

# 2022 Members Activities (in Detail)

Actividades Socios 2022 (en Detalle)

Bazkideen jarduerak 2022an (Xehatuak)



25 urte **berdeago** hegan



# MEMBERS ACTIVITIES

## 2022

Aerostructures

3 > 11

Engines

12 > 19

Systems & Equipment

20 > 25

Space

26 > 34

MRO

35 > 37

R&D Projects

38 > 50

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>AALBERTS SURFACE TECHNOLOGIES TEY</b>			
Heat treatments	ACITURRI	AIRBUS	AIRBUS families
Heat treatments	AIRBUS DS	AIRBUS DS	AIRBUS DS families
Heat treatments	EMBRAER	EMBRAER	KC-390
Heat treatments	AERNNOVA	FOKKER	miscellaneous
Heat treatments	HÉROUX-DEVTEK SPAIN	SIKORSKY	S-92
<b>ACITURRI</b>			
HTP	AIRBUS Canada	AIRBUS	A220
VTP Dorsal Fin	AIRBUS OPERATIONS	AIRBUS	A320 & A320neo
HTP Torsion box	AIRBUS OPERATIONS	AIRBUS	A320 & A320neo
Leading edge panels and LEX of HTP	AIRBUS OPERATIONS	AIRBUS	A320 & A320neo
TIP's HTP	AIRBUS	AIRBUS	A320 & A320neo
TTP's	AERNNOVA	AIRBUS	A320 & A320neo
Leading edge of HTP	AIRBUS DS	AIRBUS	A330
Passenger door structural assembly	ALESTIS	AIRBUS	A330
CFRP Spar Outboard Aileron	AIRBUS OPERATIONS	AIRBUS	A330
TIP's HTP	AIRBUS DS	AIRBUS	A330
PAX Door	AIRBUS	AIRBUS	A330
Ribs HTP	AIRBUS	AIRBUS	A330
PAX Door	AIRBUS	AIRBUS	A330neo
Ribs HTP	AIRBUS	AIRBUS	A330neo
VTP	AIRBUS OPERATIONS	AIRBUS	A350 XWB
Internal structure of S19	AIRBUS OPERATIONS	AIRBUS	A350 XWB
Outboard FLAP CFRP parts (V1000)	FOKKER-GKN	AIRBUS	A350 XWB
Belly Fairing - Risk Partner	AIRBUS	AIRBUS	A350 XWB
S19.1 -Tail Cone	AIRBUS	AIRBUS	A350 XWB
Belly Fairing (Zones 0,1, 2 , 3.1, 3.2, 3.3 y 4)	AIRBUS DS	AIRBUS	A380
MLGD / S19.1 / Rear Fairing	AIRBUS	AIRBUS	A380
Belly Fairing (panels)	AIRBUS DS	AIRBUS	A380
Auxiliary Fin & HTP Box Extension	DAHER-SOCATA	AIRBUS	A400M

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>ACITURRI</b>			
CFRP Rudder Spar	AIRBUS FRANCE	AIRBUS	A400M
Sponsons	DAHER SOCATA	AIRBUS	A400M
Wing to Fuselage Fairing	AIRBUS	AIRBUS	A400M
Flap CFRP parts and Vanes assembly	AIRBUS OPERATIONS	AIRBUS	A400M
Elevator & Cowlings	AIRBUS DS	AIRBUS	A400M
Auxiliary Fin & HTP Box Extension	AIRBUS OPERATIONS	AIRBUS	BELUGA XL
Ventral Fin	AIRBUS OPERATIONS	AIRBUS	BELUGA XL
Wing Assembly Conversion	AIRBUS DS	AIRBUS DS	A330MRTT
Elevator	AIRBUS DS	AIRBUS DS	A400M
Cowlings	AIRBUS DS	AIRBUS DS	A400M
Central WING Box: structural assembly and equipment & Tip wings integration	AIRBUS	AIRBUS DS	CN235, C295
WING Integration	AIRBUS	AIRBUS DS	CN235, C295
WING LEADING EDGE	AIRBUS	AIRBUS DS	CN235, C295
Rear fuselage	AIRBUS DS	AIRBUS DS	CN235, C295
HTP / VTP	AIRBUS DS	AIRBUS DS	CN235, C295
Sponsons and Vertical Tail	FOKKER-GKN	AIRBUS HELICOPTERS	NH90
Rudder Components & Subassembly	AIRBUS DS	BOEING	737
FLAPERONS CFRP PANELS	BOEING	BOEING	777
Aileron	AIRBUS DS	BOEING	777
Flaperon	AIRBUS DS	BOEING	777
Keel Beams CFRP Parts cargo floor	BOEING	BOEING	787
HTP Tips & Strakelet	BOEING	BOEING	787
EDGE BANDS	BOEING	BOEING	787
Upper and Belly Fairing Panels	DAG	DAG	D328 ECO
WING Movables	DAG	DAG	D328 ECO
Rudder and elevators	DAG	DAG	D328 ECO
Rudder and Elevators	AIRBUS DS	DASSAULT	FALCON 10X
HTP Spars Assembly	AIRBUS DS	DASSAULT	FALCON 10X
Landing Gear Doors / Tail Cone	DASSAULT AVIATION	DASSAULT	FALCON 10X

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>ACITURRI</b>			
Elevators	AIRBUS DS	DASSAULT	FALCON 7X/8X
HTP Parts	AIRBUS DS	DASSAULT	FALCON 7X/8X
Ailerons	FOKKER-GKN	DASSAULT	FALCON 7X/8X
Winglet & Wingstub	EMBRAER	EMBRAER	190/195
Wing to Fuselage Fairing	EMBRAER	EMBRAER	KC-390
Central Fuselage	EMBRAER	EMBRAER	LEGACY450/500
Empennage & Wings	EMBRAER	EMBRAER	LEGACY450/500
Composite parts	EMBRAER	EMBRAER	LEGACY450/500
CFRP Fairings	AIRBUS DS	EUROFIGHTER	TYPHOON
Fuselaje	LILIUM	LILIUM	LILIUM
Wings and Canards	LILIUM	LILIUM	LILIUM
<b>AERNOVA</b>			
Design and Build Center Wing Box & Tail Cone	AIRBUS	AIRBUS	A220
Engineering support to front and mid fuselage	AIRBUS	AIRBUS	A220
MGL Doors & Elevators	AIRBUS	AIRBUS	A320
Cabin interiors: "Dado" panels	AIRBUS	AIRBUS	A320
MLG Doors	AIRBUS	AIRBUS	A330
Elevator components	AIRBUS	AIRBUS	A330
Karman fairings	AIRBUS	AIRBUS	A330
Design and Build Rear upper fuselage & Dorsal fin	AIRBUS	AIRBUS	A330XL Beluga
Design and Build Fish Tail & VTP fairing	AIRBUS	AIRBUS	A330XL Beluga
Design and Build of Wing fixed Traiting Edge & Elevators	AIRBUS	AIRBUS	A350XWB
Design and Build of HTP & MLG Bay Bulkhead	AIRBUS	AIRBUS	A350XWB
Rudder & Aii inlet bulkhead	AIRBUS	AIRBUS	A350XWB
Pax. Doors & Pylon Spar (composite)	AIRBUS	AIRBUS	A350XWB
Design and Build Sect. 19	AIRBUS	AIRBUS	A380
Design and Build Horizontal Stabilizer	AIRBUS	AIRBUS	A380
Ailerons Skins & Sect.19-19.1 pannels assembly	AIRBUS	AIRBUS	A380
Design & Build Probe & TE	AIRBUS DS	AIRBUS DS	A400M



General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>AERNNOVA</b>			
HTP Ribas & Engine cowlings	AIRBUS DS	AIRBUS DS	A400M
Metallic parts & FAL Support	AIRBUS DS	AIRBUS DS	A400M
Engine cowlings Assy & NLG Doors & Elevators	AIRBUS DS	AIRBUS DS	C295/CN235
Rear fuselage skins	AIRBUS HELICOPTERS	AIRBUS HELICOPTERS	H135
Tail boom, lower & upper strutture (floor to floor)	AIRBUS HELICOPTERS	AIRBUS HELICOPTERS	H225 SUPER PUMA
Components & assemblies	AIRBUS HELICOPTERS	AIRBUS HELICOPTERS	H225 SUPER PUMA
Rear fuselage & Horizontal stabilizer skins & components	AIRBUS HELICOPTERS	AIRBUS HELICOPTERS	TIGRE
Assembly Canopy	BAE SYSTEMS	BAE SYSTEMS	T-45 GOSHAWK
Floor assembly & Mid-cabin assembly	BELL	BELL	505 JET / RANGER X
Forward fuselage assembly & Tailboom	BELL	BELL	505 JET / RANGER X
Enginnering support to Center Wing Box and Wing ribs optimization	BOEING	BOEING	787
Design of Swing zone & Latching mechanism	BOEING	BOEING	747 LCF
Engineerig of Wing box, Spars & Stringers	BOEING	BOEING	747-8 I/F
Engineering of Spoilers, Ailerons & Fuselage Sect 42	BOEING	BOEING	747-8 I/F
MMA Wing Pylon	BOEING	BOEING	787 vP8
Large and Complex Machined parts and Assemblies	SPIRIT	BOIENG	777
Large and Complex Machined parts and Assemblies	SPIRIT	BOIENG	737NG / MAX
Engineering support to HTP, VTP and Passenger doors	BOMBARDIER	BOMBARDIER	LEARJET 85
Design and Build Horizontal & Vertical Stabilizers	EMBRAER	EMBRAER	E2
Forward fuselage	EMBRAER	EMBRAER	E2
Design and Build of Coplete Empenng and Rear Fuselage	EMBRAER	EMBRAER	EMB170/190
Design and Build Wing movables & Rudder	EMBRAER	EMBRAER	KC-390
HTP Composite components	EMBRAER	EMBRAER	KC-390
Design of Rear fuselage I and II & Cargo Ramp and Door	EMBRAER	EMBRAER	KC-390
Detail design of Wing Main Box and Pylon	EMBRAER	EMBRAER	KC-390
Components & Assembly Horizontal & Vertical Stabilizer	EMBRAER	EMBRAER	KC-390
Components & Assembly Wing Skins panels and spars	EMBRAER	EMBRAER	KC-390
Components & Assembly Wing Tip	EMBRAER	EMBRAER	KC-390
Components & Assembly Horizontal & Vertical Stabilizer	EMBRAER	EMBRAER	Praetor 500/600
Components & Assembly Ailerons and Spoilers	EMBRAER	EMBRAER	Praetor 500/600

