquisabel, AERNNOVA
- Juan José Martín, AEROMEC
- Armando Jiménez – ALFA MICROFUSIÓN
- Juan Miguel López Uria – BASQUE GOVERNMENT
- Plácido Márquez, GRUPO ITP
- Xabier Berasategi, GRUPO TTT
- Ángel Alonso - NOVALTI
- Susana Larrea - SPRI
- José Juez Langara – Director de HEGAN
- Martín Fdez. Loizaga - Director Adjunto de HEGAN

Grupos de trabajo
A partir de 2005 los comités permanentes de HEGAN sufrieron una reestructuración pasando a ser grupos de trabajo temporales y flexibles dedicados específicamente a actuaciones puntuales y reportando al Comité Ejecutivo. Estos grupos de trabajo se crean y desaparecen a voluntad de los asociados y según sus necesidades específicas del momento.
En 2011, los grupos de trabajo más activos fueron los del Proyecto de Oportunidades, de Financiación y de Sistema de Inteligencia Competitiva, para dar soporte a las dos actividades clave de 2011.

Equipo de HEGAN
El equipo permanente de la Asociación es el siguiente:

- Mentxu Díaz, Responsable de Administración
- Martín Fdez. Loizaga, Director Adjunto
- José Juez Langara, Director
- Ana Rodríguez, Responsable de Operaciones

Y cuenta con el soporte permanente de:

- Adeli Gutiérrez, Comunicación
- Ana Villate, Proyectos europeos y de innovación.

2.1- Antolamendua

Aeronautika eta espazioaren sektoreko euskal enpresak biltzen dituen irabazi asmorik gabeko elkarte pribatua da HEGAN, sektore hori indartzeko, sustatzeko eta bultzatzeko sortutakoa. Sektorea ordezkatzea eta dinamizatzea da Kluster Elkartearen misioa, horrela, enpresen eta beste eragile batzuen arteko lankidetzaren eta berrikuntzaren bidez, epe motzera, ertainera eta luzera sektorearen lehiakortasuna sendotzeko, sektoreko dema estrategikoei lankidetzan oinarritutako erantzuna eskainiz.

Biltzar nagusia
Hauxe da elkarteko organo gorena. Bazkide guztiek osatzen dute, eta, beraz, bazkideen asmoak eta gogoak adierazteko foroa da.

Zuzendaritza batzordea
Administrazio eta Zuzendaritza Taldeko Organoa da. Honako hauek dira bertako kideak, Batzar Nagusiak 2011rako izendatutakoak:

- Jorge Unda (lehendakaria), SENER
- José Luís Osoro (lehendakariordea), AERNNOVA; Pedro Fuentek ordezkatu zuen 2012ko otsailean
- Ignacio Mataix (idazkaria), GRUPO ITP
- Inmaculada Freije, EUSKO JAURLARITZA
- Juan José Martín, AEROMEC
- Xabier Berasategi, GRUPO TTT
- Lara Cuevas, SPRI
- José Juez Lángara, HEGAN

Batzorde betearazlea
Zuzendaritza Batzordearen ordezkari den talde hau organo betearazlea da klusterraren jardueretan, bi hilean behin batzen da, eta hauek izan dira 2011ko kideak:

- Javier Viñals (lehendakaria), SENER
- Alfredo Esquisabel, AERNNOVA
- Juan José Martín, AEROMEC
- Armando Jiménez – ALFA MICROFUSIÓN
- Juan Miguel López Uria – EUSKO JAURLARITZA
- Plácido Márquez, GRUPO ITP
- Xabier Berasategi, GRUPO TTT
- Ángel Alonso – NOVALTI
- Susana Larrea – SPRI
- José Juez Langara – HEGANeko zuzendaria
- Martín Fdez. Loizaga – HEGANeko zuzendari laguntzailea

Lan taldeak
2005. urtetik aurrera, HEGANeko batzorde iraunkorrak berregituratu egin ziren, eta horien ordez behin-behineko lan talde malguak, ekintza zehatzetara zuzendutakoak, sortu ziren, Batzorde Betearazlearekin lotuta. Lan talde horiek bazkideen nahierara sortzen eta desagertzen dira, unean uneko behar berezien arabera. 2011n, talde aktiboenak Aukeren Proiektuko Lan Taldea eta Finantzazioko Lan Taldea eta Adimen Lehiakorrerako Sistemako Lan Taldea izan dira, horiexek izan baitira 2011ko bi jarduera nagusien euskarriak.

Heganeko taldea
Honako hauek osatzen dute elkarteko talde iraunkorra:

- Mentxu Díaz, Administrazio arduraduna
- Martín Fdez. Loizaga, Zuzendari laguntzailea
- José Juez Langara, Zuzendaria
- Ana Rodríguez, Eragiketen arduraduna

Honako hauen etengabeko laguntza du:

- Adeli Gutiérrez, Komunikazio arloa
- Ana Villate, Europako proiektuak eta berrikuntzakoak.

2.2.- HEGAN 2011 -

Two years ago, this chapter of the 2009 Report set out our recently launched processes map. Last year, we added the "Collaboration pyramid", a method promoted by the Basque Government for application in its pioneering "clusters policy" in the early 1990s.

In view of the fact that we are a "Cluster Association", our aim is to improve the competitiveness of our associates based in every case on the collaboration between the latter and the agents that form part of the "natural cluster". We carry out a number of revitalisation, development, improvement and promotional activities that focus our ever-present objective: co-operation.

There follows a short review of our activities in 2011, taking the pyramid as the basis. In it, we have performed tasks relating to Technological Innovation and Management, Inter-nationalisation and other specific aspects for the Aeronautics and space sector.

HEGAN Processes map

Le Bourget 2011

2.2- HEGAN 2011

Hace dos años, en la Memoria 2009 incluíamos en este capítulo nuestro recién estrenado mapa de procesos. El año pasado lo completábamos con la 'Pirámide de colaboración', método que impulsó el Gobierno Vasco para aplicar su 'política de clusters', de la que fue pionero allá por los primeros años de la década de los 90.

Dado que somos 'Asociación Cluster', tenemos la misión de mejorar la competitividad de nuestras asociadas siempre en base a la colaboración entre ellas y entre los agentes que forman el 'cluster natural'. Realizamos acciones de dinamización, desarrollo, mejora y promoción siempre enfocadas a nuestro objetivo: la cooperación.

Tratamos a continuación de hacer un brevísimo repaso a nuestras actividades 2011 tomando como base esa pirámide, en la que hemos desarrollado tareas relacionadas con Innovación Tecnológica y en Gestión, Internacionalización, y aspectos específicos para el sector aeronáutico y espacial.

2.2- HEGAN 2011

Duela bi urte, 2009ko Memorian, kapitulu honetan prozesuen mapa sortu berria txertatu genuen. Iaz, berriz, 'Lankidetza piramidearekin' osatu genuen; Eusko Jaurlaritzak bultzatu zuen metodo hori, 90eko hamarkadako lehen urteetan hark abiarazitako 'klusterren politika' aplikatzeko.

'Kluster Elkartea' garenez, elkarteko bazkideen lehiakortasuna hobetzeko misioa dugu, berorien arteko eta 'kluster naturala' osatzen duten eragileen arteko lankidetzaren bidez beti. Dinamizatzeko, garatzeko, hobetzeko eta sustatzeko ekintzak egiten ditugu, gure helburuari begira beti: lankidetza.

Ondoren, 2011ko jardueren errepaso txiki bat egingo dugu, eta, zeregin horretarako, piramide hori hartuko dugu oinarritzat, piramide horren barnean Berrikuntza Teknologikoarekin, Kudeaketarekin, Internazionalizazioarekin eta aeronautikako eta espazioko sektorerako berariazko alderdiekin lotutako zereginak garatu baititugu.

Co-operation groups (level 1)
This is the highest level, towards which the other activities in lower levels are moving. It is here where a "Cluster Association" must demonstrate its usefulness for members and show that we are helping them to increase the value of their companies. In 2011, as a result of the work that began in 2010 under the title of Opportunities Project, a large number of collaboration groups were generated for R&D, Design and Development and Industrial Development projects.

Challenges and Synergies (levels 2 and 3)
The following two levels are grouped together for the purposes of this report as the identification of strategic challenges and potential synergies goes hand-in-hand with the work of assessing these. This year, a great deal of work has been done in order to establish what challenges and what synergies were strategic to the interests of the Association. Adequate financing for the sector, training in different areas, identification of clients and programmes, improvement in the value chain, and to increase the value of our Competitive Intelligence System were some of the most outstanding activities in which we were engaged in 2011.

Grupos de cooperación (nivel 1)
Este es el máximo nivel, y al cual tienden el resto de las actividades de los niveles inferiores. Es aquí donde una 'Asociación Cluster' debe demostrar su utilidad para con los miembros, y la aportación de valor que les debemos.
En 2011 se generaron un buen número de grupos de colaboración reales para proyectos de I+D, de Diseño y Desarrollo y de desarrollo industrial, fruto del trabajo comenzado en 2010 que fue bautizado como Proyecto de Oportunidades.

Retos y Sinergias (niveles 2 y 3)
Agrupamos para esta memoria, y por sintetizar, los dos siguientes niveles ya que la dedicación a la identificación de retos estratégicos y potenciales sinergias, va parejo el trabajo de su evaluación. Este año ha sido abundante el trabajo dedicado a establecer qué retos y qué sinergias era estratégico que siguieran aumentado de nivel. Financiación adecuada para el sector, formación en diversas áreas, identificación de clientes y programas, mejora de la cadena de valor, e incrementar el valor de nuestro Sistema de Inteligencia Competitiva, han sido las actuaciones más sobresalientes a las que nos hemos dedicado en 2011.

Lankidetza taldeak (1. maila)
Hau da mailarik altuena, eta beheragoko mailetako gainerako jarduerek hau bilatzen dute. Hemen erakutsi behar du 'kluster elkarte' batek bazkide dituenei zer eskain diezaiekeen, eta zer balio-ekarpen egin diezaiekeen. 2011n, lankidetza-talde erreal ugari osatu ziren, I+Gren esparruko proiektuetarako, diseinu eta garapenerako nahiz garapen industrialerako proiektuetarako; hori guztia 2010ean Aukeren Proiektuaren barnean abiarazitako lanaren emaitza izan da.

Erronkak eta sinergiak (2. eta 3. mailak)
Memoria honetan, laburbiltzeko, bi maila hauek batu ditugu, erronka estrategikoak eta izan daitezkeen sinergiak identifikatzeko ahalegina hori ebaluatzeko lanarekin lotuta baitago. Aurten, ikuspegi estrategikotik zer erronkak eta zer sinergiak lortu behar zuten maila handiagoa identifikatzeko lan handia egin da. 2011. urtean, honako jarduketa hauek nabarmendu dira: sektorerako finantziazio egokia, hainbat arlotako prestakuntza, bezeroen eta programen identifikazioa, balio katearen hobekuntza eta Adimen Lehiakorrerako Sistemaren balioa handitzea.

2.2.- HEGAN 2011 -

Strategic Information (level 4)
This is the base of the permit and marks the beginning of the methodology. It is here where HEGAN is promoting all the areas indicated by our members, the market and the environment. In 2011, activities in communications, promotion, representation as well as the entire surveillance system have been carried out at this, at first sight, basic but extremely important level.

Our intention is to highlight the value of this simple methodology to our clients, associate members and the rest of the agents in the cluster and, as a consequence, to society. This methodology is completely integrated in our processes map, the origin and destination of which are our clients. With the aim of increasing our efficiency in management and improving our performance, in 2011, HEGAN began to implement the EFQM model, following the stage corresponding to the PREMIE programme promoted by the Provincial Council of Bizkaia.

Likewise, we are trying to develop new, more participative working methods based on trust, in order to develop people. This is a consequence of our determination to put the concept of transforming leadership into practice. These practices concentrate on people and we hope that they will have a deep impression on everyone in the cluster - their sensibilities, their knowledge, their interests, their work and their prospects - to which we try to give permanent value with a shared vision.

Información Estratégica (nivel 4)
Base de la pirámide e inicio de la metodología, es aquí donde HEGAN dinamiza todo el conjunto de pistas que los socios, el mercado, y el entorno nos indican. En 2011, actuaciones en comunicación, promoción, representación, así como todo el sistema de vigilancia se han llevado a cabo en este nivel, básico a primera vista, pero fundamental.

Una metodología sencilla con la que se pretende dar respuesta y valor a nuestros clientes, los Asociados y el resto de los agentes del cluster, y en consecuencia a la sociedad. Esta metodología está completamente integrada en nuestro mapa de procesos, que tienen como origen y destino a nuestro clientes. Con el objetivo de aumentar la eficiencia en la gestión y mejorar nuestro rendimiento, en 2011 HEGAN comenzó la implantación del modelo EFQM siguiendo la fase correspondiente del programa PREMIE promovido por la Diputación Foral de Bizkaia.

Así mismo estamos tratando de desarrollar nuevas formas de trabajo más participativas basadas en la confianza con el fin de lograr un desarrollo de las personas, consecuencia del empeño por poner en práctica un liderazgo transformador. Estas prácticas se centran en las personas y esperamos que vayan calando en todas las personas que componen el cluster -sus sensibilidades, sus conocimientos, sus intereses, su trabajo, sus perspectivas…- a las cuáles tratamos de dar valor permanente con una visión compartida.

Informazio estrategikoa (4. maila)
Piramidearen oinarria da, metodologiaren abiapuntua; maila horretan dinamizatzen ditu HEGANek bazkideek, merkatuak eta inguruneak ematen dizkiguten lorratzak. 2011n, komunikazioko, promozioko eta ordezkaritzako jarduketak nahiz zaintza-sistema guztia maila honetan egin dira; oinarrizko maila izan arren, funtsezkoa da.

Metodologia erraz honen bidez, gure bezeroei, bazkideei, klusterreko gainerako eragileei eta, oro har, gizarteari erantzun nahi zaie eta balioa eman nahi zaie. Metodologia hori guztiz integratuta dago gure prozesuen mapan, eta gure bezeroak dira metodologia horren jatorri eta helburu. Kudeaketaren eraginkortasuna handitzeko eta gure errendimendua hobetzeko, 2011. urtean, HEGAN elkartea EFQM eredua ezartzen hasi zen, Bizkaiko Foru Aldundiak sustatutako PREMIE programaren barnean dagokion faseari jarraiki.

Halaber, konfiantzan oinarritutako lan egiteko modu parte hartzaileagoak sustatzeko ahalegina egiten ari gara, lidergo eraldatzailea abiarazteko ahaleginaren bidez pertsonen garapena lortzeko. Lan egiteko modu horiek pertsonengan oinarritzen dira, eta klusterra osatzen duten pertsona guztiek barneratzen joatea espero dugu –horien sentikortasunean, ezagutzetan, interesetan, lanean, ikuspegietan…–, ikuspegi partekatuaren bidez etengabeko balioa ematen saiatzen baikara.

2.3.- Annual accounts -

Association 2011 results

691 K€

65.04% Grants (Regional, National and European)
27.62% Members Quota
7.35% Other Operating Incomes

(678 K€)

71.45% Operating expenses
27.02% Personnel expenses

= 13 K€

Association Balance Sheet
Net assets (%)

336 K€

25,64%

Accounts audited by EUSKOAUDIT, S.A.P. – R.O.A.C. Nº S1290

CHAPTER THREE

- THE CLUSTER MEMBERS -

3.1.- Members

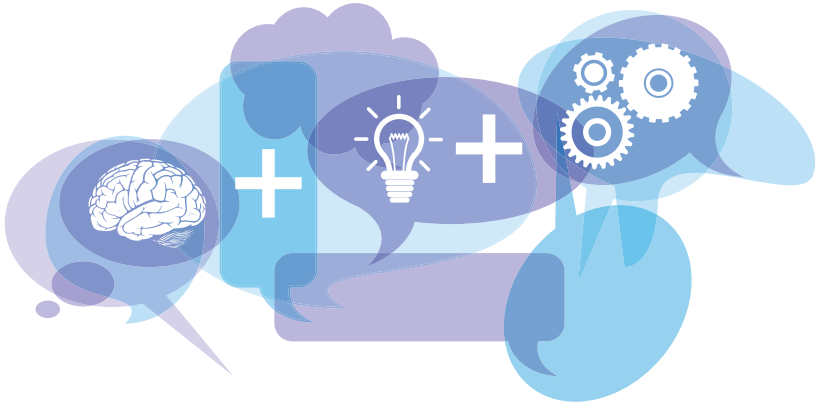
3.2.- Value chain and capabilities

3.3.- Activities 2011

- Aerostructures
- Engines
- Systems and equipment
- Maintenance
- Space
- Aircraft and space engineering R&D projects
- Manufacturing, processes, materials and other R&D projects

3.4.- Programmes and clients

3.5.- Facts and figures



- THE CLUSTER MEMBERS -

3.1.- Members

Industry • Industry • Industry • Industry • Industry • Industry • Industry • Industry • Industry • Industry • Industry

AERNNOVA
www.aernnova.com
Contact:
alfredo.esquisabel@aernnova.com

GRUPO ITP
www.itp.es
Contact:
placido.marquez@itp.es

SENER
www.sener.es
Contact:
javier.vinals@sener.es

ACITURRI
www.aciturri.aero
Innovation Manager:
ester.porras@aciturri.com
Commercial Manager:
mariaeugenia.clemente@aciturri.com

ALFA PRECISION CASTING
www.alfalan.es
Contact:
ajimenez@alfalan.es

DMP
www.dmp.aero
Contact:
philippe@dmp.aero

AEROMEC
www.aeromec.es
Contact:
jjm@aeromec.es

ALTRAN
www.altran.es
Contact:
inigo.ezquerra@altran.es

ELECTROHILO
www.electrohilo.es
Contact:
pedrol.diez@electrohilo.es

ARATZ
www.sea.es/aratz
Technical Manager:
kbalsategui-aratz@sea.es

GRUPO TTT
www.grupottt.com
General Manager - Grupo TTT:
xberasategi@grupottt.com
Managing Director-Iontech:
iontech@grupottt.com

AEROSPACE ENGINEERING GROUP
www.aerospaceengineeringgroup.com
Bizkaia-Headquarter contact:
aeg@aegeurope.net
Seville contact:
y.boto@aegeurope.net

ASTORKIA
www.astorkia.com
Contact:
mecanizados@astorkia.com

AEROVISION
www.aerovision-uav.com
Contact:
silvia@aerovision-uav.com

AYZAR
www.ayzar.com
Commercial Manager:
comercial@ayzar.com

INDUSTRIAS GALINDO
www.galindosl.es
Contact:
juan@galindosl.es

AIBE
www.aibe.es
Contact:
jon@aibe.es

BURDINBERRI
www.burdinberri.com
Contact:
burdinberri@burdinberri.com

INGEMAT
www.ingemat.com
Aeronautics and Energy:
myrizar@ingemat.com

ALESTIS
www.alestis.aero
Contact:
comercial@alestis.aero

BURULAN
www.webburulan.com
Contact:
burulan@burulan.com

LTK GRUPO
www.ltkgrp.com
Contact:
Koldo.grajales@ltkgrp.com

Industry • Industry • Industry • Industry • Industry • Industry • Industry

MATRICI
www.matrici.com
Business Development Manager:
dpzamacona@matrici.com

SIEGEL
www.siegel-sa.es
Contact:
siegel@infonegocio.com

MESIMA
www.mesima.com
Technical contact:
rperez@mesima.com

SISTEPLANT-GOLDGYM
www.sisteplant.com
R&D Department Director:
minsunza@sisteplant.com
Marketing Manager:
sercoreca@sisteplant.com

METRALTEC
www.metraltec.com
General Manager:
amendibil@metraltec.com
Technical Manager:
jrgarcia@metraltec.com

TECNASA
www.tecnologias-aerospaciales.com
Contact:
info@tecnologias-aerospaciales.com

NIVAC
www.nivac.es
Technical & Commercial Director:
cristina.sanz@nivac.es

TEY
www.industriastey.com
Contact:
roberto@industriastey.com

NOVALTI
www.novalti.es
Contact:
novalti@novalti.es

TPS
www.grupotamoin.com
General Manager:
jggarai@grupotamoin.com

NUTER
www.nuter.es
Contact:
ja.alberdi@nuter.es

WEC
www.wallair.es
Business Manager:
bes@tecnichapa.com

ORBITAL AEROSPACE
www.orbital-aerospace.com
CEO:
ascension.cruchaga@orbitalaerospace.com
Marketing Dpt:
natalia.gomez@orbital-aerospace.com

R&D Organizations

CTA
www.ctaero.com
Contact:
cta@ctaero.com

IK4 RESEARCH ALLIANCE
www.ik4.es
Market Manager:
otegui@ik4.es
Technical Coordinator:
naranguren@ideko.es

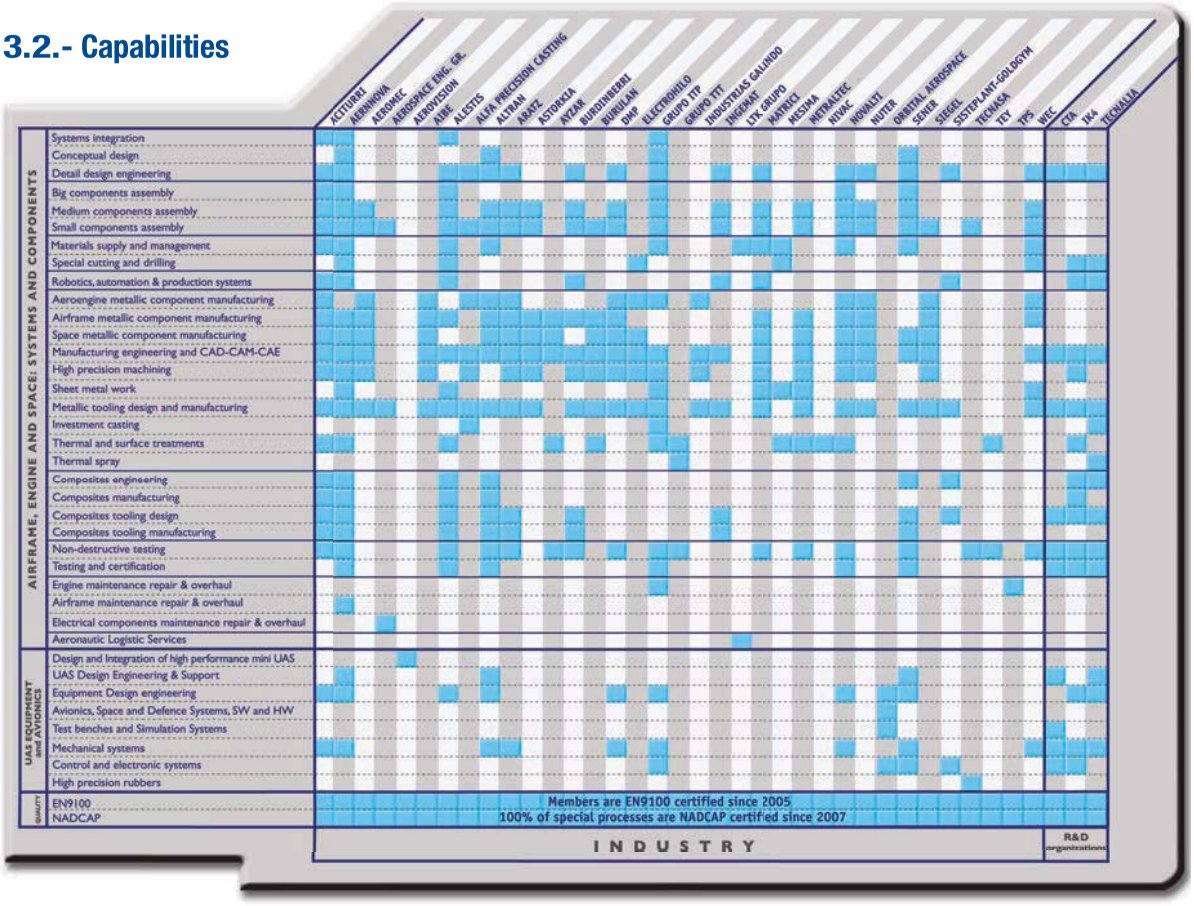
TECNALIA
www.tecnalia.info
Transport Unit-Aeronautic Market:
begona.canflanca@tecnalia.com
Industrial Systems:
marta.gimenez@tecnalia.com
Advanced Application Mgr.:
luis.usatorre@tecnalia.com

CHAPTER THREE

- THE CLUSTER MEMBERS -

3.2.- Value Chain

3.2.- Capabilities



3.3.- Activities 2011

- Aerostructures
- Engines
- Systems and equipment
- Maintenance
- Space
- Aircraft and space engineering R&D projects
- Manufacturing, processes, materials and Other R&D projects

3.3.- Activities 2011

Aerostructures

General description of the product/service	DIRECT CLIENT	OEM	MODEL
ACITURRI			
Stringer and coatings & Landing gear door	AIRBUS MILITARY	AIRBUS	A320
Section 18 structural assembly	AIRBUS MILITARY	AIRBUS	A320
HTP Torsion box	AIRBUS OPERATIONS	AIRBUS	A320
Leading edge of HTP assembly	AIRBUS MILITARY	AIRBUS	A330
Passenger door structural assembly	ALESTIS	AIRBUS	A330
Leading edge of horizontal stabilizer assembly	AIRBUS MILITARY	AIRBUS	A340
HTP Tips & Passenger door structural assembly	AIRBUS MILITARY	AIRBUS	A340
VTP & Internal structure of S19	AIRBUS OPERATIONS	AIRBUS	A350 XWB
Belly Fairing (Zones 1, 2 , 3.1 y 3.3)	AIRBUS MILITARY	AIRBUS	A380
Wing Ribs and HTP, Tail rudder	AIRBUS OPERATIONS	AIRBUS	A380
Sponsons	DAHER-SOCATA	AIRBUS MILITARY	A400M
Spar, Flap and Vanes	AIRBUS	AIRBUS MILITARY	A400M
Central Box: structural assembly and equipment	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295
Tip wings integration	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295
Rudder Components and Rudder Integration	AIRBUS MILITARY	BOEING	737
Composite material parts	AERNNOVA	BOMBARIDER	CRJ700/900
Elevators and HTP	AIRBUS MILITARY	DASSAULT	FALCON 7X
Structural fittings equipped with ball and socket joints	AERNNOVA	EMBRAER	170/175/190/195
Wing to fuselage fairing	EMBRAER	EMBRAER	KC-390
Sponsons and VT	FOKKER	EUROCOPTER	NH 90
Composite components & Fairing flare gun manufacturing	AIRBUS MILITARY	EUROFIGHTER	TYPHOON
AEROMEC			
Structural door components	LATECOERE	BOEING	787
Engine pylon supports	FIGEAC AERO	BOMBARDIER	Q-Series
Structural components front section	LATECOERE	DASSAULT	FALCON 7X
Structural door components	LATECOERE	EMBRAER	170/175/190/195

AERNNOVA

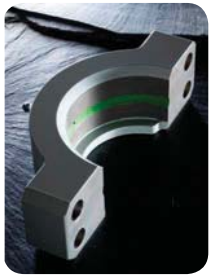
General description of the product/service	DIRECT CLIENT	OEM	MODEL
AERNNOVA			
Main landing gear doors / Elevator / leading edges / S18 covers / box spars HTTP (composite)	AIRBUS	AIRBUS	A320
Leading edge panels HTTP / Karman fairings / Elevator coatings (composite)	AIRBUS	AIRBUS	A330
Leading edge panels HTTP / Karman fairings / Elevator coatings (composite)	AIRBUS	AIRBUS	A340
Conceptual and detailed design and manufacture of horizontal stabiliser and elevator - Risk Partner	AIRBUS	AIRBUS	A350 XWB
Conceptual and detailed design and manufacture of MLG Pressure bulkhead	AIRBUS	AIRBUS	A350 XWB
Design and manufacture of the internal metal structure of section19 -Risk partner-	AIRBUS	AIRBUS	A380
Design and manufacture of the leading and trailing edge and of their joints to boxes -Risk partner-	AIRBUS	AIRBUS	A380
Leading edge HTTP / Stiffeners and angle bars S19.1 / trailing edge covers HTTP (composite)	AIRBUS	AIRBUS	A380
Stringers / tip HTTP / wing stringers (composite)	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Forward landing gear traps/ engine housings (composite)	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295
Spoiler / interiors (composite)	EADS-SOGERMA	ATR	ATR 42
Conceptual engineering Wing Insparr Ribs and structures for sections 11, 12 and 42	BOEING	BOEING	747-8I/F
Manufacturing of complete Tail section (vertical and horizontal stabilisers) and elevators	BOMBARDIER	BOMBARDIER	CRJ700/900
Conceptual Design & Manufacture of Central Wing Box (composite) - Risk Partner	BOMBARDIER	BOMBARDIER	CSeries
Design Tail Cone (composite)	BOMBARDIER	BOMBARDIER	CSeries
Design and manufacture of complete Tail section (vertical and horizontal stabilisers), rudder and elevators - Risk Partner	EMBRAER	EMBRAER	170/175/190/195
Design and manufacture of rear fuselage - Risk Partner	EMBRAER	EMBRAER	170/175/190/195
Design and manufacture of complete wings-Risk Partner	EMBRAER	EMBRAER	ERJ135/140/145
Design and manufacture of nacelles - Risk Partner	EMBRAER	EMBRAER	ERJ135/140/145
Design and manufacture of wing to fuselage fairings -Risk Partner	EMBRAER	EMBRAER	ERJ135/140/145
Design and manufacture of complete wings - Risk Partner	EMBRAER	EMBRAER	LEGACY Family
Design and manufacture of nacelles -Risk Partner	EMBRAER	EMBRAER	LEGACY Family
Design and manufacture of wing to fuselage fairings -Risk Partner	EMBRAER	EMBRAER	LEGACY Family
Design and manufacture of rear fuselage - Risk Partner	EMBRAER	EMBRAER	LINEAGE 1000
Lower structure manufacture	EUROCOPTER	EUROCOPTER	AS332 Super Puma