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>AERNNOVA</b>			
Components & Assembly Rat and cargo doors	EMBRAER	EMBRAER	Praetor 500/600
Components & Assembly Tail cone	EMBRAER	EMBRAER	Praetor 500/600
Components & Assembly Wing Box	EMBRAER	EMBRAER	Praetor 500/600
Components & Assembly Horizontal Stabilizer	EMBRAER	EMBRAER	E2-175
Components & Assembly Flaps	EMBRAER	EMBRAER	E2-175
Components & Assembly Wing Skins Panels , Spars and Ribs	EMBRAER	EMBRAER	E2-175
FuelTanks	AIRBUS DS	EUROFIGHTER	TYPHOON
FuelTanks	LEONARDO	EUROFIGHTER	TYPHOON
FuelTanks	BAE SYSTEMS	EUROFIGHTER	TYPHOON
Design and Build of Flare Dispenser	EUROFIGHTER	EUROFIGHTER	TYPHOON
Rear fuselage & Tail boom	LEONARDO	NH INDUSTRIES	NH-90
Front fuselage composite panels	LEONARDO	NH INDUSTRIES	NH-90
Design and engineering of Complete and Equipped wings	PILATUS	PILATUS	PC24
Design and build of Rear fuselage / Aft transition tailcone	SIKORSKY	SIKORSKY	S-92/H-92
<b>AEROMECH</b>			
Wing ribs structure	non-disclosure	AIRBUS	A320
Wing ribs structure	non-disclosure	AIRBUS	350XWB
<b>AIBE</b>			
Precision machining of components	MTORRES	several	miscellaneous
Precision machining of components	KUKA SYSTEMS AEROSPACE	several	miscellaneous
<b>ARATZ GROUP</b>			
Composite Tooling	AIRBUS	AIRBUS	A350 XWB, A321XLR
Lay Up Tooling	AIRBUS	AIRBUS	A350 XWB, A321XLR
Assembly tooling	AIRBUS	AIRBUS	AIRBUS families
Composite Tooling	SPIRIT AEROSYSTEMS	AIRBUS	A220
Assembly tooling	DASSAULT	DASSAULT	Falcon family
Composite Tooling	DASSAULT	DASSAULT	Falcon family

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>ASTORKIA</b>			
Machined Components	AERNNOVA	AIRBUS	AIRBUS families
Machined Components	AERNNOVA	EMBRAER	EMBRAER families
Machined Components	non-disclosure	BOEING	747 / 787
<b>AYZAR</b>			
Heat treatments	ACITURRI	AIRBUS	Several
<b>BURDINBERRI</b>			
VTP Curing Tools	AERNNOVA	AIRBUS	A220
HTP Curing Tools	AERNNOVA	AIRBUS	A320
Elevator Curing Tools	ACITURRI	DASSAULT	FALCON 10X
Rudder Curing Tools	ACITURRI	DASSAULT	FALCON 10X
<b>CIDETEC</b>			
Repocessability, Repairability and Recyclability of composites	AERNNOVA	AIRBUS	miscellaneous
Repocessability, Repairability and Recyclability of composites	SOFITEC	AIRBUS	miscellaneous
Repocessability, Repairability and Recyclability of composites	AIRBUS	AIRBUS	miscellaneous
Surface Treatments	NyM	AIRBUS	miscellaneous
Surface Treatments	IDEC	AIRBUS	miscellaneous
Testing	non-disclosure	AIRBUS	miscellaneous
<b>CTA</b>			
Tail boom frame tests	AIRBUS HELICOPTERS	AIRBUS HELICOPTERS	RACER
Wing structural tests	HAL	AIRBUS HELICOPTERS	RACER
Stringer runout	AIRBUS OPERATIONS	AIRBUS OPERATIONS	AIRBUS A350XWB
Wheel flange impact test	AIRBUS OPERATIONS	AIRBUS OPERATIONS	AIRBUS A350XWB
Prime air components structural testing	AERNNOVA	AMAZON	Prime Air
Fire certification tests of interior materials	BOEING R&T EUROPE	BOEING	Airliners
E2 Flap Supports Structural Test	ASCO INDUSTRIES	EMBRAER	E-Jets E2
Fire certification tests of interior materials	AIR NOSTRUM LAM	Several	Airliners
Fire certification tests of interior materials	DIEHL AEROSPACE	Several	Airliners
Fire certification tests of interior materials	IACOBUCCI HF AEROSPACE	Several	Airliners
Fire certification tests of interior materials	HUTCHINSON-CR	Several	Airliners



General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>CTA</b>			
Fire certification tests of interior materials	COMPOSITE INDUSTRIES	Several	Airliners
Fire certification tests of interior materials	PMV INDUSTRIES	Several	Airliners
Fire certification tests of interior materials	JCB AERO	Several	Airliners
Fire certification tests of interior materials	INDUSTRIAL NEO-TEX	Several	Airliners
Fire certification tests of interior materials	PINTA INSULATION	Several	Airliners
Fire certification tests of interior materials	VELCRO EUROPE	Several	Airliners
Fire certification tests of interior materials	ROMTEX ANJOU AERONAUTIQUE	Several	Airliners
Fire certification tests of interior materials	SN CENTRAIR	Several	Airliners
Fire certification tests of interior materials	DESSO	Several	Airliners
<b>DTK</b>			
Landing gear trap components	AERNNOVA	AIRBUS	A320
Stabilizer components	AERNNOVA	AIRBUS	A350XWB
Machined Components	FIGEAC AERO	several	miscellaneous
<b>EIBAR PRECISION CASTING</b>			
Secondary structure components	TAI	AIRBUS	A320neo/ A330neo
Secondary structure components	AIRBUS DS	AIRBUS DS	C235,C295
Secondary structure components	AIRBUS DS	AIRBUS DS	EUROFIGHTER TYPHOON
<b>EUROUTIL</b>			
forging Dies	Aubert & Duval	Several	miscellaneous
<b>EYHER</b>			
Transfer Cart AGVs for Aeronautical production	non-disclosure	Several	miscellaneous
Pallet turnersf for Aeronautical production	non-disclosure	Several	miscellaneous
Load dumpers for Aeronautical production	non-disclosure	Several	miscellaneous
<b>HEXAGON</b>			
Manufacturing Intelligence	non-disclosure	Several	miscellaneous
<b>INDUSTRIAS GALINDO</b>			
Tooling manufacturing	non-disclosure	AIRBUS	A350XWB
Tooling manufacturing	non-disclosure	BOEING	787
Tooling manufacturing	non-disclosure	EMBRAER	E-JET family

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>KHEGAL AERONÁUTICA</b>			
Elementary components Machining	non-disclosure	AIRBUS	AIRBUS Families
Fuselage Holders for assembly line and Tooling for test bench	non-disclosure	AIRBUS	AIRBUS Families
Elementary components Machining	non-disclosure	ATR	42/72
Elementary components Machining	non-disclosure	DASSAULT	Falcon Family
<b>MATRICI INNOVATIVE TECHNOLOGIES</b>			
Metallic Forming Components (casings, leading edges, tips)	ACITURRI	AIRBUS	A320, A350
Metallic Forming Components (exhaust cowl)	LAUAK	EMBRAER	KC390
<b>MESIMA</b>			
Materials management and supply	AIRBUS DS	AIRBUS DS	miscellaneous
<b>METRALTEC</b>			
Manufacturing of metallic parts (including special processes)	AERNNOVA	AIRBUS	A220, A320, A350
Manufacturing of metallic parts (including special processes)	ACITURRI	AIRBUS	A320, A350
Manufacturing of metallic parts (including special processes)	AERNNOVA	EMBRAER	KC390, E170, E190, E2
Manufacturing of metallic parts (including special processes)	ACITURRI	EMBRAER	KC390
<b>MIZAR ADDITIVE MANUFACTURING</b>			
Drilling Templates for the assembly of the HTP and VTP	AIRBUS DS	AIRBUS	Falcon 10X
Moulds for Composite parts in FDM, material Ultem 1010	AIRBUS DS	AIRBUS	miscellaneous
<b>NUTER</b>			
Machined Components	AERNNOVA	AIRBUS	A220
Machined Components	AERNNOVA	EMBRAER	ERJ family / E-JET family
Machined Components	AERNNOVA	SIKORSKY	S-92

General Description of the Product/service	DIRECT CLIENT	OEM	PLATFORMS
<b>RENISHAW</b>			
Interferometric Laser and Optical Encoders for measuring positional data: wing-panel assembly machines	Several	Several	miscellaneous
<b>TTT GROUP</b>			
Heat and surface treatments	ACITURRI	AIRBUS	A380
Heat and surface treatments	AERNNOVA	AIRBUS	AIRBUS families
Heat and surface treatments	MITSUBISHI CORPORATION	AIRBUS	A220
Heat and surface treatments	SONACA	AIRBUS	AIRBUS families
Heat and surface treatments	SPIRIT	AIRBUS	A220
Heat and surface treatments	ACITURRI	AIRBUS DS	A400M
Heat and surface Treatments	AIRBUS DS	AIRBUS DS	AIRBUS DS families
Heat and surface treatments	AERNNOVA	AIRBUS HELICOPTERS	AIRBUS HELICOPTERS families
Heat and surface treatments	AERNNOVA	BELL	Bell 505
Heat and surface treatments	non-disclosure	BOEING	737 / 777 / 787
Heat and Surface treatments	SONACA	DASSAULT	FALCON family
Heat and surface treatments	AERNNOVA	EMBRAER	EMBRAER families
Heat and surface treatments	non-disclosure	EMBRAER	KC-390
Heat and surface treatments	PARKER	Several	miscellaneous
Heat and surface treatments	SKF	Several	miscellaneous
Heat and surface treatments	AERNNOVA	SIKORSKY	S-92

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
AALBERTS SURFACE TECHNOLOGIES TEY			
Heat treatments	ACITURRI	ROLLS-ROYCE	TRENT 1000
Heat treatments	ITP AERO	ROLLS-ROYCE	TRENT family
Heat treatments	EGILE	SAFRAN HELICOPTER ENGINES	miscellaneous
Heat treatments	SAFRAN HELICOPTER ENGINES	SAFRAN HELICOPTER ENGINES	miscellaneous
Heat treatments	WEC	several	miscellaneous
Heat treatments	SAFRAN AERO BOOSTERS	several	miscellaneous
ACITURRI			
Fan structures	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP
Turbine transmissions & Structures	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP
Engine Brackets and System Components	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP
Nozzle Guide Vanes	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP
Blades	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP
Guide Vane Segments	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP
Turbine transmissions & Structures	ITP AERO	EPI	TP400
Rear Frame Structural components	ITP AERO	EPI	TP400
Engine Brackets and System Components	ITP AERO	EPI	TP400
Engine Pipe End - Fittings	ITP AERO	EPI	TP400
Engine Pipe End - Fittings	ITP AERO	EPI	TP400
Engine Brackets and System Components	ITP AERO	EUROJET	EJ200
Engine Pipe End - Fittings	ITP AERO	EUROJET	EJ200
Engine Pipe End - Fittings	ITP AERO	EUROJET	EJ200
Compressor Shrouds	ITP AERO	PRATT & WHITNEY	Several
Turbine transmissions & Structures	ITP AERO	ROLLS-ROYCE	TRENT family
Turbine Structures	ROLLS-ROYCE	ROLLS-ROYCE	TRENT family
Turbine and Combustor Casings	ROLLS-ROYCE	ROLLS-ROYCE	Bussines Jet applications
Fan and Compressor Casings	ITP AERO	ROLLS-ROYCE	TRENT family
Fan and Compressor Casings	ROLLS-ROYCE	ROLLS-ROYCE	Bussines Jet applications
Rear Frame Structural components	ITP AERO	ROLLS-ROYCE	TRENT family