BOEING 787

General description of the product/service	DIRECT CLIENT	OEM	MODEL
Tail Cone manufacture	EUROCOPTER	EUROCOPTER	AS332 Super Puma
Tail cone (composite)	EUROCOPTER	EUROCOPTER	EC135
Build to print Forward fuselage and Aft fuselage	EUROCOPTER	EUROCOPTER	NH 90
Rear fuselage / HTTP assembly (composite)	EUROCOPTER	EUROCOPTER	TIGRE
Wing covers, housings and conduits (composite)	EADS	EUROFIGHTER	TYPHOON
Build to print of fully equipped Wings	HAWKER BEECHCRAFT	HAWKER BEECHCRAFT	KING AIR, BARON, BONANZA
Build to print of fully equipped Wings	HAWKER BEECHCRAFT	HAWKER BEECHCRAFT	PREMIER IA, 400XP
Design and manufacture of the equipped transition section and tail cone - Risk Partner	SIKORSKY	SIKORSKY	S-92
Design and manufacture of the main rotor pylon, fairings and engine cowlings - Risk Partner	SIKORSKY	SIKORSKY	S-92
Design and manufacture of interiors - Risk Partner	SIKORSKY	SIKORSKY	S-92
AIBE			
Design and manufacture of fastening systems for machining processes and control tools	ACITURRI	AIRBUS	A380
ALESTIS			
BBAA HTP & VTP	ARIES COMPLEX	AIRBUS	A320
TIP's HTP	AIRBUS	AIRBUS	A320
Panels and Formers S18 / HTTP Box	AIRBUS MILITARY	AIRBUS	A320
TTP's	AERNNOVA	AIRBUS	A320
TIP's HTTP	AIRBUS MILITARY	AIRBUS	A330
PAX Door	AIRBUS	AIRBUS	A330
TIP's HTTP	AIRBUS MILITARY	AIRBUS	A340
PAX Door & Ribs HTTP	AIRBUS	AIRBUS	A340
Belly Fairing - Risk Partner	AIRBUS	AIRBUS	A350 XWB
S19.1 - Risk Partner	AIRBUS	AIRBUS	A350 XWB
MLGD / S19.1 / Rear Fairing - Risk Partner	AIRBUS	AIRBUS	A380
Belly Fairing	AIRBUS MILITARY	AIRBUS	A380
Assembly tasks	AIRBUS MILITARY	AIRBUS MILITARY	A330MRTT
Rear Cones - Risk Partner	AIRBUS MILITARY	AIRBUS MILITARY	A400M
BBAA HTP	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Elevator	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Cowlings	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Center Wing	AIRBUS MILITARY	AIRBUS MILITARY	C212
Rear & Central fuselage	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295

BURDINBERRI

General description of the product/service	DIRECT CLIENT	OEM	MODEL
ALESTIS			
HTP / VTP	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295
Cockpit	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295
Sponsons & Baggage Compartment	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295
Aileron & Flaperon	AIRBUS MILITARY	BOEING	777
BBAA HTTP - Risk Partner	AIRBUS MILITARY	DASSAULT	FALCON 7X
Winglet & Wingstub	EMBRAER	EMBRAER	170/175/190/195
Wing's 4th Station	AERNNOVA	EMBRAER	ERJ135/140/145
Central Fuselage - Risk Partner	EMBRAER	EMBRAER	LEGACY450/500
Empennage - Risk Partner	EMBRAER	EMBRAER	LEGACY450/500
Assemblies Set - Risk Partner	EMBRAER	EMBRAER	PHENOM 100/300
Participation in P3Orion Conversion	AIRBUS MILITARY	LOCKHEED MARTIN	P-3 Orion
ALFA PRECISION CASTING			
Elementary parts Section 18 (Lost-wax process in aluminium, machining and painting)	AIRBUS SAS	AIRBUS	A320
Elementary parts Section 18 (Lost-wax process in aluminium)	TAI	AIRBUS	A320
Elementary parts Section 18 (Lost-wax process in aluminium)	EADS CASA	AIRBUS	A320
Elementary parts Section 18 (Lost-wax process in aluminium)	ALESTIS	AIRBUS	A320
Elementary parts (Lost-wax process in aluminium, machining and painting)	AIRBUS SAS	AIRBUS	A330
Elementary parts (lost wax casting, machining)	IAI	GULFSTREAM	GULFSTREAM Families
Elementary parts (Lost-wax casting in aluminium)	AIRBUS MILITARY	AIRBUS MILITARY	C295/CN235
Elementary parts (Lost-wax casting in aluminium)	AIRBUS MILITARY	EUROFIGHTER	TYPHOON
ALTRAN			
Weights and mass engineering	AIRBUS	AIRBUS	A30X
Design BF A350	ALESTIS	AIRBUS	A350 XWB
Development S12	AIRBUS	AIRBUS	A350 XWB
Structural Dimensioning Cockpit	AIRBUS	AIRBUS	A350 XWB
Design of wing, ailerons and spoilers	AIRBUS	AIRBUS	A350 XWB
Composite manufactur¡ing tool design VTP A350	ACITURRI	AIRBUS	A350 XWB
Supplier management Tier1 and Tier2	AIRBUS	AIRBUS	AIRBUS Families
Development of processes and materials HTP and S19	AIRBUS	AIRBUS	AIRBUS Families
Support engineering HNC Fan Cowls	AIRBUS	AIRBUS	A380
Assembly engineering	AIRBUS	AIRBUS MILITARY	A330 MRTT
Nacelle fatigue analysis	AIRBUS	AIRBUS MILITARY	A400M
WING design and integration	EADS DSS	EADS DSS	UAV ATLANTE
UAV development	INTA	INTA	UAV DIANA
UAV development	INTA	INTA	UAV HADA
Development Central Wing	SOLAR IMPULSE	SOLAR IMPULSE	PT60M
Mission simulation	SOLAR IMPULSE	SOLAR IMPULSE	PT60M



BURULAN

General description of the product/service	DIRECT CLIENT	OEM	MODEL
ARATZ			
Composite Tooling	AIRBUS	AIRBUS	A350 XWB
Tooling assembly	AIRBUS	AIRBUS	AIRBUS Families
Assembly tools	DASSAULT	DASSAULT	FALCON Family
ASTORKIA			
Structural components	AERNNOVA	AIRBUS	A380, A350
Structural components	Several	BOEING	787,747
Structural components	AERNNOVA	BOMBARDIER	CRJ700/900
Structural components	AERNNOVA	EMBRAER	EMBRAER Families
BURDINBERRI			
Belly fairing	ALESTIS	AIRBUS	A350 XWB
Keel beam lateral panel curing tools	REDUCTIA AEROSPACE	AIRBUS	A350XWB
Vtp leading edge curing tools	ACITURRI	AIRBUS	A350 XWB
Fan cowl curing tools	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Htp strakelet & tip	ALESTIS	BOEING	B737
Fuselage curing tool	AERNNOVA	EUROCOPTER	NH90
BURULAN			
Manufacture of components, surface treatments, assemblies.	AERNNOVA	AIRBUS	AIRBUS Families
Manufacturing of components, surface treatments, assemblies	AERNNOVA	BOMBARDIER	BOMBARDIER Families
Manufacture of components, surface treatments, assembly, ball joint stapling	AERNNOVA	EMBRAER	170/175/190/195
Manufacturer of components, surface treatments, assemblies	AERNNOVA	SIKORSKY	S-92
CTA			
Service life extension tests (ESG) of MLG DOOR,NLG DOOR ELEVATOR and HTTP CENTER JOINT	AIRBUS MILITARY	AIRBUS	A320
Service life extension tests (ESG) of OUTB-FLAP	AIRBUS GERMANY	AIRBUS	A320
INTERIOR PANELS (COCKPIT AND CABIN). Fire Certification Tests	AIRBUS MILITARY	AIRBUS	A330 MRTT
MLGB Panel & HTTP Panel Certification Test	AERNNOVA	AIRBUS	A350 XWB
Panel Joint Configuration Test	AIRBUS	AIRBUS	A350 XWB
Fuel Tank Access Cover Debris Impact Test	AIRBUS	AIRBUS	A350 XWB
S19 Panel Certification Tests	AIRBUS	AIRBUS	A350 XWB
MLG Door Omega Certification Test	DAHER-SOCATA	AIRBUS	A350 XWB
S19. Working Firewall Fireproof Test	ALESTIS AEROSPACE	AIRBUS	A350 XWB
Sandwich Panel Water Tightness Test	ALESTIS AEROSPACE	AIRBUS	A350 XWB
Wing Box Panel Certification Test	AIRBUS	AIRBUS	A350XWB
Pylon Engine Rear Attachment Certification Test	AIRBUS FRANCE	AIRBUS	A380
VTP Fitting #1	AERNNOVA	AIRBUS	A380
NLG DOOR Certification Tests	AIRBUS FRANCE	AIRBUS MILITARY	A400M
Fire certification tests of interior materials	AERONÁUTICA DE GESTIÓN	Several	Airlines

AIRBUS A350

General description of the product/service	DIRECT CLIENT	OEM	MODEL
CTA			
Fire certification tests of interior materials	HUTCHINSON	Several	Airlines
Fire certification tests of interior materials	GERFLOR	Several	Airlines
Fire certification tests of interior materials	BINTERTECHINC	Several	Airlines
Fire certification tests of interior materials	L&L	Several	Airlines
Fire certification tests of interior materials	JCB AERO	Several	Airlines
Fire certification tests of interior materials	AIR NOSTRUM	Several	Airlines
Fire certification tests of interior materials	SN CENTRAIR	Several	Airlines
Fire certification tests of interior materials	WL GORE	Several	Airlines
CWT (Central Wing Tank) Fire certification tests	AERNNOVA	BOMBARDIER	CSeries
Coupon TAI tests	AERNNOVA	BOMBARDIER	CSeries
Infrared Thermography Inspections for Composite materials	CSL (Centre Spatial de Liege)	Several	Several
GRUPO TTT			
Heat and surface treatments	SONACA	AIRBUS	AIRBUS Families
Heat and surface treatments	AERNNOVA	AIRBUS	AIRBUS Families
Heat and surface Treatments	AIRBUS MILITARY	AIRBUS MILITARY	C295
Heat and surface treatments	Several	BOMBARDIER	CRJ700/900
Heat and Surface treatments	SONACA	DASSAULT	FALCON Family
Heat and surface treatments	AERNNOVA	EMBRAER	EMBRAER Families
Heat and surface treatments	SONACA	EMBRAER	EMBRAER Families
Heat and surface treatments	AERNNOVA	EUROCOPTER	EUROCOPTER family
Heat and surface treatments	AERNNOVA	SIKORSKY	S-92
INGEMAT			
Design of assembly jigs and fixtures for hybrid structure of the Belly Fairing	ALESTIS	AIRBUS	A350 XWB
Turnkey supply of automated handling and demoulding fixture for all stringer moulds of the VTP	ACITURRI	AIRBUS	A350 XWB
MATRICI			
Tooling for carbonfiber manufacture, Jigs, and metalic components	ACITURRI	AIRBUS	AIRBUS Families
Tooling for carbonfiber manufacture, Jigs, and metalic components	AUBERT & DUVAL	AIRBUS	AIRBUS Families
LTK GRUPO			
Special Aerospace Logistics: Transport, Stock, Quality control...	AIRBUS	AIRBUS	AIRBUS Families
Special Aerospace Logistics: Transport, Stock, Quality control...	AIRBUS MILITARY	AIRBUS MILITARY	A330 MRTT
Special Aerospace Logistics: Transport, Stock, Quality control...	AIRBUS	AIRBUS MILITARY	A400M
Special Aerospace Logistics: Transport, Stock, Quality control...	AIRBUS	AIRBUS MILITARY	CN235, C295
Special Aerospace Logistics: Transport, Stock, Quality control...	ALESTIS	EMBRAER	170/175/190/195

EMBRAER Lineage 1000

3.3.- Activities 2011
Aerostructures

General description of the product/service	DIRECT CLIENT	OEM	MODEL
Special Aerospace Logistics: Transport, Stock, Quality control...	EUROCOPTER	EUROCOPTER	EC135, NH90, TIGRE
MESIMA			
Materials management and supply	BURULAN	EMBRAER	EMBRAER Families
Materials management and supply	AIRBUS MILITARY	AIRBUS MILITARY	EJ-200
METRALTEC			
Manufacture and assembly of elements (Sheet metal working, machining, heat and surface treatments, painting)	AERNNOVA	AIRBUS	AIRBUS Families
Manufacture of elementary parts and assembly (sheet metal, machining, heat and surface treatments, painting)	AERNNOVA	BOMBARDIER	CRJ700/900
Manufacturer of elementary parts (sheet metal, machining, heat treatment, surface treatments, painting)	TAM	BOMBARDIER	LEARJET 85
Manufacture of elementary parts and assemblies (sheet metal, machining, heat treatments and surface treatments, painting)	AERNNOVA	EMBRAER	EMBRAER Families
Manufacture of elementary parts (sheet metal, machining, heat treatment, surface treatment, painting)	AERNNOVA	EUROFIGHTER	TYPHOON
Manufacture of elementary parts and assemblies (sheet metal, machining, heat treatments and surface treatments, painting)	AERNNOVA	SIKORSKY	S-92
NOVALTI			
Landing gear trap	AIRBUS	AIRBUS	A380
Belly Fairing components	AIRBUS	AIRBUS	A380
NUTER			
Structural components	AERNNOVA	AIRBUS	A380
Components	AERNNOVA	BOMBARDIER	CRJ700/900
Structural components	AERNNOVA	EMBRAER	170/175/190/195
Structural components	AERNNOVA	EMBRAER	ERJ135/140/145
Structural components	AERNNOVA	SIRKOSKY	S-92
SENER			
Removal of inserts from leading edge.	AIRBUS	AIRBUS	A320
Auxiliary tools for the wing flap assembly in two airbus models	STRATA	AIRBUS	A330 / A340
Fatigue analysis and damage tolerance	AIRBUS	AIRBUS	A340/600
Design, construction, installation, transport and start up of the system in which the carbon fibre laminates of the wing stringer positioning line are generated	ARITEX	AIRBUS	A350 XWB
Conceptual design of the Belly Fairing.	AIRBUS	AIRBUS	A350 XWB
Engineering of the front area of the Belly Fairing and pre-plateau stage of section 19.1	ALESTIS	AIRBUS	A350 XWB
Conceptual design of the landing gear. Pre-plateau stage	AIRBUS	AIRBUS	A350 XWB
HTP box for the Getafe production line	AIRBUS	AIRBUS	A350 XWB
Design and production of HTP assembly stations 70 and 71	THYSSEN GERMANY	AIRBUS	A350 XWB

3.3.- Activities 2011

Aerostructures

General description of the product/service	DIRECT CLIENT	OEM	MODEL
SENER			
Development of main landing gear traps: justification of strength corresponding to new flight mode groups up to the test support	AIRBUS	AIRBUS	A380
Development of Belly Fairing and support work	AIRBUS	AIRBUS	A380
Detailed design of parts such as the elevator for the cargo version	AIRBUS	AIRBUS	A380
Fuel access covers (FTAC)	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Definition of a new design for fuel access covers (FTAC)	AIRBUS MILITARY	AIRBUS MILITARY	A400M
HTP box	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Phase 4 of the Internal Noise Reduction Program	AIRBUS MILITARY	AIRBUS MILITARY	C295 Persuader
HTP box	BOEING	BOEING	787
Program to extend the life of the Spanish Navy's AB212 helicopters	Head of Logistics Support (JAL)	SPANISH NAVY	AB-212
SISTEPLANT			
Master industrial Plan for process integration	ALESTIS	BOEING	787
Engineering and industrialisation of A350 Belly Faring Assembly Line	ALESTIS	AIRBUS	A350 XWB
Process standards definition for A-380 Ductos moulding process	ACITURRI	AIRBUS	A380
Supply Chain Improvement	MPB	Several	Several
Lean Manufacturing delpoyment at Mairena facility	AEROSUR	Several	Several
Process improvement at Miñano facility	ALESTIS	Several	Several
Process optimization	ACITURRI	Several	Several
Process definition	AIRGRUP	Several	Several
TEY			
Heat treatments	AIRBUS MILITARY	AIRBUS	AIRBUS Faamilies
Heat treatments	CESA	AIRBUS	AIRBUS FAAMILIES
Heat treatments	AIRBUS MILITARY	AIRBUS MILITARY	A400M
Heat treatments	AIRBUS MILITARY	AIRBUS MILITARY	CN235, C295