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
<b>ACITURRI</b>			
Rear Frame Structural components	ROLLS-ROYCE	ROLLS-ROYCE	Bussines Jet applications
Engine Brackets and System Components	ITP AERO	ROLLS-ROYCE	TRENT family
Engine Pipe End - Fittings	ITP AERO	ROLLS-ROYCE	TRENT family
Engine Pipe End - Fittings	ITP AERO	ROLLS-ROYCE	TRENT family
Nozzle Guide Vanes	ITP AERO	ROLLS-ROYCE	TRENT family
Blades	ITP AERO	ROLLS-ROYCE	TRENT family
Guide Vane Segments	ITP AERO	ROLLS-ROYCE	TRENT family
Nozzle Guide Vanes	AVIO AERO	several	miscellaneous
Blades	AVIO AERO	several	miscellaneous
Guide Vane Segments	AVIO AERO	several	miscellaneous
<b>AEROMECH</b>			
Support ring	non-disclosure	CFM INTERNATIONAL	CFM56
Engine TBH	non-disclosure	EPI	TP400
LPT rings	non-disclosure	EUROJET	EJ200
Turbine casing & Thermal	non-disclosure	GE	miscellaneous
Engine TBH	non-disclosure	PRAT & WHITNEY	PW1500G
Intermediate pressure Turbine	non-disclosure	PRAT & WHITNEY	PW535
Engine exhaust Zone.	non-disclosure	ROLLS-ROYCE	TRENT XWB
Engine exhaust Zone.	non-disclosure	ROLLS-ROYCE	TRENT 1000
<b>AIBE</b>			
Manufacture of clamping systems and fixtures for machining process and special machines	ITP AERO	GE	miscellaneous
Manufacture of clamping systems and fixtures for machining process and special machines	ITP AERO	ROLLS-ROYCE	TRENT family
Manufacture of clamping systems and fixtures for machining process and special machines	ACITURRI	several	miscellaneous
Manufacture of clamping systems and fixtures for machining process and special machines	EGILE	several	miscellaneous
<b>ARATZ GROUP</b>			
Machined Components	ITP AERO	ROLLS-ROYCE	TRENT 700
Machined Components	ITP AERO	ROLLS-ROYCE	TRENT 900

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
ASTORKIA			
Machined Components	ITP AERO	EPI	TP400
Machined Components	ITP AERO	ROLLS-ROYCE	TRENT family
Machined Components	ITP AERO	ROLLS-ROYCE	TRENT XWB
BATZ			
Hot formed panels for special alloys	ITP AERO	EPI	TP400
Hot formed panels for special alloys	SALLEN AVIACIÓN	ROLLS-ROYCE	TRENT 7000
Hot formed panels for special alloys	WEC	ROLLS-ROYCE	TRENT XWB
Hot formed panels for special alloys	WEC	ROLLS-ROYCE	TRENT 900
Hot formed panels for special alloys	WEC	ROLLS-ROYCE	TRENT 1000
Hot formed panels for special alloys	ITP AERO	ROLLS-ROYCE	BR715
Hot formed panels for special alloys	ITP AERO	ROLLS-ROYCE	TRENT 900
CTA			
Aerodynamic Technology Acquisition Rig Programme	ITP AERO	several	miscellaneous
DANOBATGROUP			
Vertical grinding Machine-Tools for aeroengine manufacturing	GE	several	miscellaneous
EGAMASTER			
Torque control traceability and permit system	ITP AERO	several	miscellaneous
Remote Asset localization system	ITP AERO	several	miscellaneous
EGILE			
Carter parts	ITP AERO	CFM INTERNATIONAL	CFM56
Carter parts	ITP AERO	CFM INTERNATIONAL	LEAP 1A/B
Engine actuation systems	HÉROUX-DEVTEK SPAIN	EUROJET	EJ200
Main shaft Ge90	AUBERT&DUVAL	GE	GE90
Heat Shields	ITP AERO	PRAT & WHITNEY	PW1000G
NGVs	ITP AERO	ROLLS-ROYCE	TRENT 1000
NGVs	ITP AERO	ROLLS-ROYCE	TRENT XWB
Bearing housings	SAFRAN TRANSMISSION SYSTEMS	SAFRAN AIRCRAFT ENGINES	LEAP 1A/1B
Fourreaux	SAFRAN TRANSMISSION SYSTEMS	SAFRAN AIRCRAFT ENGINES	LEAP 1A/1B
Gears and shafts	SAFAN AERO BOOSTERS	SAFRAN AIRCRAFT ENGINES	LEAP 1A/1B



General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
<b>EGILE</b>			
Gears and shafts	SAFRAN HELICOPTER ENGINES	SAFRAN AIRCRAFT ENGINES	M88
Main transmission gears	SAFRAN HELICOPTER ENGINES	SAFRAN HELICOPTER ENGINES	ALL RANGE
Accessory transmission gears	SAFRAN HELICOPTER ENGINES	SAFRAN HELICOPTER ENGINES	ALL RANGE
Shaft	ITP AERO	SAFRAN HELICOPTER ENGINES	MTR390-E
<b>EIBAR PRECISION CASTING</b>			
Castings Components	ITP AERO	ROLLS-ROYCE	TRENT 1000
Castings Components	ITP AERO	ROLLS-ROYCE	TRENT XWB
Castings Components	ITP AERO	ROLLS-ROYCE	PEARL700
Castings Components	ITP AERO	ROLLS-ROYCE	ULTRAFAN
<b>EKIN</b>			
Broaching Tools for the manufacture of Fir Tree turbine discs	ITP AERO	several	miscellaneous
<b>ELECTROHILO</b>			
Inner vanes stubs machining (spark erosion) and Vanes edge cutting (wire)	ITP AERO	EPI	TP400
TEC segmentation	ITP AERO	EUROJET	EJ200
Edging of VANES and BCVs	ITP AERO	ROLLS-ROYCE	TRENT 1000 / 7000
Separation Top Core Vane, Vanes erosion, Top Core Vane manufacture	ITP AERO	ROLLS-ROYCE	TRENT 900
Segments wire-cut	ITP AERO	ROLLS-ROYCE	TRENT XWB
wire-cut, machininf and sheet-metal works - Segments wire-cut	ITP AERO	ROLLS-ROYCE	ULTRAFAN
wire-cut, machininf and sheet-metal works - Segments wire-cut	ITP AERO	ROLLS-ROYCE	STELLA
<b>EUROUTIL</b>			
Press Tools	SAFRAN AIRCRAFT ENGINES	several	miscellaneous

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
ITP AERO			
Lost wax casting super alloys for Turbine	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	CFM56
Lost wax casting super alloys for Turbine	MTU	EA	GP7000
Design and manufacture of low pressure turbine (LPT) - Member of EPI Consortium	AIRBUS DS	EPI	TP400
Design and manufacture of the Front Frame and Exhaust System - Member of the EPI Consortium	AIRBUS DS	EPI	TP400
Manufacture of Externals - Member of EPI Consortium	AIRBUS DS	EPI	TP400
Final assembly of engine - Member of EPI Consortium	AIRBUS DS	EPI	TP400
Lost wax casting super alloys for intermediate pressure turbine	ROLLS-ROYCE	EPI	TP400
Lost wax casting super alloys for the LPT	ROLLS-ROYCE	EPI	TP400
Design and manufacture of the Diffuser cones and By-Pass Module - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200
Design and manufacture of the post burner duct and variable nozzle - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200
Manufacture of Externals - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200
Final assembly of the engine - Member of the EUROJET Consortium	NETMA	EUROJET	EJ200
Lost wax casting super alloys - nozzle	NETMA	EUROJET	EJ200
Lost wax casting super alloys - low pressure turbine	NETMA	EUROJET	EJ200
Components	GE	GE	CF34-10
Manufacture of rear turbine structure	GE	GE	GE90-115
Structural components	HONEYWELL	HONEYWELL	HTF7000
Design and manufacture of three LPT - Member of the MTRI Consortium	AIRBUS HELICOPTERS	MTRI	MTR390-E
Final assembly of the engine - Member of the MTRI Consortium	AIRBUS HELICOPTERS	MTRI	MTR390-E
Lost wax casting super alloys - low pressure turbine	AIRBUS HELICOPTERS	MTRI	MTR390-E
Lost wax casting super alloys for Turbine	SAFRAN AIRCRAFT ENGINES	POWERJET	SaM146
Modules manufacturing	PRATT & WHITNEY	PRATT & WHITNEY	PW1000G
Components manufacturing	PRATT & WHITNEY CANADA	PRATT & WHITNEY	PW535E
Components manufacturing	PRATT & WHITNEY CANADA	PRATT & WHITNEY	PW800
Parts of external equipment of engine	ROLLS-ROYCE	ROLLS-ROYCE	BR725
Design and validation of the ROLL POST	ROLLS-ROYCE	ROLLS-ROYCE	F136
Design and manufacture of low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 1000
Design and manufacture of Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 1000
Lost wax casting super alloys for the LPT	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 1000

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
<b>ITP AERO</b>			
Lost wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 1000
Design and manufacture of low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 500
Assembly of the LPT and component manufacture	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 700
Lost wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 700
Design and manufacture of the low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 7000
Design and manufacture of the low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 900
Design and manufacture of the Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 900
Lost wax casting super alloys for the LPT	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 900
Lost wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	TRENT 900
Design and manufacture of the low pressure turbine (LPT) - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT XWB
Design and manufacture of the Rear Frame - Risk Partner	ROLLS-ROYCE	ROLLS-ROYCE	TRENT XWB
Lost wax casting super alloys for the LPT	ROLLS-ROYCE	ROLLS-ROYCE	TRENT XWB
Lost wax casting super alloys for the intermediate pressure turbine	ROLLS-ROYCE	ROLLS-ROYCE	TRENT XWB
Development of the intermediate pressure turbine and the rear structure	ROLLS-ROYCE	ROLLS-ROYCE	ULTRAFAN
<b>LAZPIUR</b>			
Machined components	non-disclosure	non-disclosure	non-disclosure
<b>MATRICI INNOVATIVE TECHNOLOGIES</b>			
Metallic Forming Components (vane)	ITP AERO	EPI	TP400
Metallic Forming Components (cones)	ITP AERO	MTRI	MTR390-E
Laser Cutting (inner & outer)	ITP AERO	PRATT&WITHNEY	PW815
Metallic Forming Components (cone)	ITP AERO	PRATT&WITHNEY	PW814
Metallic Forming Components (baffle)	ITP AERO	ROLLS-ROYCE	TRENT 900/1000
Metallic Forming Components (cones)	ITP AERO	ROLLS-ROYCE	TRENT 1000
Metallic Forming Components (vane)	ITP AERO	ROLLS-ROYCE	TRENT XWB
Metallic Forming Components (mixers & Itp fairing)	ITP AERO	ROLLS-ROYCE	PEARL 700
<b>MESIMA</b>			
Materials management and supply	ITP AERO	GE	miscellaneous
Materials management and supply	ITP AERO	ROLLS-ROYCE	miscellaneous
Materials management and supply	WEC	several	miscellaneous

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
METRALTEC			
Special processes (surface trearments, Penetrant, Paint)	ASTORKIA	ITP AERO	miscellaneous
Special processes (surface trearments, Penetrant, Paint)	MATRICI INNOVATIVE TECHNOLOGIES	ITP AERO	miscellaneous
METROLOGÍA SARIKI			
Measurement Equipment maintenance, training and software programming	EGILE	several	miscellaneous
Measurement Equipment and Consultancy-supply, maintenance, training and software programming	ITP AERO	several	miscellaneous
Measurement Equipment maintenance, training and software programming	ITP AERO	several	miscellaneous
MIZAR ADDITIVE MANUFACTURING			
Pneumatic bleed valve (Inconel 718)	HÉROUX-DEVTEK SPAIN	EPI	A400M
Instrumentation Rakes (Inconel 718) to test aeroengines in a production line.	ITP AERO	MTRI	MTR390-E
Oil tube for helicopter engine (Inconel 718) - 1st Flight Metal Certified Part In Spain	ITP AERO	MTRI	MTR390-E
Instrumentation Rakes (Inconel 718) to test aeroengines in a production line.	ITP AERO	ROLLS-ROYCE	ULTRAFAN
Oil Nozzle (Inconel 718)	ITP AERO	several	miscellaneous
NUTER			
Fittings	ITP AERO	EPI	TP400
Fittings	ITP AERO	EUROJET	EJ200
Fittings	ITP AERO	GE	miscellaneous
Airfoils & Small parts	ITP AERO	PRATT & WHITNEY	PW800
Small Parts & Fittings	ITP AERO	PRATT & WHITNEY	PW1000G
nozzels	ITP AERO	PRATT & WHITNEY	PW1000G
Fittings	ITP AERO	ROLLS-ROYCE	TRENT family
Fittings	ITP AERO	ROLLS-ROYCE	ULTRAFAN
Fittings	ITP AERO	ROLLS-ROYCE	PEARL 10X
Small Parts	ACITURRI	SAFRAN AIRCRAFT ENGINES	miscellaneous
ONA ELECTROEROSIÓN			
Die-Sinking EDM machines	GENERAL ELECTRIC VERNOVA	GE	miscellaneous
Wire EDM machines	BARNES AEROSPACE	PRATT & WHITNEY	miscellaneous
Die-Sinking EDM machines	SAFRAN AIRCRAFT ENGINES	SAFRAN AIRCRAFT ENGINES	miscellaneous

General Description of the Product/service	DIRECT CLIENT	OEM	ENGINE MODEL
<b>RENISHAW</b>			
Measurement data for the production and repair of blades and bladed disks: Blade tip refurbishment, in-process blade measurement and root blending of bladed disks. Contact and non-contact tool setting systems to detect and adjust to the condition or wear of cutting tools.	several	several	miscellaneous
Precision sensors for fast, accurate acquisition of component dimensions and surface data. They include blade-specific software applications.	several	several	miscellaneous
Component set up, tool setting and in-cycle gauging and first off component inspection for accurate machining processes.	several	several	miscellaneous
Precise and rapid gauging of complex parts, tracking trends in machining and enabling automatic process adjustments to account for changing variables like thermal drift.	several	several	miscellaneous
<b>TM TELLERIA</b>			
Processes Tooling	several	several	miscellaneous
<b>TTT GROUP</b>			
Heat and Surface treatments	ITP AERO	EUROJET	EJ200
Heat and surface treatments	ITP AERO	ROLLS-ROYCE	miscellaneous
Heat and surface treatments	SAFRAN AIRCRAFT ENGINES	SAFRAN AIRCRAFT ENGINES	miscellaneous
Heat and surface treatments	SAFRAN HELICOPTER ENGINES	SAFRAN HELICOPTER ENGINES	miscellaneous
<b>TUBACEX</b>			
Precision tubes	non-disclosure	several	miscellaneous
<b>WEC</b>			
Parts of external equipment of engine	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	CFM56
Parts of external equipment of engine	SAFRAN AIRCRAFT ENGINES	CFM INTERNATIONAL	LEAP 1A/B
Parts of external equipment of engine	ITP AERO	EPI	TP400
Structural parts	ITP AERO	EPI	TP400
Exhaust nozzle parts	ITP AERO	EUROJET	EJ200
TEC parts	ITP AERO	EUROJET	EJ200
Parts of external equipment of engine	ITP AERO	EUROJET	EJ200
Parts of external equipment of engine	SAFRAN AIRCRAFT ENGINES	GE	GE90-115k
Rings, annular components, combustion chamber components	HONEYWELL	HONEYWELL	miscellaneous
Parts of external equipment of engine	ITP AERO	PRATT & WHITNEY	PW814
TEC Front Cases	GKN Aerospace Engine Systems	ROLLS-ROYCE	miscellaneous
Structural parts	ITP AERO	ROLLS-ROYCE	TRENT family
Parts of external equipment of engine	ITP AERO	ROLLS-ROYCE	TRENT family
Dynamic seals components	ITP AERO	ROLLS-ROYCE	TRENT family
Parts for engine cooling devices	SAFRAN AIRCRAFT ENGINES	SAFRAN AIRCRAFT ENGINES	SILVERCREST
<b>WOLCO</b>			
Special Cutting Tools	ITP AERO	several	miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>AALBERTS SURFACE TECHNOLOGIES TEY</b>			
Heat treatments	AIRBUS DS	Several	Miscellaneous
Heat treatments	EGILE	Several	Miscellaneous
Heat treatments	HÉROUX-DEVTEK SPAIN	Several	Miscellaneous
Heat treatments	INDRA	Several	Miscellaneous
Heat treatments	SAFRAN LANDING SYSTEMS	Landing Gear	Miscellaneous
Heat treatments	SENER	Several	Miscellaneous
<b>ACITURRI</b>			
Auxiliary Fuel Tanks	AIRBUS DS	Fuel system components	EUROFIGHTER TYPHOON
Hydraulic Tanks	HÉROUX-DEVTEK SPAIN	Hydraulic system	Miscellaneous
Equipped elements	RATIER FIGEAC	Turboprop systems	Miscellaneous
Landing System components	SAFRAN LANDING SYSTEMS	Landing Gear	AIRBUS A320/350 XWB
<b>AEROMECH</b>			
Nose landing gear components	non-disclosure	Landing Gear	AIRBUS DS C295
Main landing gear components	non-disclosure	Landing Gear	AIRBUS DS C295
<b>ANTERAL</b>			
System antennas	INDRA	AESA Antennas	NGWS
<b>CIDETEC</b>			
Non Destructive Inspection	EGILE	Landing gear	Miscellaneous
Surface preparation	EIBAR PRECISION CASTING	Air Control System	Miscellaneous
Surface Treatments	ELHCO	Landing gear	Miscellaneous
Non Destructive Inspection	TTT GROUP	Landing gear	Miscellaneous
RAM Air Channel tests	AIRBUS OPERATIONS	RAC	AIRBUS ZEROe
Electrovalve Tests	CIRCOR	Electrovalve	AIRBUS A350 XWB
Flow servovalve tests	COLLINS AEROSPACE	Electrovalve	PW1100G
Inert Gas Generation Sustem Tests	STELIA AEROSPACE	IGSS	AIRBUS A350 XWB



General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>DANOBATGROUP</b>			
Grinding Machine-Tools for Landing Gears	SAFRAN LANDING SYSTEMS	Landing gear	Miscellaneous
Machine tools for aerocomponents manufacturing	non-disclosure	Several	Miscellaneous
<b>EGILE</b>			
Gears and shafts	AIRBUS HELICOPTERS	MLG and AGB	AIRBUS HELICOPTERS H160/175
Lubricant Pumps	AIRBUS HELICOPTERS	MLG and AGB	AIRBUS HELICOPTERS H160/175
Carters and main rotor shaft	HELICOPTERES GUIMBAL	Main rotor	GUIMBAL CABRI G2
Carters and main rotor shaft	non-disclosure	Main rotor	AIRBUS HELICOPTERS VSR700
Landing gear components	HEROUX DEVTEK UK	Landing Gear	SAAB GRIPEN
Actuation systems	HÉROUX-DEVTEK SPAIN	Several	AIRBUS DS CN235/C295
Landing gear components	HÉROUX-DEVTEK SPAIN	Balancier	AIRBUS HELICOPTERS TIGRE
Flight control & actuation systems	HÉROUX-DEVTEK SPAIN	Several	EUROFIGHTER TYPHOON
Actuation systems	HÉROUX-DEVTEK SPAIN	Several	SIKORSKY S-92
Slider	SAFRAN LANDING SYSTEMS	NLG	AIRBUS A320
Rack	SAFRAN LANDING SYSTEMS	NLG	AIRBUS A320
Cylinder & Piston	SAFRAN LANDING SYSTEMS	RETRACTION ACTUATOR MLG	AIRBUS A330
Shock Absorber	SAFRAN LANDING SYSTEMS	MLG	AIRBUS A330/A340
Shock Absorber	SAFRAN LANDING SYSTEMS	MLG	AIRBUS A350XWB
Balancier équipé	SAFRAN LANDING SYSTEMS	Landing Gear	AIRBUS HELICOPTERS SUPER PUMA
Slider	SAFRAN LANDING SYSTEMS	NLG	ATR 42/72
Shock Absorber	SAFRAN LANDING SYSTEMS	MLG	BOEING 787
Shock Absorber	SAFRAN LANDING SYSTEMS	NLG	BOEING 787
Gears and shafts	SAFRAN POWER UNITS	Pump	DASSAULT RAFALE
Gears and shafts	SAFRAN POWER UNITS	APUs	Miscellaneous

# SYSTEMS & EQUIPMENT

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General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>EIBAR PRECISION CASTING</b>			
Fuel system components	AIRBUS	Several	AIRBUS A320neo/330neo
Optronic equipment housings (Lost wax casting aluminium)	ELBIT SYSTEMS	Optronic systems TV-Thermography	Miscellaneous
Radar housings (Lost wax casting aluminium)	INDRA	Radars	EUROFIGHTER TYPHOON
Conduits- Air Fittings (Lost wax casting superalloys)	LIEBHERR AEROSPACE	Air conditioning	AIRBUS A220/320neo/ceo, BOEING 787
Conduits- Air Fittings (Lost wax casting superalloys)	LIEBHERR AEROSPACE	Air conditioning	COMAC / KC395 / EJET / G7000
Actuator equipment housings (Lost wax casting aluminium)	SAFRAN AEROSYSTEMS	Engines-Actuators-Electrical equipments	AIRBUS A320/330
Optronic equipment housings (Lost wax casting aluminium)	SAFRAN ELECTRONICS AND DEFENCE	Optronic systems TV-Thermography	Miscellaneous
Carter Air (Lost wax casting aluminium)	SAFRAN POWER UNITS	APUs (Auxiliary Power Units)	AIRBUS HELICOPTERS SUPERPUMA
Optronic equipment housings (Lost wax casting aluminium)	THALES GROUP	Engines-Actuators-Electrical equipments	AIRBUS A320/330, NHI NH90, BOEING B737MAX
<b>EUROUTIL</b>			
Composite Molds	SAFRAN SEATS	Several	Miscellaneous
<b>INDUSTRIAS GALINDO</b>			
Tooling manufacturing	non-disclosure	Several	Miscellaneous
<b>INGETEAM</b>			
Hybridization and electrification	non-disclosure	Several	Miscellaneous
<b>KHEGAL AERONÁUTICA</b>			
Oil tanks Elementary components Machining	AD GROUP	Lubrication systems	AIRBUS A350XWB
<b>KORTA</b>			
Worm Screws	HEROUX DEVTEK UK	Actuators	Miscellaneous
Ball Screws	SAFRAN GROUP	Actuators	Miscellaneous
Ball Screws	SENER	Actuators	Miscellaneous
<b>METRALTEC</b>			
Special processes (surface treatments, Penetrant, Paint)	EIPC	Fuel pipes	A320
<b>MIZAR ADDITIVE MANUFACTURING</b>			
Electrical connectors for testing electrical harnesses on workbenches.	AERTEC	Electrical connectors	Miscellaneous
Functional tooling, simulation for overpressure testing	AIRBUS DS	Entrance Door	AIRBUS DS C295
Fuselage Mock-Ups	AIRBUS DS	FWD Fuselage Mock-Up	AIRBUS DS EUROMALE/ERODRONE
Oxygen cylinder mock-ups for training simulators.	AIRBUS DS	Oxygen cylinder mock-ups	AIRBUS DS A400M
Locking system for joystick in SLS, material PA2200.	AIRBUS DS	RARO console	AIRBUS DS A330 MRTT
Parts for Electronic Warfare system in FDM, material Ultem 9085	INDRA	non-disclosure	non-disclosure