3.3.- Activities 2011

Engines

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL	PLATFORMS
ACITURRI				
Mounting Rings, Thermales and fittings	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Components	WEC	EUROJET	EJ200	EUROFIGHTER TYPHOON
Struts	ITP	GENERAL ELECTRIC	GE90-115	BOEING 777
Housings	ITP	ROLLS-ROYCE	Trent Series	Several
Lugs and vanes	ITP	ROLLS-ROYCE	Trent Series	Several
Lugs and vanes	ITP	ROLLS-ROYCE	TP400	AIRBUS A400M
T. Match	ITP	ROLLS-ROYCE	Trent 1000	BOEING 787
Housings	ITP	ROLLS-ROYCE	F414	BOEING F/A-18E/F Super Hornet
End Fittings	RMDG Aerospace	ROLLS-ROYCE	Several	Several
AEROMEC				
LPT rings	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
AIBE				
Design and manufacture of clamping systems and fixtures for machining processes and special machines	ITP	GENERAL ELECTRIC	G90	BOEING 777
Design and manufacture of clamping systems and fixtures for machining processes and special machines	ITP	ROLLS-ROYCE	Trent Series	Several
ALTRAN				
Aerodynamics, structural and heat analysis	ITP	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
ARATZ				
Machined components	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
ASTORKIA				
Machined components	ITP	ROLLS-ROYCE	Trent 900	AIRBUS A380

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL	PLATFORMS
AYZAR				
Heat treatments	ACITURRI	Several	Several	Several
CTA				
TBH Stub-Lug Buckling Test	ITP	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
Validation tests of Aerodynamic Technologies	ITP	ROLLS-ROYCE	Trent Series	Several
DMP				
Casing parts	PCB	CFM International	CFM56	AIRBUS A320 / BOEING 737
Main shaft Ge90	AUBERT&DUVAL	GENERAL ELECTRIC	GE90	BOEING 777
Thrust struts	Several	Several	Several	Several
Transmission shafts Curvic-Coupling	TURBOMECA	TURBOMECA	ARRIEL / MAKILA	EUROCOPTER DAUPHIN / SUPERPUMA
HP turbine discs	AEROTECH	TURBOMECA	ARRIEL / MAKILA	EUROCOPTER DAUPHIN / SUPERPUMA
Transmission shafts Curvic-Coupling	TURBOMECA	TURBOMECA	ARRIUS	EUROCOPTER EC135
HP turbine discs	AEROTECH	TURBOMECA	ARRIUS	EUROCOPTER EC135
Main transmission gears	TURBOMECA	TURBOMECA	All range	Several
Accessory transmission gears	TURBOMECA	TURBOMECA	All range	Several
ELECTROHILO				
Inner vanes erosion. Recanteado alabes	ITP	EPI	TP400	AIRBUS A400M
TEC segmentation	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Strut manufacture	ITP	MTRI	MTR390-E	EUROCOPTER TIGRE
Edging of VANES and BCVs	ITP	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
HUB drill, Separation Top Core Vane, Vanes erosion	ITP	ROLLS-ROYCE	Trent 900	AIRBUS A380
Vane edging, Bottom Core, Thick Subassy, Bars	ITP	ROLLS-ROYCE	Trent 1000	BOEING 787

Eurocopter EC135 equipped with TURBOMECA ARRIUS

GRUPO ITP

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL	PLATFORMS
GRUPO ITP				
Lost-wax casting super alloys for Turbine	SNECMA	CFM International	CFM56	AIRBUS A320 / BOEING 737
Lost-wax casting super alloys for Turbine	MTU	ENGINE ALLIANCE	GP7000	AIRBUS A380
Design and manufacture of low pressure turbine (LPT) - Member of EPI Consortium	AIRBUS MILITARY	EPI	TP400	AIRBUS A400M
Design and manufacture of the Front Frame and Exhaust System - Member of the EPI Consortium	AIRBUS MILITARY	EPI	TP400	AIRBUS A400M
Manufacture of Externals - Member of EPI Consortium	AIRBUS MILITARY	EPI	TP400	AIRBUS A400M
Final assembly of engine - Member of EPI Consortium	AIRBUS MILITARY	EPI	TP400	AIRBUS A400M
Lost-wax casting super alloys for intermediate pressure turbine	ROLLS-ROYCE	EPI	TP400	AIRBUS A400M
Lost-wax casting super alloys for the LPT	Itself	EPI	TP400	AIRBUS A400M
Design and manufacture of the Diffuser cones and By-Pass Module - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200	EUROFIGHTER TYPHOON
Design and manufacture of the post burner duct and variable nozzle - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200	EUROFIGHTER TYPHOON
Manufacture of Externals - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200	EUROFIGHTER TYPHOON
Final assembly of the engine - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200	EUROFIGHTER TYPHOON
Lost-wax casting super alloys - nozzle	Itself	EUROJET	EJ200	EUROFIGHTER TYPHOON
Lost-wax casting super alloys - low pressure turbine	Itself	EUROJET	EJ200	EUROFIGHTER TYPHOON
Manufacture of rear turbine structure	GENERAL ELECTRIC	GENERAL ELECTRIC	GE90-115	BOEING 777
Components	GENERAL ELECTRIC	GENERAL ELECTRIC	CF34-10	EMBRAER 190/ LINEAGE 1000
Structural components	HONEYWELL	HONEYWELL	HTF7000	BOMBARDIER CHALLENGER 300
Design and manufacture of three LPT - Member of the MTRI Consortium	EUROCOPTER	MTRI	MTR390-E	EUROCOPTER TIGER
Final assembly of the engine - Member of the MTRI Consortium	EUROCOPTER	MTRI	MTR390-E	EUROCOPTER TIGER
Lost-wax casting super alloys - low pressure turbine	Itself	MTRI	MTR390-E	EUROCOPTER TIGER
Lost-wax casting super alloys for Turbine	SNECMA	POWERJET	SaM146	SUKHOI SUPERJET 100

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL	PLATFORMS
GRUPO ITP				
Components manufacture	P&W CANADA	PRATT & WHITNEY	PW535E	EMBRAER PHENOM 300
Assembly of the LPT and component manufacture	ROLLS-ROYCE	ROLLS-ROYCE	Trent 700	AIRBUS A330
Lost-wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	Trent 700	AIRBUS A330
Design and manufacture of low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent 500	AIRBUS A340
Design and manufacture of the Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent 500	AIRBUS A340
Lost-wax casting super alloys for the LPT	Itself	ROLLS-ROYCE	Trent 500	AIRBUS A340
Design and manufacture of the low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
Design and manufacture of the Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
Lost-wax casting super alloys for the LPT	Itself	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
Lost-wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
Design and manufacture of the low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent 900	AIRBUS A380
Design and manufacture of the Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent 900	AIRBUS A380
Lost-wax casting super alloys for the LPT	Itself	ROLLS-ROYCE	Trent 900	AIRBUS A380
Lost-wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	Trent 900	AIRBUS A380
Design and manufacture of low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent 1000	BOEING 787
Design and manufacture of Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	Trent 1000	BOEING 787
Lost-wax casting super alloys for the LPT	Itself	ROLLS-ROYCE	Trent 1000	BOEING 787
Lost-wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	Trent 1000	BOEING 787
Parts of external equipment of engine	ROLLS-ROYCE	ROLLS-ROYCE	BR725	GULFSTREAM G650
Design and validation of the ROLL POST	ROLLS-ROYCE	ROLLS-ROYCE	F136	LOCKHEED MARTIN F-35
GRUPO TTT				
Heat and Surface treatments	Several	EUROJET	EJ200	EUROFIGHTER TYPHOON
Heat and surface treatments	ITP	ROLLS-ROYCE	Several	Several
Heat and surface treatments	SNECMA	SNECMA	Several	Several
Heat and surface treatments	TURBOMECA	TURBOMECA	Several	Several

EUROJET EJ200

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL	PLATFORMS
INDUSTRIAS GALINDO				
Manufacturing of Tooling for LPT Components (inter stage seals)	ITP	ROLLS-ROYCE	Trent XWB	AIRBUS A350XWB
Manufacturing of Tooling for turbine shafts and static components	ITP	Several	Several	Several
Desing of Cutting Tools	ITP	Several	Several	Several
Manufacturing of Tooling	INESPASA	Several	Several	Several
MESIMA				
Materials management and supply	ITP	ROLLS-ROYCE	Several	Several
Materials management and supply	NOVALTI	ROLLS-ROYCE	Several	Several
Materials management and supply	WEC	SNECMA	Several	Several
NIVAC				
Thermal and surface treatments	WEC	CFM International	CFM56	AIRBUS A320 / BOEING 737
NOVALTI				
Components for LPT	ITP	EPI	TP400	AIRBUS A400M
Components	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Engine components	ITP	MTRI	MTR390-E	EUROCOPTER TIGRE
Components	ITP	ROLLS-ROYCE	Trent 500	AIRBUS A340
Components for the LPT	ITP	ROLLS-ROYCE	Trent Series	Several
NUTER				
Fittings	ITP	EPI	TP400	AIRBUS A400M
Fittings	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Fittings	ITP	ROLLS-ROYCE	Trent Series	Several
SENER				
Test gantry	ITP	EPI	TP400	AIRBUS A400M
SIEGEL				
Components	ITP	EPI	TP400	AIRBUS A400M
Components	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Machined Components	ITP	ROLLS-ROYCE	Trent Series	Several

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL	PLATFORMS
TEY				
Heat treatments	SENER	EPI	TP400	AIRBUS A400M
Heat treatments	ITP	ROLLS ROYCE	Several	Several
Heat treatments	TURBOMECA	TURBOMECA	Several	Several
Heat treatments	DMP	Several	Several	Several
Heat treatments	WEC	Several	Several	Several
WEC				
Parts of external equipment of engine	SNECMA	CFM International	CFM56	AIRBUS A320 / BOEING 737
Parts of external equipment of engine	ITP	EPI	TP400	AIRBUS A400M
Exhaust nozzle parts	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
TEC parts	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Parts of external equipment of engine	ITP	EUROJET	EJ200	EUROFIGHTER TYPHOON
Parts of external equipment of engine	SNECMA	GENERAL ELECTRIC	GE90-115k	BOEING 777
Ducts for external equipment of engine	ITA	PRATT & WHITNEY	V2500	AIRBUS A320
Parts of external equipment of engine	ITP	ROLLS-ROYCE	Trent 700	AIRBUS A330
Ducts for external equipment of engine	ITA	ROLLS-ROYCE	Trent 700	AIRBUS A330
Parts of external equipment of engine & Structural parts	ITP	ROLLS-ROYCE	Trent 500	AIRBUS A340
Ferrule parts	ITP	ROLLS-ROYCE	Trent 900	AIRBUS A380
Parts of external equipment of engine	ITP	ROLLS-ROYCE	Trent 1000	BOEING 787
Ducts for external equipment of engine	ITA	ROLLS-ROYCE	BR 710	GULFSTREAM G500

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
ACITURRI			
Hydraulic Tanks	CESA	Hydraulic Systems	AIRBUS A380
Equipped elements	RATIER FIGEAC	Turboprop systems	Several
Electrical installation cabinets	SOGEMASA	Electrical systems	Several
AERNNOVA			
Missile launcher tubes (composite)	MBDA	MILAN / MISTRAL	Defence aircraft
Logistics container (composite)	DBGT	IRIS T	Defence aircraft
Antennas and randomes (composite)	INDRA	Radars	Defence aircraft
Wing conduits (composite)	ALENIA	Wings Systems	EUROFIGHTER TYPHOON
Flare dispenser (composite)	ALENIA	Special equipment	EUROFIGHTER TYPHOON
Ammunition box (composite)	MAUSER	Special equipment	EUROFIGHTER TYPHOON
AEROMEC			
Auxiliary and main landing gear components	CESA	Landing Gear	CASA C295
Main landing gear components	CESA	Landing Gear	CASA CN235
AEROVISION			
Design and Integration of high performance mini Unmanned Air Systems (UAS)	Itself	UAS	AEROVISION FULMAR F-T
Design and Integration of high performance mini Unmanned Air Systems (UAS)	Itself	UAS (Maritime Version)	AEROVISION FULMAR F-M
Operation Services of FULMAR System for 3rd parties	Itself	UAS	AEROVISION FULMAR F-T / F-M
Design and manufacturing of Ground equipment for UAS (Launcher, landing net, gimbal...)	Miscellaneous	UAS Ground Equipment	Miscellaneous
AIBE			
Precision machining of components	SENER	Several	Several

AEROVISION FULMAR

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
ALFA PRECISION CASTING			
Conduits- Air Fittings (Lost wax casting superalloys)	LIEBHERR AEROSPACE	Air conditioning	AIRBUS A320
Conduits- Air Fittings (Lost wax casting superalloys)	LIEBHERR AEROSPACE	Air conditioning	AIRBUS A380
Conduits- Air Fittings (Lost wax casting superalloys)	LIEBHERR AEROSPACE	Air conditioning	BOEING 787
Optronic equipment housings (Lost wax casting aluminium)	SAGEM DEFENSE	Optronic systems TV-Thermography	EUROCOPTER NH90
Radar housings (Lost wax casting aluminium)	INDRA	Radars	EUROFIGHTER TYPHOON
ALTRAN			
Door actuator dimensioning	CESA	Doors	A400M
Landing gear design	AIRBUS MILITARY	Landing Gear	AIRBUS A320/380/400M
Harness design	AIRBUS MILITARY	Electrical systems	C295 CH01
Support in the development and mission of the APU	AIRBUS	APU	Several
ASTORKIA			
Machined components	WEC	Air Conditioning	Several
CTA			
Landing Gear Actuator Qualification Test (MLG)	CESA	Landing Gear	AIRBUS A350 XWB
Landing Gear Actuator Qualification Test (NLG)	CESA	Landing Gear	AIRBUS A380
4 Landing Gear Actuator Qualification Tests and 6 Ramp System Tests.	CESA	Landing Gear	AIRBUS A400M
Fire Certification Tests	INDRA	Electronic boards	AIRBUS A400M
HALT tests PGE vibration equipment	TECNOBIT	PGE	Ground equipment
HALT tests Perseo vibration equipment	TECNOBIT	PERSEO	Ground equipment
DMP			
Shock Absorber MLG	MESSIER-DOWTY	Landing Gear	AIRBUS A330/A340
Shock Absorber MLG	MESSIER-DOWTY	Landing Gear	AIRBUS A350XWB
Shock Absorber NLG	MESSIER-DOWTY	Landing Gear	BOEING 787
Main rotor servocontrol kit	GOODRICH	Main rotor	EUROCOPTER DAUPHIN
Main rotor servocontrol kit	GOODRICH	Main rotor	EUROCOPTER ECUREUIL
Balancier équipé	MESSIER-DOWTY	Main rotor	EUROCOPTER SUPER PUMA

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
GRUPO TTT			
Heat and surface treatments	MESSIER-BUGATTI-DOWTY	Landing Gear	AIRBUS Families
Heat and surface treatments	MESSIER-BUGATTI-DOWTY	Brakes	AIRBUS Families
Heat and surface treatments	HISPANO SUIZA	Systems	Several
Heat and surface treatments	IAI	Systems	Several
NUTER			
Machined components	CESA	Several	AIRBUS Families
ORBITAL AEROSPACE			
System integration test bench and supportability for Ground and Flight test	E2S Airbus Military	Air Refuelling	A330-MRTT
Design, implementation and integration of critical SW on board, communication, LLF..)	E2S Airbus Military	Mission Management System	A400M
MTF Model and Test Support	CASSIDIAN	Military Test Facilities	A400M
Verification and validation	CASSIDIAN	Human Management Interface	A400M
SW and Firmaware design and testing	E2S Airbus Military	Audio Management System	A400M
Tests and requirements definition,implementation and validation	GTD	Communication System	A400M
Model and Test support	E2S Airbus Military	Military Test Facilities	A400M
SW development of Tactical Situation System	E2S Airbus Military	Tactical Situation Management	A400M
Flight Test	E2S Airbus Military	Mission Management System	A400M
MaTe test conversion, configuration manager	E2S Airbus Military	Testing	Eurofighter
SW Multifunction Control Display and BOOM Control ann Computing System	E2S Airbus Military	BOOM	MRTT
SENER			
Image management unit for two Tactical Recognition systems (RecceLite or Litening Pods)	ZEISS OPTRONICS	IPU 2 / IPU 3	Defence aircraft
Production of the Control Section of aerodynamic fins and fixed wings (Air - Air version)	DBD	IRIS-T	Defence aircraft
Development and qualification of the Control Section of aero-dynamic fins (Ground - Air version)	DBD	IRIS-T SL	Ground equipment
Development, qualification, industrialisation and production of the Control Section of aerodynamic fins	MBDA-UK	METEOR	Defence aircraft

Systems and equipment

TECNASA

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
SENER			
Production of the Control Section of aerodynamic fins	KONGSBERG Defence & Aerospace	NSM	Ground equipment
Design authority and sole supplier of the SMU (Stabilized Mirror Unit)	SAAB Dynamics	RBS 70 NG	Ground equipment
FASS subsystem of drive and control of aerodynamic fins	TAURUS Systems GmbH	TAURUS KEPD 350	Defence aircraft
Integration of the TAURUS KEPD 350 in the EF18 and acquisition of units	MALOG	TAURUS KEPD 350	Defence aircraft
TECNALIA			
Man-Machine interfaces for the AIRBUS plants in PUERTO REAL, GETAFE and STADE	AIRBUS	Equipment and software	AIRBUS families
Drilling and riveting robots autocalibration software	AIRBUS	Equipment and software	AIRBUS families
TECNASA			
Firing handles	MARTIN-BAKER	Ejection Seats	Defence aircraft
O-RINGS	MARTIN-BAKER	Ejection Seats	Defence aircraft
JIGS	MARTIN-BAKER	Ejection Seats	Defence aircraft
TEY			
Heat treatments	CESA	Landing Gears	Several
Heat treatments	AIRBUS MILITARY	Several	Several
Heat treatments	SENER	Several	Several
Heat treatments	DMP	Several	Several
WEC			
Thrust Reverser parts	AIRCELLE	Systems	AIRBUS A380
Air Bleed equipment parts	HONEYWELL	Air Conditioning	Several
Air Bleed equipment parts	LIEBHERR	Air Conditioning	Several
Stabilising wings	SENER	IRIS-T	Defence aircraft
Connection box	SNECMA	Several	AIRBUS A320

Space

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
AIBE			
Precision machining of components	SENER	Miscellaneous	Miscellaneous
ALTRAN			
Structural dimensioning	EADS ASTRIUM	Reflectors	AMAZONAS3
Test development and validation	EADS ASTRIUM	Reflectors	HISPASAT1E
Structural dimensioning	EADS ASTRIUM	Antennas Top Floor	MEASAT
ARATZ			
Machined Components	SEVERAL	Miscellaneous	Miscellaneous
Components for satellite antennas	SEVERAL	Miscellaneous	Miscellaneous
CTA			
BEPICOLOMBO magnetometer boom tests	SENER	Magnetometer Boom	BEPICOLOMBO
EXOMARS lander impact tests	SENER	Lander	EXOMARS
GAIA satellite DSA vibration tests	SENER	DSA	GAIA
GAIA satellite M2MM vibration tests	SENER	M2MM	GAIA
Galileo Antenna vibration tests	RYMSA	Antenna	GALILEO
Tesat Spacecom satellite heat pipes system	IBERESPACIO	Heat pipes system	TESAT SATELLITE
GRUPO ITP			
Super alloy components for space shuttle engine	SNECMA	Shuttle	ARIANE 5
MATRICI			
Tooling for carbonfiber manufacture, jigs and metalic components	ASTRIUM España	Miscellaneous	Miscellaneous
NOVALTI			
On-board components and mechanical systems	THALES ALENIA SPACE	Miscellaneous	ARABSAT 5C
On-board components and mechanical systems	SENER	Miscellaneous	SEOSAT

CTA SENER

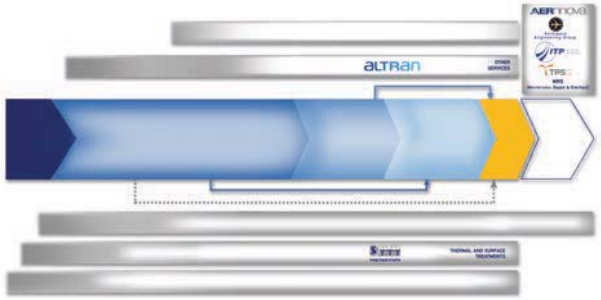
General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
NUTER			
Components	SENER	Miscellaneous	GAIA
Components	SENER	Miscellaneous	METEOSAT
ORBITAL AEROSPACE			
Design and manufacture of mechatronic for spectrometers , control system , embedded SW	CIAC	Ultraviolet Visible sounder UVAS	SEOSAT
DOORs Data Base Maintenance	EUMETSAT	Meteorological satellite	METEOSAT THIRD GENERATION
SENER			
Analysis of different alternatives for planetary vehicle landing gear	ESA	Planetary exploration ship -Scientific Mission	AURORA - Mars Sample Return (MSR)
Mechanism that separates the magnetic disturbance magnetometer of the satellites, as well as the accompanying mobile arm	ESA / JAXA	Planetary exploration ship -Scientific Mission	BEPICOLOMBO
Communication antennas sub-system (HGA & MGA)	THALES-I	Planetary exploration ship -Scientific Mission	BEPICOLOMBO
Main system contractor	ESA	MARES system to investigate muscular atrophy caused by weightlessness	COLUMBUS
Main contractor and responsible for the support structure and of the help system at the exit of the Rover (SES) onto the Martian surface	ESA	Planetary exploration ship -Scientific Mission	EXOMARS
Raman LIBS instrument	INTA / CAB	Planetary exploration ship -Scientific Mission	EXOMARS
Deployable parasol, precision pointing mechanism in three axes plus two more times of the M2MM mirror of the optical system.	ASTRIUM SAS	Observation satellites - Scientific Mission	GAIA
Design and verification of a swinging mechanism or FMD (Flip Mirror Device)	JENA OPTRONIK	Observation satellite -Sentinel 3-	GMES
Attitude and orbit complete control system (AOCS/GNC)	ESA / THALES ALENIA SPACE Italy & France	Observation satellites - Scientific Mission	HERSCHEL - PLANCK
In-flight demonstration study of all the functions of the mechanism and Guidance, Navigation and Control system (GNC)	ESA - ESTEC	Docking and joining mechanism -Navigation	IBDM (International Berthing and Docking Mechanism)
Complete Guidance, Navigation and Flight control subsystem (GNC)	ESA	Intermediate experimental vehicle for re-entry into atmosphere	IXV

WSO-UV ESA Courtesy

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
High gain antenna pointing mechanisms (HGAG) of the Rover	NASA	Planetary exploration ship -Scientific Mission	MARS SCIENCE LABORATORY
Technical and engineering assistance in the project	ESA	MELISSA project for developing a life-support system for long duration space travel and planetary bases.	MELISSA
Development model of the visible camera scanner	EADS ASTRIUM	Observation satellite	METEOSAT 3rd Generation (MTG)
Attitude Determination and Control system (ADCS)	INTA	Pico-satellite - Navigation	OPTOS
Complete formation flying system (FF)	ESA	Set of small satellites - Navigation	PROBA 3
Main contractor of the formation flying system	ESA	Formation flying system	PROBA 3
Radar deployment system	ESA	Observation satellite - Scientific Mission	SENTINEL 1
Calibration mechanism	ESA	Observation satellite - Scientific Mission	SENTINEL 2
Optical instrument: engineering work of systems and optical and thermal-structural design	CDTI	Optical instrument - Observation satellite	SEOSAT / INGENIO
Feasibility study of the ISSIS instrument (Imaging and Slitless Spectroscopy Instrument for Surveys)	CDTI	Optical instrument - Observation satellite	World Space Observatory - Ultra Violet (WSO-UV)
SISTEPLANT			
Process improvement system deployment	EADS Espacio	Miscellaneous	Miscellaneous
TEY			
Heat treatments	EADS-CASA ESPACIO	Miscellaneous	Miscellaneous
Heat treatments	INDRA	Miscellaneous	Miscellaneous
Heat treatments	SENER	Miscellaneous	Miscellaneous

3.3.- Activities 2011

Maintenance



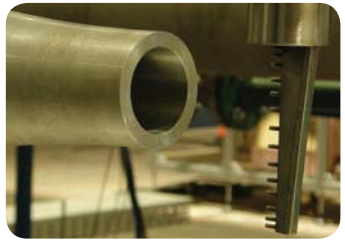
General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
AERNNOVA			
Composite structure repairs	BOMBARDIER & Operators	Tips, fairings, etc	BOMBARDIER Families
Inspections, special processes and re-qualifications	Operators	Several	BOMBARDIER Families
Metal structure repairs	Operators	Wings, stabilises, fuselages,etc	BOMBARDIER Families
Composite structure repairs	EMBRAER & Operators	Elevators, Rudders	EMBRAER 170/190
Composite structure repairs	EMBRAER & Operators	Flaps, Ailerons, Wing tips, Winglets	EMBRAER ERJ145/135/Legacy
Composite structure repairs	EMBRAER & Operators	Landing gear doors, Spoilers, Fairings	EMBRAER ERJ145/135/Legacy
Inspections, special processes and re-qualifications	Operators	Several	EMBRAER Families
Metal structure repairs	Operators	Wings, stabilises, fuselages,etc	EMBRAER Families
Technical assistance & Sales of spares 24H/365d	Operators	Several	Several
Composite structure repairs	SIKORSKY	Doors, cowlings, stabilisers	SIKORSKY S-92
AEROSPACE ENGINEERING GROUP			
Electrical components Overhaul and Repair	MRO Companies, Operators, Air Forces, Trading Companies	Electrical systems	Several
Hydraulic components Overhaul and Repair	MRO Companies, Operators, Air Forces, Trading Companies	Hydraulic systems	Several
Fuel components Overhaul and Repair	MRO Companies, Operators, Air Forces, Trading Companies	Fuel systems	Several
Avionics components Overhaul and Repair	MRO Companies, Operators, Air Forces, Trading Companies	Avionics	Several
ALTRAN			
Training and Simulators	AIRBUS	Simulators	A320/A340/A380
Supportability and Maintainability Management	AIRBUS MILITARY	Several	Defence Aircrafts

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
GRUPO TTT			
Heat and surface treatments	MESSIER-SERVICE	Several	Several
GRUPO ITP			
Resolving incidents	ROLLS-ROYCE	RR Trent 700	AIRBUS A330
Resolving incidents	ROLLS-ROYCE	RR Trent 500	AIRBUS A340
Resolving incidents	ROLLS-ROYCE	RR BR715	BOEING 717
Full Maintenance, Inspection and Repair of the F404 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	GE F404	BOEING F/A-18
Full Maintenance, Inspection and Repair of the TFE731 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	HONEYWELL TFE731	CASA C101
Full Maintenance, Inspection and Repair of the TPE331 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	HONEYWELL TPE331	CASA C212
Full Maintenance, Inspection and Repair of the ATAR -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	SNECMA ATAR	DASSAULT MIRAGE Families
Full Maintenance, Inspection and Repair of the PW206 -engine, modules and components- & engine and accessories test	Several	P&W PW206	EUROCOPTER EC135
Full Maintenance, Inspection and Repair of the EJ200 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	EUROJET EJ200	EUROFIGHTER TYPHOON
Full Maintenance, Inspection and Repair of the T56 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	RR T56	LOOCKHEED MARTIN C130
Full Maintenance, Inspection and Repair of the T56 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	RR T56	LOOCKHEED MARTIN P-3
Full Maintenance, Inspection and Repair of the J85 -engine, modules and components- & engine and accessories test	Spanish Ministry of Defence	GE J85	NORTHROP F-5
Full Maintenance, Inspection and Repair of the TPE331 -engine, modules and components- & engine and accessories test	**Royal Air Force**	**HONEYWELL TPE331**	**SHORT TUCANO**
TPS			
Engine disassembly and overhaul	IBERIA Maintenance	CFM Int. CMF56	AIRBUS A320 / BOEING 737
Engine disassembly and overhaul	IBERIA Maintenance	P&W JT8D	McDONNELL DOUGLAS MD80 Series

3.3.- Activities 2011

Aircraft and space engineering R&D projects

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
ACITURRI		
HP-SMART-EMA	Development of High Performance Electromechanical Actuators	European - CLEAN SKY
E-EMA	Development of High Performance Electromechanical Actuators	European - CLEAN SKY
LAYSA	Development of new functional composites	European - FP7
NICE TRIP (Novel Innovative Competitive Effective Tilt Rotor Integrated Project): convertible aircraft-helicopter	Development of a Tilt-Rotor prototype	European - FP6
SINTONIA	UAV with low environmental impact	National-CENIT
TARGET	Sustainable and intelligent technology for composite structure manufacturing	National-CENIT
AERNNOVA		
CLEAN SKY	Smart Fixed Wing Aircraft	European - FP7
ELECTRICAL	Novel Aeronautical Multifunctional Composite Structures With Bulk Electrical Conductivity And Self-Sensing Capabilities	European - FP7
DAEDALOS	Dynamics in Aircraft Engineering Design and Analysis for Light Optimized Structures	European - FP7
LAYSA	Multifunctional Layers for Safer Aircraft Composites Structures	European - FP7
CESAR	Cost Effective Small Aircraft	European - FP7
ADVICE	Autonomous Damage Detection and Vibration Control Systems	European - FP7
AEROVISION		
WIMAAS (Wide Maritime Area Airborne Surveillance)	Wide Maritime Area surveillance with aircrafts and UAS / Leader THALES	European - FP7
FULMAR-M (Maritime version of the Fulmar System)	New UAS for operation in a maritime environment and landing on the sea	National-CDTI
ATLANTIDA (Air Traffic Management Research)	New Technology to research ATM using UAS / Leader BOEING R&T	National-CENIT