2022 Members Activities (in Detail)

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>NUTER</b>			
Machined Components	HÉROUX-DEVTEK SPAIN	Several	AIRBUS A330/350XWB
Machined Components	HÉROUX-DEVTEK SPAIN	Several	AIRBUS A400M
Machined Components	HÉROUX-DEVTEK SPAIN	Several	EUROFIGHTER TYPHOON
<b>RENISHAW</b>			
Raman spectroscopy technology for the material make-up of specialist components and the quality of component surface coatings	Several	Several	Miscellaneous
Magnetic Encoders to control position of compartint doors	Several	Several	Miscellaneous
<b>SENER</b>			
IFF Mode 5 Rotary Wing Upgrade	AIRBUS HELICOPTERS SPAIN	Control Systems	Security Systems
GREASE CARTRIDGES	BAYANAT AIRPORTS ENGINEERING & SUPPLIES	ATC Secondary Radars	Ground equipment
RSLO2330 4M MSSR ANTENNA	EASAT RADAR SYSTEMS	ATC Secondary Radars	Ground equipment
WARNING LIGHT CLUSTER	EUROPAVIA	Control Systems	Security Systems
NATO Pod	GENERAL ATOMICS	Control Systems	Security Systems
RSL-2130 REFLECTOR ASSY	HENSOLDT AUSTRALIA	ATC Secondary Radars	Ground equipment
RT-211 SPARE PARTS	HENSOLDT AUSTRALIA	ATC Secondary Radars	Ground equipment
LVA 8m MSSR ANTENNA	HENSOLDT	ATC Secondary Radars	Ground equipment
SUBASSY, REFLECTOR ROD	HENSOLDT	ATC Secondary Radars	Ground equipment
SPARE PARTS	HENSOLDT	ATC Secondary Radars	Ground equipment
SUPPLY OF 1 UNIT RSL-2731A & FAT WITH WITNESSING O	HENSOLDT	ATC Secondary Radars	Ground equipment
RSL-273A MODIFICATION - Netherlands	HENSOLDT	ATC Secondary Radars	Ground equipment
RADIATING COLUMN FOR LVA 8M. SSR ANTEN	HENSOLDT	ATC Secondary Radars	Ground equipment
Portable Antennas	INDRA	ATC Secondary Radars	Ground equipment
Mixed Columns	INDRA	ATC Secondary Radars	Ground equipment
SPARE PARTS	INDRA	ATC Secondary Radars	Ground equipment
SAAR 20VV Pedestal	INDRA	ATC Secondary Radars	Ground equipment
UPPER RADOME D-VOR ANTENNA	INDRA	ATC Secondary Radars	Ground equipment
LVA ANTENNA, PEDESTAL AND SPARE PARTS	INDRA	ATC Secondary Radars	Ground equipment

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>SENER</b>			
OPEN PEDESTAL HOSE	INDRA	ATC Secondary Radars	Ground equipment
RSL-2330 ANTENNA FIXINGS	INDRA	ATC Secondary Radars	Ground equipment
STROMAG CLUTCH	INDRA	ATC Secondary Radars	Ground equipment
FLEXIBLE GASKET SETS	INDRA	ATC Secondary Radars	Ground equipment
ANTENNAS OPEN PEDESTALS & TESTS	INDRA	ATC Secondary Radars	Ground equipment
ANTENNA DVOR	INDRA	ATC Secondary Radars	Ground equipment
CSL-M ANTENNA PROBES	INDRA	ATC Secondary Radars	Ground equipment
SUPPLY OF A SSR ANTENNA MODEL RSL-2330+	INTERSOFT	ATC Secondary Radars	Ground equipment
PTRANS SCATER ZL	MINISTERIO DE DEFENSA DGAM	Control Systems	Security Systems
AM RECEIVERS ZL-ZC	MINISTERIO DE DEFENSA DGAM	Control Systems	Security Systems
LVA 8m MSSR Antenna, model RSL-2730(A)	MITSUBISHI ELECTRIC EUROPE	ATC Secondary Radars	Ground equipment
8m LVA MSSR ANTENNAS, MODEL RSL-2730A	NRPL AERO	ATC Secondary Radars	Ground equipment
ANTENNA LVA MK2	RAYTHEON	ATC Secondary Radars	Ground equipment
DARS Spare Parts	RAYTHEON	ATC Secondary Radars	Ground equipment
Stabilized Mirror Unit (SMU) of the sight	SAAB DYNAMICS	Control Systems	Ground equipment
RBS70NG SMU	SBD	Control Systems	Security Systems
L-BAND TEST ARRAY	SENER TAFS	ATC Secondary Radars	Ground equipment
<b>TECNASA</b>			
Components	MARTIN-BAKER	Seats	Several

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
TTT GROUP			
Heat and surface treatments	GOODRICH	Several	Miscellaneous
Heat and surface treatments	HEROUX DEVTEK	Landing Gear	KAI platforms
Heat and surface treatments	IAI	Several	Miscellaneous
Heat and surface treatments	non-disclosure	Ventilation / LIEBHERR	Miscellaneous
Heat and surface treatments	non-disclosure	Landing Gear	SIKORSKY platforms
Heat and surface treatments	SAFRAN LANDING SYSTEMS	Landing Gear	AIRBUS families
Heat and surface treatments	SAFRAN LANDING SYSTEMS	Brakes	AIRBUS families
Heat and surface treatments	SAFRAN TRANSMISSION SYSTEMS	Several	Miscellaneous
Heat and surface treatments	WITZENMANN	Wing leading edge ventilation	AIRBUS families
WEC			
Air Bleed equipment parts	HONEYWELL	Air Treatment Management	AIRBUS A320/330
Air Bleed equipment parts	HONEYWELL	Air Treatment Management	DASSAULT F7X
Air Bleed equipment parts	LIEBHERR	Air Treatment Management	AIRBUS A220/A320/A330/A400M
Air Bleed equipment parts	LIEBHERR	Air Treatment Management	AIRBUS A320neo/A330neo
Air Bleed equipment parts	LIEBHERR	Air Treatment Management	BOEING 747-8
Air Bleed equipment parts	LIEBHERR	Air Treatment Management	DASSAULT F7X
XUBI			
Rotating transmission	GENERAL DYNAMICS	Azimut	Miscellaneous
Actuation sytems/linear actuator	IAI	Control systems	Miscellaneous
Gear transmission	IAI	Control systems	Miscellaneous
Rotating transmission	IAI	Radar	Miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>AALBERTS SURFACE TECHNOLOGIES TEY</b>			
Heat treatments	AIRBUS DS	several	miscellaneous
Heat treatments	INDRA	several	miscellaneous
Heat treatments	SENER	several	miscellaneous
<b>ACITURRI</b>			
Components	PDL SPACE	several	Launcher
<b>AERNNOVA</b>			
Large and Complex Machined parts and Assemblies	SPACE X	several	FALCON 9
Large and Complex Machined parts and Assemblies	SPACE X	several	FALCON HEAVY
<b>ANTERAL</b>			
System antennas	AIRBUS DS	DLP LHA-F System	miscellaneous
System antennas	CAST - MKR	QON	METOP
System antennas	JPL	LHA-HG-50-WR04	IMPULSE
System antennas	L3HARRIS	LHA-30-WR10	IMPULSE
System antennas	LCDC	POL-LCDC-WR112	miscellaneous
System antennas	PARADIGMA	Azerstellar	miscellaneous
System antennas	SAPCE X	DCPLHA-30-WR28-01	IMPULSE
Safety Subsystem antennas	THALES ALENIA SPACE	TT&C	SPACE RIDER
<b>ARATZ GROUP</b>			
Machined Components	non-disclosure	several	miscellaneous
Components for satellite antennas	non-disclosure	Satellite Antennas	miscellaneous
<b>BURDINBERRI</b>			
Dispenser Curing Tool	AIRBUS DS	several	ONESAT
MSR Curing Tool	AIRBUS DS	several	ONESAT
<b>CIDETEC</b>			
Surface treatments	FINITEC ELECTROLISIS	Satellites	miscellaneous
Surface preparation	SENER	Satellites	miscellaneous



General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>CTA</b>			
Multi-Payload Component Static Tests	AIRBUS DS	Structure	miscellaneous
Controller shock tests	CRISA	Flight Control	miscellaneous
Solar panels	DHV	Power	miscellaneous
Heat pipes system	IBERESPACIO	Thermal Protection System	miscellaneous
Satellite structures	ICEYE	Structure	miscellaneous
Mechanisms	SENER	Telecom	miscellaneous
<b>DANOBATGROUP</b>			
High precision mechanical components	SENER	HGAG Antenna	miscellaneous
<b>INDUSTRIAS GALINDO</b>			
Tooling manufacturing	non-disclosure	Collars	CSO
<b>ITP AERO</b>			
Components for engines	SAFRAN AIRCRAFT ENGINES	Shuttle	ARIANE Family
<b>METRALTEC</b>			
Heat Treatments	ACITURRI	several	Launcher
Heat Treatments	PLD SPACE	several	Launcher
<b>MIZAR ADDITIVE MANUFACTURING</b>			
Ventilation ducts and covers in FDM, material Ultem 9085	INDRA	Cooling Systems for electronics	miscellaneous
Covers in FDM, material Ultem 9085	SENER	Antennas	METEOSAT THIRD GENERATION
Arm and other parts in FDM, material Ultem 1010	SENER	UAE rover Rashid	HAKUTO R
<b>NAITEC</b>			
Development of anti-reflective painting	AIRBUS DS	Structure	miscellaneous
<b>NUTER</b>			
Machined Components	SENER	several	miscellaneous
Machined Components	SENER	several	METEOSAT THIRD GENERATION
<b>RENISHAW</b>			
Metal 3D printing systems	several	several	miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>SATLANTIS</b>			
Mission Specifications and Thermal Requirements for an Earth Observation Mission based on a High Resolution Optical Payload	ESA	iSIM family	miscellaneous
High resolution optical imager for OPEN COSMOS	ESA	iSIM-90	MANTIS Mission
Earth Observation Full Solution for Small Satellite	GEOSMOS	iSIM-SAT 16U and Product services	miscellaneous
High resolution multispectral Cameras for Earth observation microsattellites	several	Space imagers: iSIM Family	miscellaneous
High resolution cubesat for EO	several	iSIM-SAT 16U	miscellaneous
Embedded solution for methane emissions detection and quantification	several	GEI-SAT	miscellaneous
<b>SENER</b>			
Design of the four Hatches and the internal secondary structure	AIRBUS	Future space station in lunar orbit	LOP-Gateway lunar mission
PROBA-3 SOLAR ARRAY MECHANISMS	AIRBUS	SOLAR ARRAY MECHANISMS	PROBA-3
DTA-1201 SERIES PRODUCTION	AIRBUS	Actuator	miscellaneous
Design of the docking and berthing mechanisms between the I-HAB and the various modules, which will be assembled in orbit	AIRBUS / THALES ALENIA SPACE	Future space station in lunar orbit	LOP-Gateway lunar mission
MSR ERO TPM	AIRBUS DS	TPM	MSR ERO
SFR-ACTS	AIRBUS DS	SFR-ACTS	SFR-ACTS
Spainsat-NG DSSPA & DLNA	AIRBUS DS	NG DSSPA & DLNA	Spainsat
Badr-8 Tcr Equipment	AIRBUS DS	Badr-8 Tcr Equipment	miscellaneous
EUTELSAT 36X TCR equipment	AIRBUS DS	Equipment	EUTELSAT
CO3D X-BAND ANTENNA	AIRBUS DS	ANTENNA	miscellaneous
LO MetOp 2G	AIRBUS DS	LO MetOp 2G	Metop
Output Power Distribution Network	AIRBUS DS	Opdn G2g	miscellaneous
Tcr Equipment	AIRBUS DS	Tcr Equipment	BADR-8
RAS	AIRBUS DS	RAS	BIOMASS
OPDN (output Power Distribution Network)	AIRBUS DS	OPDN	GALILEO 2ND GEN.
S-BAND ANTENNAS	AIRBUS DS	S-BAND ANTENNAS	METOP
LO	AIRBUS DS	LO	METOP 2G
Thuraya Lna's	AIRBUS DS	Thuraya Lna's	miscellaneous
Thuraya Tcr Equipment	AIRBUS DS	Thuraya Tcr Equipment	miscellaneous
Smile Payload Module (plm) X-band Antenna	AIRBUS DS	Payloads & Antennes	Miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
SENER			
Gw-v Development	AIRBUS DS	Equipment	ONESAT
Cpsu	AIRBUS DS	Equipment	ONESAT
Gw-lna Development	AIRBUS DS	Equipment	ONESAT
Tcr Antennas	AIRBUS DS	Tcr Antennas	ONESAT
USER BEAM LNAs Ku-Ka BAND	AIRBUS DS	Equipment	ONESAT
DTA10-104 rotary actuators	AIRBUS DS	Telecommunications platforms	ONESAT / EUROSTAR NEO
Reflector Pointing Assembly	AIRBUS DS	Equipment	SPAINSAT
S-band And X-band Tcr Global Horn	AIRBUS DS	Equipment	SPAINSAT
Ka-band Feeders Chains And Global Horn	AIRBUS DS	Equipment	SPAINSAT
X-band Dra Radiating Chains	AIRBUS DS	Equipment	SPAINSAT
Spainsat Phase 1 (Govsatcom)	AIRBUS DS	Equipment	SPAINSAT
METOP-SG SAS HDRM DLM	AIRBUS DS	Equipment	METOP
Spainsat-ng X-band Dra Radiating Chains	AIRBUS DS	Ng X-band Dra Radiating Chains	SPAINSAT
GUIAS AIRBUS 2022	AIRBUS DS	Passive RF	miscellaneous
Additional Test Caps For GPS	AIRBUS ONEWEB	Tests	ONEWEB
GPS ANTENNAS	AIRBUS ONEWEB USA	ANTENNAS	ONEWEB
TMANT Exploitation	ARIANE GROUP	TELEMETRY ANTENNA (TMANT)	ARIANE 6
AST GATEWAY ANTENNA	AST & SCIENCE LLC	Antenna	AST
VNE phase CDE1	AVIO SPA	Equipment	NAVIGA
TDRS Antennas	AVIO SPA	Antennas	VEGA
NAVIGA	AVIO SPA	Navigation Equipment	VEGA-C
Spherex Program	BALL AEROSPACE	Equipment	miscellaneous
SPACE WEATHER FOLLOW-ON (SWFO)	BALL AEROSPACE	Equipment	miscellaneous
GLIDE S-BAND MGA & FILTERS	BALL AEROSPACE	Antenna	miscellaneous
JANUS PSM-MCM	CSIC	PSM-MCM	JANUS
Advanced Receiver for L-Band Radiometer	ESA	Equipment	Advanced Receiver for L-Band Radiometer
Assembly and testing of actuator	ESA	REFOCUSING MECHANISM DERISKING	ARIEL
KU-BAND GLOBAL ANTENNAS	ESA	KU-BAND	ARTES C&G

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>SENER</b>			
Design, manufacture and test a prototype of the HDRA (Hold Down and Release Actuator) mechanism	ESA	Scientific Mission	ATHENA
Design, manufacture and test the Instrument Selection Mechanism (ISM)	ESA	Scientific Mission	ATHENA
Analysis of different alternatives for planetary vehicle landing gear	ESA	Planetary exploration / Scientific Mission	AURORA - Mars Sample Return Mission
Design, manufacture and test devices for assembly of the Biomass satellite	ESA	Scientific Mission	BIOMASS
ISL Antenna	ESA	ISL Antenna	COMET
DEMPCOS	ESA	DEMPCOS	DEMPCOS
Clamping mechanism for the B1 phase	ESA	Mission to combat the space debris problem	E-Deorbit
MGSE	ESA	Mechanical ground support equipment	ELECTRA
Development of fluid connectors for refueling between DSG (Deep Space Gateway) modules connected by IBDM (International Berthing and Docking Mechanism)	ESA	REFUELING INTERFACE DEVELOPMENT	ESPRIT
Fixation Box for a vegetal biology experiment to be performed at the ISS	ESA	FixBox	ISS - International Space Station
C-BAND HORN MADE OF CFRP	ESA	C-BAND HORN	ITI
DFACS assessment and prototyping	ESA	Equipment	LISA
S-band deployable antenna integrated into the lunar ascent module	ESA	Future space station in lunar orbit	LOP-Gateway lunar mission
Technical and engineering assistance in the project	ESA	life-support system for long duration missions	MELISSA
Ku	ESA	Ku	NEXT GENERATION ARTES-34
Main contractor of the entire program	ESA	Phases C/D and E1	PROBA 3
AOCS ENHANCED VERIFICATION	ESA	AOCS	ESA
ENVISION SRS - BB BOOM ANTENNA	ESA	Antenna	Envision
SPADS	ESA	SPADS	miscellaneous
PODIUM	ESA	PODIUM	miscellaneous
SCRIPT	ESA	SCRIPT	miscellaneous
ARTIFICIAL INTELLIGENCE TEC. for GNC DESIGN	ESA	Equipment	miscellaneous
HIPERGA - Future High Perf. Gyros. Techno for AOCS	ESA	Equipment	miscellaneous
DTK	ESA	Equipment	DTK
THORMUX - Photonic RF Demux	ESA	Equipment	THORMUX
HDRM Roadmap	ESA	Equipment	Miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
SENER			
In-flight demonstration study of all the functions of the mechanism and Guidance, Navigation and Control system (GNC)	ESA / ESTEC	Docking / joining mechanisms -Navigation	ISS - International Space Station
Hard Capture System (HCS) of the IBDM (International Berthing and Docking Mechanism)	ESA / ESTEC	Docking / joining mechanisms -Navigation	ISS - International Space Station
Delivery of the Engineering Qualification Models (EQM) of the Ice Cloud Imager (ICI) Back End Receivers	ESA / EUMETSAT	Equipment	METOP SG
Main contractor of the formation flying system	ESA / GMV	Equipment	PROBA 3
Scan assembly (FCI and IRS SCA) and the Calibration and Obturation Mechanism (FCI and IRS COM)	ESA / KAYSER-THREDE	Observation satellite	METEOSAT THIRD GENERATION
Prime contractor for Euclid's AOCS/GNC	ESA / THALES ALENIA SPACE	Scientific Mission	EUCLID
High Gain Antenna Gimbal	ESA / THALES ALENIA SPACE	Scientific Mission	EUCLID
Design and construction of the cells of the secondary (M2) and tertiary (M3) mirrors	ESO - European Southern Observatory	Infrared optical telescope	E-Extreme Large Telescope
Design and construction of the cells for the fifth mirror (M5)	ESO - European Southern Observatory	Infrared optical telescope	E-Extreme Large Telescope
Miniaturized Uhf Antennas For Planetary (mapp)	ESTEC	Antennas	miscellaneous
AMFORASS ADDITIVE MANUF.FOR SELECTIVE SURFACES	ESTEC	Equipment	miscellaneous
AERIAL	ESTEC	Equipment	AERIAL
ARIEL M2M PHASE CD	ESTEC	Mechanism	ARIEL
De-Spin mechanism pre-development	ESTEC	Mechanism	ESA
CPTR L-Band Feed	ESTEC	Antenna	miscellaneous
DEPLOYMENT MECHANISM FOR ELECTRA DPR	IBERESPACIO	DEPLOYMENT MECHANISM	ELECTRA
ARIEL M2 Phase B	IEEC	Equipment	ARIEL
Comet-I Instruments Fase B	INSTITUTO DE ASTROFÍSICA DE ANDALUCÍA	Equipment	Comet-I
Loutch Svm	ISS-RESHETNEV Co	Equipment	miscellaneous
SKIF-D Ka-Band Receiver	ISS-RESHETNEV Co	Equipment	miscellaneous
S-band Antennas For Cas500 3,4 & 5	KOREA ASTRONOMY SPACE SCIENCE INSTITUTE	Antennas	miscellaneous
DTJ Phase CD	LEONARDO	Equipment	PROSPECT
FLEX FLORIS INSTRUMENT OPTICAL MODULE STRUCTU	LEONARDO	Optics	FLEX
SFR SOLAS	LEONARDO	Mechanism	SOLAS
LM400 FILTERS	LOCKHEED MARTIN	FILTERS	miscellaneous
COUGAR PASSIVES	LOCKHEED MARTIN	Activated RF	miscellaneous
NG OPIR Ka-Band OMUX	LOCKHEED MARTIN SPACE SYSTEMS	Equipment	miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
SENER			
C-band	MAXAR	Equipment	INTELSAT
Power Propulsion Element	MAXAR	Propulsion	miscellaneous
SIRIUS XM 9&10	MAXAR	Equipment	miscellaneous
Power Propulsion Element	MAXAR	Passive RF	miscellaneous
Gateway XORI Fluid Transfer	MDA (McDonald, Dettwiler and Associates)	XORI Fluid Transfer	Gateway
AMOS 8 ANTENNAS	MDA (McDonald, Dettwiler and Associates)	ANTENNAS	miscellaneous
THUNDER C-BAND LNA	MDA (McDonald, Dettwiler and Associates)	Activated RF	miscellaneous
WSO/UV/PDD	MINECO	WSO/UV/PDD	WSO
EMIRATES LUNAR ROVER MAST & GIMBAL	MOHAMMED BR	Equipment	miscellaneous
C-band Program	NORTHROP GRUMMAN	C-band Program	miscellaneous
MEP Ku-Band	NORTHROP GRUMMAN	Antenna	miscellaneous
MRV C-Band	NORTHROP GRUMMAN	Antenna	miscellaneous
HALO PASSIVES	NORTHROP GRUMMAN	Passive RF	HALO
MRV S-Band	NORTHROP GRUMMAN	Antenna	miscellaneous
Optus X filters and test couplers	NORTHROP GRUMMAN	Passive RF	miscellaneous
Mechanical ground support equipment (MGSE) for assembly of BIOMASS Space Mission	OHB ITALIA	MGSE	BIOMASS
PB2	OHB ITALIA	Equipment	COMET
OPSAT REPOINTING MECHANISM	OHB SYSTEM AG	Equipment	OPSAT
CHIME RMU	OHB SYSTEM AG	RMU	CHIME
PLATO PSHF	OHB SYSTEM AG	Equipment	miscellaneous
OPTSAT TTC S-BAND ANTENNAS	OHB SYSTEM AG	ANTENNAS	OPTSAT
FORUM Scan and Pointing Units	OHB SYSTEM AG	Scan and Pointing Units	FORUM
MTG SCAN ASSEMBLY	OHB SYSTEM AG / THALES ALENIA SPACE	SCANNER	METEOSAT THIRD GENERATION
I-Hab HCS-IBDM (International Berthing and Docking Mechanism)	QINETIC SPACE	Mechanism	ISS - International Space Station
S-BAND ANTENNAS	QINETIC SPACE	Antennas	PROBA-3
SEOSAT-2	SENER	Integrated systems	miscellaneous
AST GATEWAY ANTENNA	SENER	Antenna	AST
Prototyping of Spacecraft Refuelling	THALES ALENIA SPACE France	Systems	miscellaneous
Equipment	THALES ALENIA SPACE France	Equipment	SATRIA