CTA

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
ALTRAN		
ALTCOMP	Automation Methodology Dimensioning Primary Structure Composites	Others
CTA		
HP-SMART EMA	Development of a new EM actuator	European - CLEAN SKY
AISHA II	Aircraft Integrated Structural Health Assessment II	European - FP7
DREAM	Aerodynamics: Validation of Radical Engine Architecture	European - FP7
FANTOM	Full field Aeronautical Non destructive Technique for On -line and Maintenance applications.	European - FP7
DOTNAC	Development and optimization of THz NDT on aeronautics Composite multilayered Structure	European - FP7
FUTURE	Aerodynamics: Flutter-Free Turbomachinery Blades	European - FP7
LEMCOTEC	Low Emissions Core-Engine Technologies	European - FP7
VITAL	Aerodynamics: Environmentally Friendly Aero Engine	European - FP6
OPENAER	Aerodynamics: New aircraft and engine configurations for the future system of air transport	National-CENIT
SPACECAP III	Development of the spatial technologies	Regional - DFA
AIRHEM-II	Health Monitoring in Aeronautics. Consortium coordinated by CTA	Regional - ETORTEK
VAXNUM	Development of capacitor technologies for the experimental aero-dynamic validation of components of low-emission aeroengine cores.	Regional - SAIOTEK
TIVECA	Measurement Technologies for validation of radical engine architecture.	Regional - SAIOTEK
AEROFIRE	Fire behaviour of the advanced composite materials used in aeronautical structural components	Regional - SAIOTEK
NEWFIRE	Fire behaviour of the advanced composite materials used in aeronautical structural components / microgravity.	Regional - SAIOTEK
AVICOHM	Health Monitoring demostrator for UAs. Consortium coordinated by CTA	Regional - SAIOTEK

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
IK4		
ELUBSYS: engine lubrication systems technologies	Optimisation of oil and fuel consumption, improving engine lubrication (Safrane, Brussels University, ITP,...)	European - FP7
ACTUATION 2015	Development and validation for the standardisation and modularity of the EMA in all systems (flight control, landing systems, etc.) to reduce the general LCC costs, improve reliability, refine the technology, reduce weight, reuce environmental impact.	European - FP7
ELUBSYS: engine lubrication systems technologies	Advanced propulsion plants: Optimisation of oil and fuel consumption, improving engine lubricationr	European - FP7
DEIMOS	Control and monitorisation of hydrogen fuel cell prototype / CESA	National - CENIT
PROSAVE2	Research and development of technologies in the systems area that set companies apart from their competitors at a technological level to compete on the market: advanced actuation systems, landing gear, in-flight refuelling systems, gas purification system and energy generation and reutilization systems. - Development of an HM system for EMA. - Configuration management systems. - Implementation of semi-active suspension systems for landing gear. CESA /SISTEPLANT	National - CENIT
SINTONIA	Scientific research for acquiring new know-how and technological developments to reduce environmental impact and increase efficiency in UAVS: - Electromechanical actuation systems (EMAs) for UAV platforms as an alternative to conventional systems, incorporating 'Health Monitoring' technologies to promote functional features that make the actuator "smart". - MEMS (Micro Electro Mechanical Systems) CESA	National - CENIT
SINTONIA: non manned systems oriented to minimal environmental impact	Alternatives to conventional drive systems in order to minimise consumption / CESA	National - CENIT
TMFwITPG	Thermo mechanical fatigue tests with minimum thermal and phase gradients	National - CICYT
RC2: quick and cost-cutting manufacturing of functional prototypes for gas turbines made of pile up metallic layers	Manufacture and maintenance: Rapid manufacture of aeronautical turbine blade prototypes by means of "laser cladding" technique	National - Eureka-Profit
AIRHEM: health monitoring in aeronautics	Sensorisation and monitorisation / CTA, TECNALIA	Regional - ETORTEK
Gap Measurement Solutions	Pre-design of gap guage solution in aeronautical engine rotors.	Regional - GAITEK
HEMA: actuators health monitoring	Sensorisation and monitorisation of actuators in aeronautics / SENER	Regional - GAITEK

CTA GRUPO ITP

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
MARVEL	"Sensor systems - Aernnova Structural integrity monitoring with ultrasonic radar built into reusable shuttle vehicles"	Others
INGEMAT		
Robcom	Robotized machining cell with flexible fixture	Others
GRUPO ITP		
JTI - Clean Sky	Advanced propulsion plants: Development of new concepts for the future generation of aircraft propulsion plants in accordance with the environmental requirements established by ACARE.	European - CLEAN SKY
AIDA - Aggressive Intermediate Duct Aerodynamics for Competitive and Environmentally Jet Engines	Aerodynamics: Development of transition ducts between compressors and between turbines in order to reduce consumption and noise emitted by turbomachinery.	European - FP6
MAGPI - Main Annulus Gas Path Interactions	Interaction of secondary flows with the main flow and effects of cavities in turbomachinery.	European - FP6
PREMECCY - Protective Methods for Combined Cycle Fatigue in Gas Turbines	Fatigue prediction: Study of mechanisms and prediction of fatigue in turbomachinery	European - FP6
TATMO - Turbulence and Transition Modelling for Specigla Turbomachinery	Aerodynamics: Improvements in efficiency by means of non-stationary at aerodynamic analysis	European - FP6
VITAL - Environmentally Friendly Aero Engine	Advanced propulsion plants: Integrated project. Substantial reductions in emissions (-18% of CO2) and noise (-6dB).	European - FP6
DREAM - Validation of Radical Engine Architecture Systems	Advanced propulsion plants: Study of new architectures for propulsion plants based on the open-rotor concept	European - FP7
FUTURE - Flutter- Free Turbomachinery Blades	Aerodynamics: Technological development to reduce the flutter phenomenon in turbomachinery blade crowns	European - FP7
ERICKA - Engine Representative Internal Cooling and Applications	Technologies for turbine refrigeration	European - FP7
ELUBSYS - Engine Lubrication System Technologies	New lubrication technologies in gas turbines	European - FP7
OPENAIR - Optimisation for low Environmental Noise Impact Aircraft	Technologies for reducing noise in aircraft	European - FP7
TAG - Feasibility studies for the development of general aviation turbines	Feasibility studies for the development of low pressure turbines, structures and external components in turbines for general aviation	National - SAE
MASIR - Advanced Noiseless Machining	Noise reduction: Techniques to reduce noise in industrial environments engaged in the precision machining and well-being of parts.	National Calls
OPENAER - New engine and aircraft configurations for the future air transport system	Aerodynamics, Methods, Materials, Mechanical design, Manufacture and Control.: Development of technologies for the design and manufacture of components in the hot area of an aeronautical gas turbine in "open-rotor" configuration	National-CENIT

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
GRUPO ITP		
NOISE MEASUREMENT - Optimisation and validation of techniques for the advanced measurement of noise in a jet engine.	Advanced instrumentation: Optimisation and validation of techniques for the advanced measurement of noise in a jet engine.	Regional - Madrid Region
SACMI - Advanced Control and Monitoring System of ITP	Control systems: Development of a control system applied to the fuel control unit of an aeronautical engine.	Regional - Madrid Region
NOVALTI		
Turbine blades for test RIGs	PTB4++, PTB8, PTB9	Others
ORBITAL AEROSPACE		
Standardisation of the development of onboard	Design and development of an application programming interface for the communication between IMA partitions and Cockpit Display System	National - CDTI
Test benches SW	System that provides a common environment for running design models, simulations and real equipments to support testing and / or simulation of avionic equipment subsystem or system.	National - CDTI
SENER		
HP-SMARTEMA- Development of high power density electrical actuators.	Development of high power density electrical actuators. Collaboration with SENER, CTA, Castle Aero	European - CLEAN SKY
Actuator for Turbomeca	Design, manufacture and validation of the initial prototypes for electromechanical actuation systems for helicopter engines. Collaboration with TECNALIA, CTA and ACITURRI.	European - CLEAN SKY
MTU project	Development of prototypes for airplane motor actuators Collaboration with TECNALIA, CTA, ACITURRI and MACCON.	European - CLEAN SKY
Robotic arm for extravehicular activities in space	Robot arm	European - ESA
HISAC (Environmentally Friendly High Speed Aircraft)	Assess the feasibility of a small, environmentally friendly and economically feasible supersonic transport aircraft.	European - FP6
NICE TRIP (Novel Innovative Competitive Effective Tilt Rotor Integrated Project): convertible aircraft-helicopter	SENER designs the rotor components, the drive system and the nacelle	European - FP6
VULCAN - Vulnerability analysis and new materials and design approaches for aircraft strengthening against fire and blast due to accident or terrorist attacks	Development of improved design for sub-structures with high energy absorption capacity materials in the presence of fire and explosion.	European - FP6
WIMAAS (Wide Maritime Area Airborne Surveillance) program	Future Unified European Maritime Surveillance System. Collaboration with INTA.	European - FP7
Feasibility study and configuration of EUCLID project		National - IDC

HADA

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
MICRODIS - Microelectronic devices for space instrumentation		National - IDC
Feasibility study for MISTIGRI project		National - IDC
SCIMIS - Feasibility study for scientific missions		National - IDC
EMA (Health Monitoring for Actuators)	Definition of a real-time monitoring system for electromechanical actuators for the determination of operating failures and operability level, providing high added value for the final product	National - SAE
AGCFO	Operations on the ground and in captive flight in an air-transported microlauncher	National - SAE
FCU WSO - UV camera for world space observatory		National - SAE
SOL-2 - Optical communications for deep space missions		National - SAE
OPENAER	Study new aircraft and engine configurations for the future care transport system.	National-CENIT
DEIMOS - Development and innovation of polymeric membrane and solid oxide fuel cells	Fuel cells for aircraft: Development and innovation of fuel cells of polymeric membrane and solid oxide	National-CENIT
SINTONIA	Unmanned zero environmental impact oriented systems.	National-CENIT
PIVOT - Advanced mechanical flexion elements for small turns		Regional - GAITEK
HEALTH-HM	Real-time monitoring of aeronautical actuators to determine operating failures and operability levels	Regional - GAITEK
ELGA	Integrated landing gear system by means of electromechanical drive and control (EMLG – ElectroMechanical Landing Gear)	Regional - INNOTEK
HDR qualification with potentiometers		Others
Image navigation		Others
SISTEPLANT		
PLATINO - HADA - UAV convertible aircraft-helicopter	Led by INTA, Sisteplant provides the health monitoring system	National-CDTI
SIMAP - UAV healthmonitoring system	Design of health monitoring system for UAV	National-CDTI
TECNALIA		
AIRHEM -2-	Electronics for transport: Health Monitoring for structures	Regional - ETORTEK
ACTIPPTSENS	Active pressure, position and temperature sensors for turboshaft engines	European - CLEAN SKY
REMFOS	Design , manufacturing and reliability evaluation of embedded sensors	European - CLEAN SKY

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
TECNALIA		
ASE-TB	Design and development of an adaptive, smart and eco-efficient test bench for synchronized testing of linear actuators in the aeronautic sector	European - CLEAN SKY
ROVE	Exomars rove vehicle re-design by using multifunctional technologies for the mobility system, power and solar panels integrated into composite chassis	European - FP7
SIDER	Radiation shielding for spacecraft structures by using nanomaterials.	European - FP7
SMARTESS	Mars entry Thermal protection system based in advanced materials	European - FP7
HAMLET	Solid lubricants for space mechanism	European - FP7
HYDRA	TPS thermal protection systems for MSR Mars and Moon mission based in ablative materials	European - FP7
ALICIA	Electronics for transport: Development of the new cabin concept and optimisation of operations under all conditions	European - FP7
ESPOSA - Integrated approach to efficient propulsion and related aircraft systems for small-size aircraft	"Development and integration of novel design and manufacture technologies for a range of small gas turbine engines up to approx. 1000 kW. Coordinator: PRVNI BRNENSKA STROJIRNA VELKA BITES A.S. Some other participants: AVIO S.P.A, MOTOR SICH JSC, HONEYWELL INTERNATIONAL SRO, PIAGGIO AERO INDUSTRIES SPA, FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V, etc"	European - FP7
SARISTU- Integrated approach to smart airframe structures	"The project proposal concerns the challenges posed by the physical integration of smart intelligent structural concepts. Coordinator: AIRBUS OPERATIONS GMBH. Some other participants: ALENIA AERONAUTICA SPA, AERNNOVA, SAAB AKTIEBOLAG, SHORT BROTHERS PLC, GKN Aerospace Services Limited, etc"	European - FP7
ACTUATION 2015- Integrated modular actuation systems for the future all-electric aircraft	"ACTUATION 2015 aims to develop and validate a common set of standardised, modular and scalable EMA resources for all actuators and all types of aircraft. Coordinator: GOODRICH ACTUATION SYSTEMS SAS. Some other participants: AIRBUS, ALENIA, SENER, HISPANO SUIZA, CESA, etc"	European - FP7
PROMETEO	Fire detection system by using new telecom architecture	National - INNPRONTA
TEY		
Heat treatments	SENER R&D Projects	Others

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
ACITURRI		
EMC2-Factory	"Eco Manufactured transportation means from Clean and Competitive Factory"	
LEADING EDGE A400M	Bird impact composites	Others
ALESTIS		
Environmental and intelligent technologies for composite materials structures generation (TARGET)	DEVELOPMENT OF COMPOSITES	National - CENIT
Window Frame A380	DEVELOPMENT OF COMPOSITES	Others
360º Fabric Composite	DEVELOPMENT OF COMPOSITES	Others
ALTRAN		
ATLANTIDA: Application of Leading Technologies to UAVs for Research and Development into Air Transit Management (ATM)	The Atlántida project tackles scientific and technological challenges for the introduction of high levels of automation in the future management if air space. This project is led by BOEING.	National - CENIT
SOLAR IMPULSE	Simulation of aircraft misison. Complete flight to Earth propelled by solar panels.	Others
BURULAN		
More integrated offer	A new plant for surface treatments, primer and final paint, assemblies and stapling of ball and socket joints. Bearing installation and staking	Others
CTA		
CAYLEY "Industrial implementation of new flat panels from recyclable and/or natural materials for the aeronautical industry". Fire certification tests for interior materials	Consortium coordinated by BOEING R&T	European: CIP Eco-Innovation
Development of green materials - Fire certification tests for interior materials	Consortium coordinated by BOEING R&T	National - CENIT

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
CTA		
ATLANTIDA - UAV Technologies application for ATM research & development	Consortium coordinated by BOEING R&T	National - CENIT
DUOMO	Consortium coordinated by DANOBAT/ IDEKO	Regional-ETORGAI
ACTIMAT	Consortium coordinated by GAIKER	Regional - ETORTEK
SITICAD	IR for Tensional analysis. Post-proces techniques	Regional - SAIOTEK
IK4		
TATEM: Technologies and tools for novel maintenance Concepts	Maintenance	European - FP6
FOREMOST: Fullerene-based opportunities for robust engineering: making optimised surfaces for tribology	Creation of nanostructured surfaces through the addition of inorganic fullerenes to improve tribiological features	European - FP6
MERLIN: Development of Aero Engine Component Manufacturing using Additive Manufacturing	Rolls Royce/ITP/MTU/Turbomeca/TWI	European - FP7
ASPIRATE	IDEKO-IK4, Ortza S. Coop., Zubiola S. Coop, INVENT GmbH - The main objective of ASPIRATE is to develop an innovative technology for machining carbon and glass fibre reinforced plastic (CFRP and GFRP) parts	European - FP7
CAMEL	Drastic reduction in the consumption of coolant in grinding operations by means of Minimum Quantity of Lubricant techniques (MQL): ECOLOGICAL GRINDING	European - FP7
FIRE-RESIST. Developing novel Fire-resistant High performance Composites	Developing novel Fire-resistant High performance Composites - EADS, BOMBARDIER, LLOYD, VTT,	European - FP7
INNOSHADE: Innovative Switchable Shading Appliances based on Nanomaterials and Hybrid Electrochromic Device Configurations	Fraunhofer, EADS, CNRS, AKZO, etc.	European - FP7
ISAM-A. Materials with autosensoral capacity; investigation of magnetorheological damping systems for aircraft		National - CDTI
ISAM-A. Materials with autosensoral capacity;	Research into magentorheolgical shock-absorbing systems for aircraft - CESA	National - CDTI
OPENAER: New aircraft and engine configurations for the future system of air transport	Service life prediction in critical rotating components - manufacturing strategies (machining) at thickness limit / ITP, Danobat, Lealde and others	National - CENIT
OPENAER: New aircraft and engine configurations for the future system of air transport	Predicting service life in critical rotating components - manufacturing strategies (machining) at thickness limit / ITP, Danobat, Lealde and others	National - CENIT
DEIMOS: Control and monitoring of hydrogen pile prototype	Reliability and maintenance - CESA	National - CENIT