General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>SENER</b>			
Hera Hga & Lga Antennas	THALES ALENIA SPACE France	Antennas	Hera
TT&C Global horn Ant. & Test couplers	THALES ALENIA SPACE France	Equipment	SES-23
ESPRIT HYBRID FTC	THALES ALENIA SPACE France	Mechanism	ESPRIT
TELKOM 13 CBAND ANTENNAS & FILTERS	THALES ALENIA SPACE France	Antenna	miscellaneous
SES 24 ANTENNAS	THALES ALENIA SPACE France	Antenna	miscellaneous
Koreasat 6A	THALES ALENIA SPACE France	Antenna	miscellaneous
Reflector	THALES ALENIA SPACE Italy	Reflector	HALO
Lunar Communication System	THALES ALENIA SPACE Italy	Communications	HALO
Assessment on the motorised Hatch, the communication antenna pointing mechanism and the robotic arm interfaces	THALES ALENIA SPACE Italy	Future space station in lunar orbit	LOP-Gateway lunar mission
Interfaces for the robotic arms (external and internal)	THALES ALENIA SPACE Italy	Future space station in lunar orbit	LOP-Gateway lunar mission
Navigation Filters (navflt)	THALES ALENIA SPACE Italy	Equipment	GALILEO 2ND GEN.
Galileo G2 SARP	THALES ALENIA SPACE Italy	Equipment	GALILEO
SPACE RIDER	THALES ALENIA SPACE Italy	Equipment	SPACE RIDER
EUCLID AOCS	THALES ALENIA SPACE Italy	AOCS	EUCLID
EXM18 AOC GNC SCOE	THALES ALENIA SPACE Italy	Equipment	EXOMARS
LISA MECHANISM	THALES ALENIA SPACE Italy	MECHANISM	LISA
CIMR-MCA	THALES ALENIA SPACE Italy	Equipment	CIMR
METEOSAT THIRD GENERATION	THALES ALENIA SPACE Italy	Equipment	MTG
ATHENA MAMD	THALES ALENIA SPACE Italy	Equipment	ATHENA
NG UHF OMUX	THALES ALENIA SPACE Spain	Equipment	SPAINSAT
Eutelsat-36x- Uhf Filters	THALES ALENIA SPACE Spain	Filters	Eutelsat
CIMR	THALES ALENIA SPACE Spain	Equipment	CIMR

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>TECNALIA</b>			
Novel structural components for launchers/satellites applications by additive manufacturing	ESA	Instrument / Optics	miscellaneous
Corrosion protective hybrid coating for space	ESA	Spacecraft Structures	REACH
Citric acid as a green alternative for the passivation of stainless steel tubes	ESA	Spacecraft Structures	REACH
Application of Surface Functionalisation in Space Mechanisms	ESA	Structures / Mechanisms	miscellaneous
Investigation of additive manufacturing of improved ceramic packages for detectors	ESA	Instrument / Electronics	miscellaneous
Technology transfer of IRUCOAT (Environmentally friendly corrosion protective hybrid coating as substitute of chromium based conversion coatings	ESA	Technology transfer	REACH
<b>TTT GROUP</b>			
Heat and surface treatments	AIRBUS DS	Propulsion systems	ARIANE Family
Heat and surface treatments	SENER	Systems	Miscellaneous
<b>TUBACEX</b>			
Development of solutions (process, materials adaptation) for rocket engines	non-disclosure	Launchers Engines	Miscellaneous

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>ACITURRI</b>			
MRO A400M	AIRBUS DS	Several	AIRBUS DS A400M
Wing Assembly Conversion	AIRBUS DS	Several	AIRBUS DS A330MRTT
Rudder & Elevators	AIRBUS OPERATIONS	SPARES	AIRBUS A380
S19.1 Ducts & Housing	AIRBUS OPERATIONS	SPARES	AIRBUS A380
<b>AERNNOVA</b>			
Technical assistance & Sales of spares 24H/365d	AIRBUS	MLGD, HTP, Fuselage,etc	AIRBUS HELICOPTERS families
Composite & metal structure repairs	AIRBUS	MLGD, Elevators, tips, Leading edges	AIRBUS families
Composite & Metal structure repairs	EMBRAER	Elevators, Rudders	EMBRAER 170/190
Composite & Metal structure repairs	EMBRAER	Flaps, Ailerons, Wing tips, MLGD, etc	EMBRAER ERJ145/135/Legacy
Technical assistance & Sales of spares 24H/365d	EMBRAER	Structures and mobile surfaces	EMBRAER families
Technical Publications, SRM, AMM, ITEM, SB, etc	IAI	P2F conversions	AIRBUS A320/330
Maintainability, Reliability Analysis	IAI	P2F conversions	AIRBUS A330
Composite & metal structure repairs	LEARJET	Tips, fairings, panels, etc	BOMBARDIER CRJ Families
Technical assistance & Sales of spares 24H/365d	LEARJET	Empenage, fairings, elevators	BOMBARDIER CRJ Families
Technical assistance & Sales of spares 24H/365d	LEONARDO	fuselage	NHI NH90
Technical assistance & Sales of spares 24H/365d	MHI	Empenage, fairings, elevators	BOMBARDIER CRJ Families
Maintainability, Reliability Analysis	OEMs	Several	Miscellaneous
Technical Publications, SRM, AMM, ITEM, SB, etc	OEMs	Several	Miscellaneous
Modifications at Final Assembly of OEMs	OEMs	Several	Miscellaneous
Design of repairs	OEMs & Operators	Several	Miscellaneous
Design of GSEs	OEMs & Operators	Several	Miscellaneous
Inspections, special processes and re-certification on site and in house	Operators	Several	Miscellaneous
Technical assistance & Sales of spares 24H/365d	Operators	Several	Miscellaneous
Composite & metal structure repairs and modifications	Operators	Several	Miscellaneous
Technical Publications, SRM, AMM, ITEM, SB, etc	SIE	P2F conversions	AIRBUS A320/330
Composite & Metal structure repairs	SIKORSKY	Shields, cowlings, stabilisers	SIKORSKY S-92/H-92
Technical assistance & Sales of spares 24H/365d	SIKORSKY	cowlings, stabilisers	SIKORSKY S-92/H-92

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>AEROSPACE ENGINEERING GROUP</b>			
Components Maintenance, Repair & Overhaul	AIRBUS DS	power generation/hydraulics/avionics/fuel	AIRBUS DS C235/C295/MRTT
Components Maintenance, Repair & Overhaul	BRITISH AIRWAYS ENGINEERING	power generation/hydraulics/avionics/fuel	BOEING 777
Components Maintenance, Repair & Overhaul	IBERIA MAINTENANCE	power generation/hydraulics/avionics/fuel	A320F/A330/A340/B737/B767/B777
Components Maintenance, Repair & Overhaul	LUFTHANSA TECHNIK	power generation/hydraulics/avionics/fuel	A320F/A330/A340/B737/B767/B777
Components Maintenance, Repair & Overhaul	SABENA ENGINEERING	power generation/hydraulics/avionics/fuel	LOCKHEED MARTIN F-16
Components Maintenance, Repair & Overhaul	TURKISH TECHNIK	power generation/hydraulics/avionics/fuel	A320F/A330/A340/B737/B767/B777
Grinding Machine Retrofitting	MRO Operators	Engines	Miscellaneous
Machine tools for landing gear MRO	MRO Operators	Landing gear	Miscellaneous
<b>EGAMASTER</b>			
FOD Tool Control system	GLOBALIA	Several	Miscellaneous
Electronic Kanban systems	GLOBALIA	Several	Miscellaneous
<b>ITP AERO</b>			
Resolving incidents	ROLLS-ROYCE	RR Trent 700	AIRBUS A330
Resolving incidents	ROLLS-ROYCE	RR Trent 500	AIRBUS A340
Resolving incidents	ROLLS-ROYCE	RR BR717	BOEING 717
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	ROYAL AIR FORCE	HONEYWELL TPE331	SHORT TUCANO
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	Several	P&W PW206	AIRBUS HELICOPTERS EC135
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	GE F404	BOEING F/A-18
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	HONEYWELL TFE731	CASA C101

General Description of the Product/service	DIRECT CLIENT	SYSTEM / EQUIPMENT	PLATFORMS
<b>ITP AERO</b>			
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	HONEYWELL TPE331	CASA C212
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	SNECMA ATAR	DASSAULT MIRAGE Families
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	EUROJET EJ200	EUROFIGHTER TYPHOON
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	RR T56	LOCKHEED MARTIN C130
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	RR T56	LOCKHEED MARTIN P-3
Full Maintenance, Inspection and Repair, modules and components & engine and accessories test	MINISTERIO DE DEFENSA DGAM	GE J85	NORTHROP F-5
<b>METRALTEC</b>			
Manufacturing of metallic parts (including special processes)	AERNNOVA	Several	AIRNUS families
<b>ONA ELECTROEROSIÓN</b>			
Die-Sinking EDM machines	IBERIA MAINTENANCE	Engines	CFM CFM56/LEAP 1A
Die-Sinking EDM machines	IBERIA MAINTENANCE	Engines	IAE V2500
<b>RENISHAW</b>			
Measurement machine (CMM) with multiple instruments to measure blades, and components	Several	Several	Miscellaneous