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
RC2: Quick and cost-cutting manufacturing of functional prototypes for gas turbines made of pile up metallic layers	Rapid manufacture of aeronautical turbine blade prototypes using "laser cladding" techniques.	National - Eureka-Profit
Rough alignment of large-lize parts for chip forming processes.	Rough alignment of parts in vertical turning and milling.	National - INNPACTO
ENNGRANA: Development of flexible, advanced manufacturing processes of high performance and high responsibility gears.	DMP	National - INNPACTO
VARIPASS	MPB Aerospace and Kennametal Ibérica	National - PROFIT
RAMPE: Alternative coatings to environmentally contaminating heavy metals	Development of highly contaminating tribiological replacement coatings	National - PROFIT
ALTERA: Alternative treatments to replace Cr and Cd	Steam phase physical deposition of non-contaminating replacement coatings	National - PROFIT
Blade repair workshop	Manufacturing and maintenance: Línea Aérea and Danobat	National - PROFIT
Certification of miniature screw spindles for the aeronautics sector.	KORTA S.A.	Regional - COMPITE
SURFER: Development of laser technology applications in the modification and finish of functional surfaces.	AIN, AIMME, AIDO	Regional - ETORGAI
EUSKESTUR: Basque collaboration project for the manufacture of a new generation of radial turbine structures.	Modelling of manufacturing process to reduce development time and improve cathode design / PECM Engineering, ITP	Regional - ETORGAI
Inspection of surface defects in metal materials.	Inspection of surface defects in metals by active thermography for the replacement of magnetic particles.	Regional - ETORGAI
IÑUDE	Aernnova	Regional - ETORGAI
EUSKESTUR: Basque collaboration project to manufacture a new generation of turbine radial structures.	Modelling of manufacturing process to reduce development time and improve cathode design / PECM Engineering	Regional - ETORGAI
MANUFACTURING 0,0	Efficient management of the latest materials and by means of nonconventional electrochemical techniques	Regional - ETORTEK
PROFUTURE: Development of technologies and processes for the factory of the future.	ITP	Regional - ETORTEK
AIRHEM: Health monitoring en aeronáutica	Maintenance - Sensorisation and monitoring / CTA	Regional - ETORTEK
LASCLEAN: Laser surface cleaning in industrial applications	Inser-robótica, PCB	Regional - GAITEK
PRECISUS: Ultrasonic assisted drilling for high precision holes in aeronautics	Industrias Laip	Regional - GAITEK
OPTICAM: Development and implementation in CAD/CAM of models for the simulation of mechining processes.	AyS, Bundinberri, Talleres Aratz	Regional - GAITEK

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
IK4		
Manufacturer and prediction of service life in high responsibility parts for aviation turbines.	ITP & PRECICAST	Regional - INTEK
Augmented reality for assembling aeronautical equipment	EADS	Others
Optimisation of the Manufacturing Process of parts for the aeronautics sector	Optimisation of the manufacturing process of engine parts and the solution of vibration problems during machining.	Others
Thermo-mechanical fatigue tests with minimum thermal and phase gradiantes.	CICYT	Others
VARIPASS	Optimisation of the machining of thin titanium parts.	Others
HEMA: actuators health monitoring	Maintenance - sensorisation and monitoring of aeronautical actuators / SENER	Others
Change management system.	New system for speeding up the machining operation change request process. ITP, Industria de Turbo Propulsores, S.A	Others
Tool management system (FTKTool)	FTKTool is a system for managing the processes, tools and the pre-regulation of machine correctors. Extension of functionalities: -Data exchange between FTKTool and SAP. -Broaching tool sharpening control. -Search for reusable components. -Control of tools ordered ad measurements (Poka-Yoke) ITP, Industria de Turbo Propulsores, S.A	Others
GRUPO ITP		
FANTASIA - Flexible and Near-Net-Shape Generative Manufacture Chains and Repair Techniques for Complex Shaped Aero Engine Parts	Repair: advanced processes. New manufacturing and repair techniques based on LMD (Laser Metal Deposition) and LDF (Laser Direct Formig)	European - FP6
VERDI - Virtual Engineering for Robust Manufacturing with Design Integration	Process simulation: Production of scrap during the development stage (virtual tests) and reduction of engine weight (emission reduction)	European - FP6
ACCENT - Adaptive Control of Manufacturing Processes for a New Generation of Jet Engine Components	Process simulation: Development of adaptive control technologies for terrible machine component oriented manufacturing processes	European - FP7
ALEXANDRIA	Development of Damage Inspection Techniques and Methodologies and New Generation Dimensional Metrology for the Aeronautics, Railways, Naval and Wind Power sectors.	National - MICIN
DESAFIO - Development of High Reliability Manufacturing Systems for Rotating Parts with High Surface Integrity Requirements	Development of High Reliability Manufacturing Systems for rotating parts with High Surface Integrity Requirements.	National - MICIN
MATERIALES - Oxycarbide layers of multi-component silicon on metal alloys surfaces by plasma spray	Development of the application of coatings by means of plasma spray	National - PROFIT

SENER

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
RAMPE - Alternative coatings to heavy metals (RAMPE)	Residue removal: Development of alternative coatings for removing Cr-VI	National - PROFIT
VANCAST - Next Generation Nozzle Guide Vane Design and Casting Technology	Technologies for the Design and Casting of the New Generation of Low-pressure Turbine Blades.	Regional - Basque Country Calls
SAGER - Large-scale Energy Storage Systems for the Electricity Grid	Development of energy storage technologies.	Regional - Basque Country Calls
EUSKESTUR	Manufacturing technologies: Development of Basque excellence pole for the manufacture of radial structures for aeronautical turbines	Regional - Basque Country Calls
GENESYS		Regional - Basque Country Calls
DIALPE - Fatigue life design and verification of the vibration behaviour of gas turbine monocrystal blades	Mechanical technology: Study of fatigue and service life behaviour of small size monocrystal blades for a gas turbine.	Regional - Madrid Region
GRUPO TTT		
Prosave: Eco-efficient aircraft	Leader: CESA	National-CENIT
Landing gear protector	Integration of special processes in the manufacture of metal parts. Partners: Tratamientos Térmicos TTT, Ikankronitek and Iontech	Regional - INTEK
MESIMA		
Euskertur	ITP/ PCB	Regional - Basque Country calls
NOVALTI		
MHM	NOVALTI-UNI. MONDRAGON	European - MANUNET
GONDOLA	NOVALTI-TECNALIA	Regional - GAITEK
PAYLOAD	NOVALTI-UPNA-UPV	National - INNPACTO
SENER		
High precision linear actuator (HPLA)	High precision Linear Actuator based on own design, applicable to deployment mechanisms	European - ESA GSTP
ACTUATION 2015 - Health Monitoring in Control and Actuation Systems	Control, diagnosis, and prognosis of the operating function of actuators in order to optimize their operation	European - FP7
Test bench	Generic testbed for Guidance, Navigation and Control systems (GNC / AOCS)	European - ESA
SENARIO - Advanced sensors and novel concepts for intelligent and reliable processing in bonded repairs	Attitude control systems: Development of innovating sensorial systems linked to intelligent control equipment and aerostructures maintenance methodologies.	European - FP6
NOESIS - Aerospace nanotube hybrid composite structures with sensing and actuating capabilities	Development of composite material with carbon nanotubes and with sensorial and drive capacity, by itself for aeronautics applications.	European - FP6

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
SENER		
DATAFORM - Digitally Adjustable Tooling for manufacturing of Aircraft panels using multi-point FORMing methodology	Development of a flexible technology for the manufacture of metal aircraft panels, based on computer-controlled multipoint tooling methodology	European - FP7
HP-SMART-EMA	Development of high energy density electrical actuators	European - FP7
RESTAURAC	Development of a demonstrator for the restoration of degraded images due to high compression levels 2008	National - COINCIDENTE
Materials	Definition of component admissibles in carbon fibre and the effects on the fatigue life of hybrid structures	Others
Miniaturised Deployment Regulator MDR	Regulator appropriate for the deployment of small appendices or mini satellite panels	Others
Literary Actuator with potentiometers (HDRA_P)	Rotating actuator for space applications (HDRA) incorporating angular position sensors (potentiometers).	Others
SISTEPLANT		
ICARO - composite aerostructures	Industrialisation in advanced materials - Led by Airbus, research into materials and manufacturing systems for aerostructures	National - CDTI
TECNALIA		
SPECIMEN	Study on the processing and the performance of cyanate ester composites towards the optimization of harsh service environments	European- Clean Sky
APRIL	Development of advanced preforms for LCM technologies	European- Clean Sky
HP-SMARTEMA	Development of high power density electrical actuators. Collaboration with SENER	European- Clean Sky
ADVITAC - Advanced integrated composite tail cone	Development of new composite materials and technologies for the tail cone of future regional aircraft / DAHER Aerospace, Coriolis, FRT, Univ. Cranfield...	European - FP7
IAPETUS - Innovative repair of aerospace structures with curing optimization & life cycle monitoring abilities	Development of structural repair processes by means of new materials and technologies / Huntsman, Inasco, HAI, DAHER, Univ. Patras...	European - FP7
LAYSA - Multifunctional layer for safer aircraft composite structures.	Developments of multifunctional laminated composite materials/ Aernnova, Aries Complex, Inasco, HAI, Univ. Patras, etc...	European - FP7
INMA	Innovative Manufacturing of complex Ti sheet aeronautical components/ Univ. Patras, Airbus, EADS, INDUSTRIAS PUIGJANER S.A.etc	European - FP7
ELECTRICAL	Novel aeronautical multifunctional composite structures with buk electrical conductivity and self-sensing capabilities(Airbus, Univ. Patras, Aernnova, EADS, Short Brothers, Arkema, etc	European - FP7
MAAXIMUS- More Affordable Aircraft through eXtended, Integrated and Mature nUmerical Sizing	Fast development and right-first time validation of a highly-optimised composite fuselage thanks to a coordinated effort between virtual structure development and composite technology. Coordinator: AIRBUS. Some other partners: BOMBARDIER: SONACA; TAI; DLR, INASCO, etc	European - FP7
LOCOMACHS	Low Cost Manufacturing & Assembly of Composites	European - FP7

ACRONYM and/or NAME OF THE PROJECT and brief description	PROJECT SUMMARY / RELEVANT DETAILS / CONSORTIUMS	CALL
CABLEBOT	Parallel Cable Robotics for Improving Maintenance and Logistics of Large-Scale Products. Collaboration with EADS	European - FP7
EMC2	Eco Manufactured transportation means from Clean and Competitive Factory. Collaboration with SPASA - ACITURRI AERONAUTICA	European - FP7
REFORM	Resource-Efficient Factory Of recyclable Manufacturing composite components. Collaboration with the University of Sheffield - Department of Advanced Manufacturing Research Centre (AMRC) and Formtech Composites Limited.	European - FP7
AMAZE	Collaboration with the European Space Agency (ESA), AVIOprop, AVIO S.p.A, Thales Alenia Space, BAE Systems and Bombardier.	European - FP7
ICARO - Innovation in advanced composite and optimised rear-end	Development of new technologies for future aircraft in composite/ Collaborations with AIRBUS, AERNNOVA,CASA ESPACIO, IDEC, SISTEPLANT	National - CENIT
TARGET- Intelligent and Environmentally Sustainable Technologies for the Generation of Structures in composite materials.	Development of new technologies for future aircraft in composite/ Collaborations with AIRBUS, AERNNOVA,EADS-CASA, SAIREM, M-TORRES	National - CENIT
PROSAVE2- Research project into advanced systems for a more eco-efficient aircraft.	"Development of new technologies for aeronautic systems and sub-systems. Collaborations with CESA, AERNNOVA, TTT, etc"	National - CENIT
SINTONIA- SIstemas No Tripulados Orientados al Nulo Impacto Ambiental	Development of technologies to improve the efficiency of UAV. Collaborations with BR&TE, AERNNOVA, CESA, ACITURRI, SENER, etc	National - CENIT
TEY		
Heat treatments	ITP	Others
WEC		
OPENAER	Characterisation of laser weld in parts for aeronautical engines	National - CENIT
EUSKESTUR - Laser Welding	New generation for engine radial structures	Regional - ETORAGAI
Laser Cutting	Characterisation of optimised laser cutting parameters in aeronautical materials	Others

BOMBARDIER CSeries

Leading programmes

AIRBUS **A350XWB** – Risk sharing partners: AERNNOVA, ACITURRI, ALESTIS

AIRBUS **A380** – Risk sharing partners: AERNNOVA, ACITURRI, ALESTIS, NOVALTI

AIRBUS **A400M** – Risk sharing partners: ACITURRI, ALESTIS

BOEING **747-8I/F:** AERNNOVA

BOMBARDIER **CSeries** – Risk sharing partner: AERNNOVA

DASSAULT **FALCON 7X** – Risk sharing partners: ACITURRI, ALESTIS

EMBRAER **ERJ 135/145** – Risk sharing partner: AERNNOVA

EMBRAER **170/190** – Risk sharing partner: AERNNOVA

EMBRAER **LEGACY / PHENOM** – Risk sharing partner: ALESTIS

EPI **TP400** – Consortium member: GRUPO ITP

EUROJET **EJ200** – Consortium member: GRUPO ITP

MTRI **MTR390E** – Consortium member: GRUPO ITP

ROLLS ROYCE **TRENT 500/900/XWB** – Risk sharing partner: GRUPO ITP

ROLLS ROYCE **TRENT 1000** - Risk sharing partners: ACITURRI, GRUPO ITP

SIKORSKY **S-92** – Risk sharing partner: AERNNOVA

TURBOMECA **(ALL RANGE)** – Exclusive transversal agreement for special gears: DMP

AIRBUS A380

SIKORSKY S-92

ROLLS-ROYCE Trent 1000

3.4.- Programmes and clients

DASSAULT FALCON 7X

Current and former Programmes & Clients

AEROSTRUCTURES

AIRBUS A300/ 310/ 318/ 319/ 320/ 321/ 330/ 330MRTT/ 340/ 350XWB/ 380/ 400M
ATR 42, 72
BOEING 737, 747-LCF, 747-8I/F, 787, E-3 AWACS
BOMBARDIER CRJ700/ 900, CSeries
DASSAULT FALCON 7X
DORNIER DO728
EADS C101/ 212/ 295, CN235, TBM700
EMBRAER ERJ135/ 140/ 145/ 145LR/ 145XR, LEGACY EXECUTIVE/ SHUTTLE, LINEAGE, EMB170/ 175/ 190/ 195, PHENOM
EUROCOPTER AS332, EC135, NH90, TIGRE
SIKORSKY S-92
SINO SWEARINGEN SJ30

ENGINES

EPI TP400
EUROJET EJ200
GENERAL ELECTRIC CF700, CT7, F404/ 414, GE90-14/ 115, J79, LM2500, T700
HONEYWELL AS907, HTF7000, Lycoming T53/55, Garrett TPE331/TFE731, TF50 MTRI MTR390-Enhanced
PRATT & WHITNEY F135, JT8-STD / 200, PT6 / T3, PW535 /150/810
ROLLS ROYCE BR710/715, RB211,TRENT MT30/50, TRENT-500/ 700/ 800/ 900/1000/XWB
ROLLS ROYCE NORTH AMERICA A250, A601K, M250, T63
SNECMA ATAR 9KPLUS/09C/09K50, CFM 56, SaM146
TURBOMECA ARRIEL, MAKILA, ARRIUS

SYSTEMS & EQUIPMENT

AIRBUS Military, AIRCELLE, ALENIA, BAE Systems, BOMBARDIER, CESA, DIEHL-BGT, EADS, EUROCOPTER, EUROFIGHTER, GOODRICH, HONEYWELL, INDRA, LATECOERE, LIEBHERR, MARTIN BAKER, MBDA, MESSIER DOWTY, RATIER FIGEAC, ROLLS-ROYCE, SAGEM, SIKORSKY.

SPACE

ESA/NASA:

ARTEMIS, AURORA, CLUSTER, CX-OLEV, EGNOS, ENVISAT, EUREKA, GAIA, GTAB, HERMES, HERSCHEL-PLANCK, HUBBLE SPACE TELESCOPE, HIPPARCOS, INTEGRAL, ISEE-B/COLUMBUS/CRV, METOP, MSG, ROSetTA, SOHO, SPACELAB, ULISSES, XMM-NEWTON.

OTHERS:

AMC21, AMOS3, ARABSAT 4A/B, ARIANESPACE, ASTRA1M, ASTRIUM, CIEL-2, CHINASAT9, EXPRESS AM33/44, GE 1i/2i, GALAXY 17, GALILEO, HELIOS I/II, HISPASAT 1C/D, KOREASAT 5, METEOSAT, MINISAT, NETLANDER, OLYMPUS, PLEIADES, SPOT-4, SYRACUSE 3B, SUPERBIRD7, SPAINSAT, TURKSAT 3A, YAMAL 200.

Members agregate **turnover** and **employment** were in 2011

1,419 million € and 11,586 people

(directly generated in all of their worldwide facilities)

2011 Geographical breakdown:	Turnover (M€)	Growth vs. 2010	Employment	Growth vs. 2010
Basque Country	705	6.4%	3,840	2.7%
Rest of Spain	559	10.5%	6,007	8.2%
Rest of the World	154	79.6%	1,739	26.5%
TOTAL	**1,419**	**13.0%**	**11,586**	**8.7%**

2011	M€	% over Sales	Average % over Sales since 1993
R&D INVESTMENT	**193**	13.6%	17.0%
EXPORTS	**827**	58.3%	73.4%

CLUSTER DIMENSION (2010 figures comparison): Facilities in the Basque Country

1.1% of the **BASQUE GDP** (*)	**4.8%** of the **BASQUE Industrial GDP** (*)	**1.8%** of the **BASQUE Industrial EMPLOYMENT** (*)

HEGAN MEMBERS DIMENSION (2010 figures comparison): Total number of facilities in Spain

18.1% of the **SPANISH** (**) / **1.1%** of the **EUROPEAN** (***) — **aerospace TURNOVER**	**26.4%** of the **SPANISH** (**) / **2.0%** of the **EUROPEAN** (***) — **aerospace EMPLOYMENT**	**20.7%** of the **SPANISH** (**) / **1.5%** of the **EUROPEAN** (***) — **aerospace R&D INVESTMENT**

65 AEROSPACE ORGANIZATIONS

HEGAN Members (representing the 99.5 % of the Aerospace turnover generated)

5 TIER1
Aerostructures
Engines
Space

9 COMPANIES with more than 45 people

21 SMEs with less than 45 employees

132 FACILITIES
66 in the Basque Country
48 in the rest of Spain
18 abroad (Brazil, Germany, India, Malta, Mexico, Romania, UK, USA)

1 AEROSPACE R&D CENTRE (CTA)
Testing (R&D and Certification)

2 R&D CORPORATIONS with 12 R&D CENTRES with aerospace activities

Non-Members

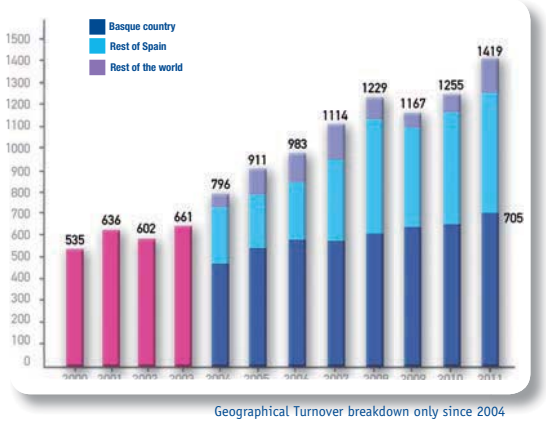
22 COMPANIES with aerospace activities

5 UNIVERSITIES (ETSIB: Aeronautical Intensification Course)

(*) EUSTAT 2010 (a), (**) TEDAE 2010, (***) ASD 2010

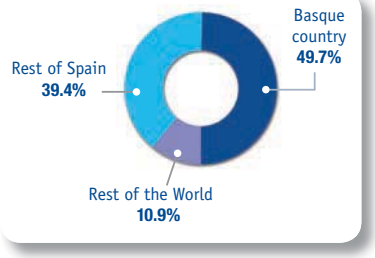
3.5.- Facts and figures
Turnover

Aggregate turnover in M€

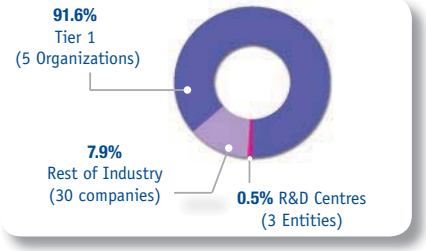


Geographical Turnover breakdown only since 2004

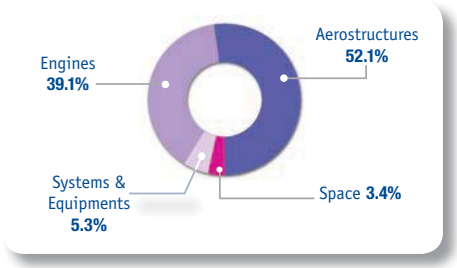
Geographical distribution of Turnover



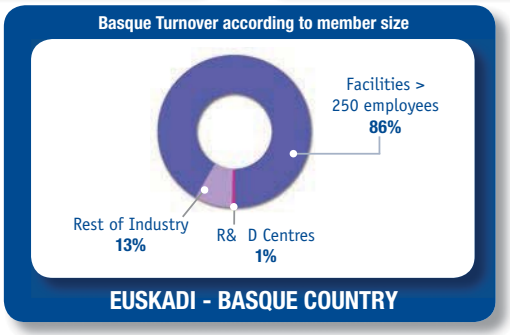
Turnover according to member size



Turnover according to subsectors

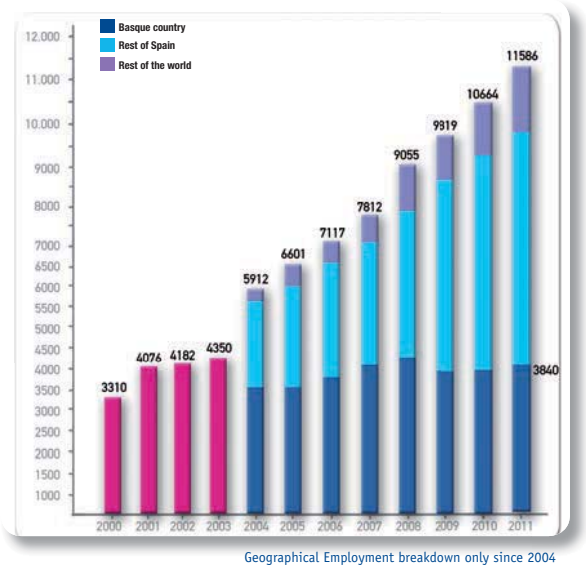


Basque Turnover according to member size



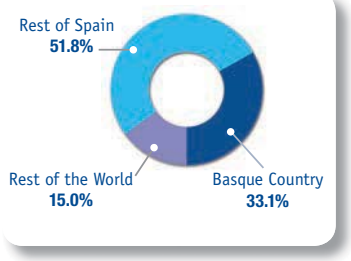
3.5.- Facts and figures

Employment

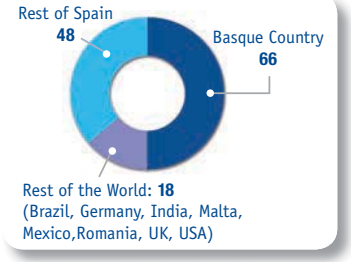


Geographical Employment breakdown only since 2004

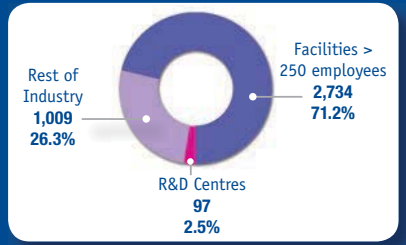
Geographical distribution of jobs



Members facilities

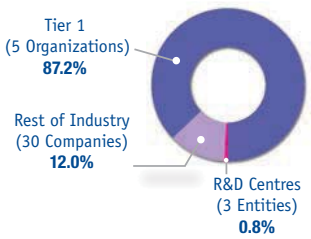


Basque Employment according to member size

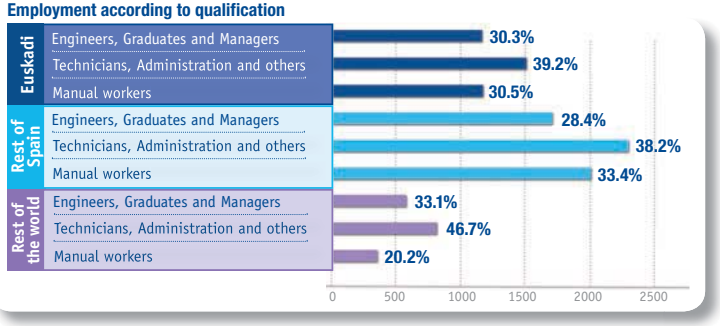


EUSKADI - BASQUE COUNTRY

Employment according to member size

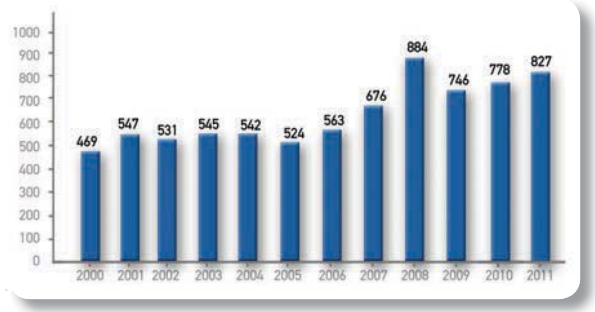


Employment according to qualification

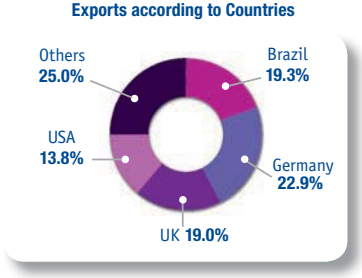


3.5.- Facts and figures

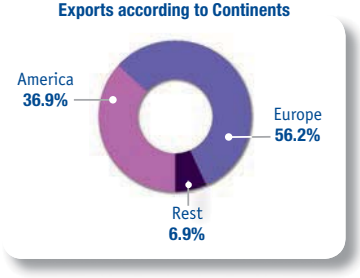
Exports in M€



Exports according to Countries



Exports according to Continents

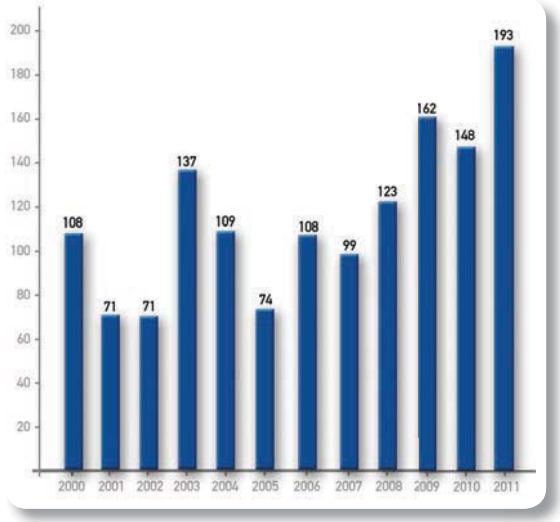


R&D in M€

R&D Investment over Sales %
13.6%

R&D Self-financing (%)
80.0%

R&D personeel
1,431



CHAPTER FOUR

- ACKNOWLEDGEMENTS -

"I do what you cannot do and you do what I cannot do. **Together** we can do **great things**."

Mother Teresa of Calcutta

In our dream of 2011 –which you undoubtedly share–we saw Hegan as an Association built at a human scale, flexible and transparent, based on open, participative structures, in which everyone has the opportunity of contributing the best we have to offer, to generate economic and social value.

A secure space in which one can share - ask, listen, discuss, propose .... - to do, with the efforts of everyone involved, *great things*.

Many thanks to all the people who, *together*, have made this dream come true.

AGRADECIMIENTOS

"Yo hago lo que usted no puede, y usted hace lo que yo no puedo. **Juntos** podemos hacer **grandes cosas**."

Madre Teresa de Calcuta

En nuestro sueño 2011 –que seguramente compartís– veíamos a Hegan como una asociación hecha a la medida de las personas. Flexible y transparente, basada en estructuras abiertas y participativas, en las que todo el mundo tiene la oportunidad de aportar lo mejor de sí mismo para generar valor económico y social.

Un espacio seguro en el que compartir – preguntar, escuchar, dialogar, proponer… - para construir, entre todos, *grandes cosas*.

Gracias a tod@s por hacer posible la realidad que, *juntos*, hemos soñado.

ESKER ONEZ

"Zuk egin ezin dezakezuna egiten dut nik, eta nik egin ezin dezakedana egiten duzu zuk. **Elkarrekin gauza handiak** egin ditzakegu."

Ama Teresa Kalkutakoa

2011rako gure ametsean –zuek ere amets bera izango zenuten, ziurrenik–, pertsonen neurrira egindako elkarte gisa ikusten genuen Hegan. Malgua, gardena, egitura ireki eta parte-hartzaileetan oinarritutakoa, jende guztiak barruan duen onena eskaintzeko aukera izan dezan balio ekonomikoa eta soziala sortzeko orduan.

Partekatzeko –galdetzeko, entzuteko, elkarrekin hitz egiteko, proposatzeko…– gune segurua, guztion artean *gauza handiak* eraiki ditzagun.

Eskerrik asko guztioi *elkarrekin* amestutako errealitatea egia bihurtzeagatik.

Diseño y maquetación: amaiaelgezabal@gmail.com

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SEVENTH FRAMEWORK PROGRAMME

hegan
basque aerospace cluster

Parque Tecnológico, 303
48170 ZAMUDIO - Bizkaia
SPAIN

hegan.aero

Tel: +34 944 318 987
Fax: +34 944 317 976
hegan@hegan.com