PROJECT	SUMMARY	CALL
<b>ACITURRI</b>		
EWIRA	Manufacturing, assembly and integration of extended wing for a regional aircraft	European-CLEAN SKY 2
H2ELIOS	HydroEn Lightweight & Innovative Tank for Zero-Emission Aircraft	European-CLEAN AVIATION
HERWINGT	Hybrid Electric Regional Wing Integration Novel Green Technologies	European-CLEAN AVIATION
NEWBORN	Next Generation High Power Fuel Cells For Airborne Applications	European-CLEAN AVIATION
FASTERH2	Fuselage, Rear Fuselage and Empennage With Cabin and Cargo Architecture Solution Validation and Technologies for H2 Integration	European-CLEAN AVIATION
DOMMINIO	Digital method for improved manufacturing of multifunctional airframe parts	European-H2020-MG
RLIGHTBIOCOMP	New Bio-Based and Sustainable Raw Materials Enabling Circular Value Chains of High Performance Lightweight Biocomposites	European-Horizon Europe - C4
OVERLEAF	LH2 composite storage solutions for aviation applications	European-Horizon Europe - C5
NEOTAIL	Rudder development in thermoplastics	National - CDTI - CIEN
VALORH2	Research into new technologies, materials and processes associated with the hydrogen value chain	National - CDTI - MISIONES
CRYOTANK-LOX	LOX composite storage solutions for space applications	National - CDTI - PID
SHERPA	Sustainable & Competitive Solutions for Small Space Launcher Payload Fairings	National - CDTI - PID
COPERNICO	Development of strutal parts by RTM	National - CDTI - RETOS
FEINA	Development of strutal parts by WAAM	National - CDTI - RETOS
AERCOST	Advanced technologies for composite airframe components	National - PTA 2021
MULTIGLIDE	Flexible forming for highly integrated airframe components	National - PTA 2021
AIRE	Innovative Aerostructures aimed at Reducing Emissions	National - PTA 2022
LIDER	Disruptive Helicopter of the Future	National - PTA 2022
COMPCOAT	Coating solutions to improve composites resistance to temperatures	Regional - Castilla y Leon Calls
<b>AERNNOVA</b>		
UPWING	Droop nose composite leading edge	European-CLEAN AVIATION
FASTER H2	LH2 aircraft and airframe integration	European-CLEAN AVIATION
HERA	Digital and sustainability activities for Hybrid Electric Aircraft	European-CLEAN AVIATION
CLEAN SKY 2	Airframe ITD: Morphing composite winglet, advance flap kinematics	European-CLEAN SKY 2
CLEANSKY 2	LPA, HLFC HTP and WING: hybrid composite metallic architectures for leading edges with laminarity	European-CLEAN SKY 2
CLEANSKY 2	LPA, REAREND: 100% composite rear fuselage architecture with advanced materials and manufacturing processes	European-CLEAN SKY 2
CLEANSKY 2	LPA, THERMOPLASTIC PANELS: cargo door surrounding structure, stingers, etc	European-CLEAN SKY 2
ENGRT	Low observability and impact resistant fairings for high speed helicopter	European-EDF



PROJECT	SUMMARY	CALL
<b>AERNNOVA</b>		
MOLDAN	Large composite tools enabled by additive manufacturing	European-EIF Manufacturing
FIBEREUSE	Large scale demonstration of new circular economy value-chains based on the reuse of end-of-life fiber reinforced composites.	European-H2020
S2R PIVOT & PIVOT 2	Development of new structural components in composite for landing gears	European-H2020
FENIX	Composite panels for air-mobility and other transport modes, fire resistant, improved acoustic and thermal conductivity	European-H2020
SEER	SHM and structural airframe developments	European-Horizon Europe
DIDEAROT	Aerospace manufacturing operations digital twins	European-Horizon Europe
GENEX	Generative digital models	European-Horizon Europe
GRAPHENE 3	Primary structure characterization when composite materials graphene doped	European-Horizon Europe
MASTERLY	Large components automatic manipulations in an aerospace industrial assembly line	European-Horizon Europe
AVANWINGLET	New composite manufacturing process for a winglet	National - CDTI
CAPMAM	Characterization of new composites material for Avance Air Mobility	National - MICINN
TRANSCEND	Advanced Air Mobility	National - PTA 2021
AEROBOTICS	Aerospace assembly operations robotization and digitalization	National - PTA 2022
E-FLIGHT	Electric airframe technologies development	Regional - Basque calls - HAZITEK
Quick-UT	Robotics solution for non destructive testing	Regional - Basque calls - HAZITEK
<b>ANTERAL</b>		
VALIDDANTENNESS	validation de la fabrication additive d'antennes pour applications spatiales: This project will explore and validate additive metal manufacturing techniques for antennas for space applications, specially for small satellites	European-NAEN Euroregion
ARTS	New broadband communications and resilience technologies integrated into aerostructures	National - CDTI
QON-Space	Quasioptical systems for space observation	Regional - Navarra Calls
LANs-6G	New lens antenna technologies for New Space and 6G	Regional - Navarra Calls
<b>CEIT</b>		
HIVOMOT	High power and VOLTage operation of electric MOTors in aeronautics	European-H2020
AssAssiNN	Development of a multifunctional system for complex aerostructures ASSEMBLY, ASSisted by Neural Network	European-H2020

PROJECT	SUMMARY	CALL
CIDETEC		
U-CROSS	Early detection, monitoring and prediction of corrosion damage of coated aeronautic Al alloys through the application of calibrated Ultrasonic CorROsion Sensors	European-CLEAN SKY 2
STELLAR	Development of SmarT Eco-friendly anticontamination technologies for LAmInaR wings	European-CLEAN SKY 2
AMANECO	Assessment of additive manufacturing limits for eco-design optimization in heat exchangers	European-CLEAN SKY 2
H2FREE	Investigation and modelling of Hydrogen effusion in electrochemically plated ultra-high-strength-steels used for landing gear structures	European-CLEAN SKY 2
LUBGEAR	Tribological behaviour under loss of LUBrication of new optimized GEARs for friction reduction in power gearboxes	European-CLEAN SKY 2
REINTEGRA	Innovative End of Life procedures for REcycling INTEGRAl welded Al-Li Aerostructures	European-CLEAN SKY 2
HIPERION	Generation of knowledge and capabilities for new space technologies and future planetary missions	Regional - Basque calls - ELKARTEK
CTA		
OUTCOME	OUT of autoclave COMpositE manufacturing, wing and tail unit components and multifunctional design. Test technologies, STRUCTURAL TEST,	European-CLEAN SKY 2
ORBIT	AerOdynamic Rigs for VHBR IP Turbine. Experimental aerodynamics	European-CLEAN SKY 2
ARIAS	Advanced Research Into Aeromechanical Solutions. Aeroelasticity test	European-H2020
VALIDDANTENNESS	Validation of additive manufacturing of antennas for space applications	European-NAEN Euroregion
TASTE	Aerodynamic Technologies for Geared Turbofan	National - CDTI - RETOS
TRANSCEND	MATERIALS AND PROCESSES ADVANCED OF LOW COST FOR HIGH AIRCRAFT CADENCE	National - PTA
ZEROe	TECHNOLOGIES FOR OPERATE AIRCRAFT WITH ZERO EMISSIONS	National - PTA
PHIADI	INNOVATIVE ADVANCED E INTELLIGENT HYDROGEN PROPULSION	National - PTA
HEGAZKIN 2022	Validation of New Technologies for Zero Emission Aircraft	Regional - Basque calls - DFA
CONAVANTER 2022	Development of advanced thermal control techniques and sensor communication for optimization of aeronautical manufacturing processes.	Regional - Basque calls - DFA
ECOSSEL	Development of experimental technologies for new concepts of turbine seals in zero emission engines.	Regional - Basque calls - DFB
HIPERION	Generation of knowledge and capabilities for new space technologies and future planetary missions	Regional - Basque calls - ELKARTEK
EKOHEGAZ	DIGITALIZATION IN THE INTELLIGENT AND SUSTAINABLE AERONAUTICAL INDUSTRY for the ZERO EMISSIONS AIRCRAFT	Regional - Basque calls - ELKARTEK
PROH2BIO	PROpulsión híbrida hidrógeno-eléctrica y diseños BIOinspirados para un transporte aéreo sostenible	Regional - Basque calls - ELKARTEK
EKOPROP	Enabling technologies for intelligent and sustainable propulsion of zero-emission aircraft	Regional - Basque calls - ELKARTEK
INDARRA	Infrastructure Designed for Modular Self-Assembly in Orbit	Regional - Basque calls - HAZITEK
PRELUDIO	Distributed Electric Propulsion	Regional - Basque calls - HAZITEK
ALL-E	New high-performance 100% electric lubrication pump that improves efficiency and safety in the aeronautical sector	Regional - Basque calls - HAZITEK

PROJECT	SUMMARY	CALL
<b>DANOBATGROUP</b>		
FIBREMACH	Minimizing exposure of humans to potential carcinogenic dust and increasing competitiveness with robots in composite parts machining	European-H2020
INFINITE	Aerospace Composites digitally sensorised from manufacturing to end-of-life	European-Horizon Europe
MIRAGED	Strategic positioning in virtual models and digital twins for an industry 4.0	National - CDTI - CERVERA
OPTICED	Process optimization for zero defect manufacturing of large parts	Regional - Basque calls - ELKARTEK
<b>EGILE</b>		
NEWGENPAGB	Development of a power gearbox for a turbopropengine to be installed in future jets	European-CLEAN SKY 2
ADDIMOT	New electric engine design based on AM process	European-CLEAN SKY 2
APEM-AM	Inco 718 additive manufacturing process simulation and monitoring	National - CDTI - CERVERA
NINFA	Metal AM component certification	National - CDTI - CIEN
LUBEOFF	Effect of oil off condition on transmissions	Regional - Basque calls - ELKARTEK
AEROLUBE	Oil gerotor pumps CFD simulation	Regional - Basque calls - ELKARTEK
LATIDO	New multiphase oil pumps for aerospace industry	Regional - Basque calls - HAZITEK
HI-PREST	No backlash and high reduction gearbox for ultra high precision positioning	Regional - Basque calls - HAZITEK
<b>EIBAR PRECISION CASTING</b>		
INEVITABLE	Optimization and performance improving in metal industry by digital technologies	European-H2020
OSMOSIS	Strategic specialization in cast seal segments production for the new high speed aeronautic turbines	National - CDTI
HIDROSOL	New aluminium products for aeronautics with high modular variability obtained by ablation casting	National - CDTI
ADHOC	Manufacturing metal products with high mechanical characteristics, low series production and customized geometries by additive manufacturing technologies	Regional - Basque calls - HAZITEK
FAKTORIA	Research on new technologies and production processes of the basque aeronautic manufacturing network for the future high speed turbines	Regional - Basque calls - HAZITEK
MODELAN	Technologies for advanced and connected integral modelling for metal industries	Regional - Basque calls - HAZITEK
MANDALA	Development of aeronautic components with advanced design and high performance by SLM	Regional - Basque calls - HAZITEK
SENDOA	Process development for the manufacturing of high strength aluminium components	Regional - Basque calls - HAZITEK
CORTEX	Precision in ultra near net shape critical components obtained by 2030 processes	Regional - Basque calls - HAZITEK

PROJECT	SUMMARY	CALL
<b>ITP AERO</b>		
Clean Sky 2	VHBR Engine Intermediate Pressure Turbine Technology	European-CLEAN SKY 2
ARIAS	Advanced Research Into Aeromechanical Solutions	European-H2020
TURBONOISE	Validation of improved turbomachinery noise prediction models and development of novel design methods for fan stages with reduced broadband noise	European-H2020
ENCOMPASS	ENgineering COMPASS	European-H2020
EMUSIC	Efficient Manufacturing for Aerospace Components Using Additive Manufacturing, Net Shape HIP and Investment Casting'	European-H2020
BOOSTER2	Acquisition of basic compressor technologies	National - CDTI
COLD SPRAY	High Speed Cold Filling Repairs for Nickel Base Alloys	National - CDTI
SALUD	Unified Analysis System for Diagnosis	National - CDTI
JANO	Join ActioN towards digital TranfOrmation	National - CDTI
FUTURALVE	Material and advanced manufacturing technologies for new generation high-speed turbines. Development of advanced materials and manufacturing technologies necessary to design optimized components of high speed turbines and be able to manufacture them with better use of the raw material	National - CDTI - CIEN
ENVIDIA	Virtual Environment for the Design and Manufacture of Aeronautical Turbines	National - MICINN
ESCALITURB	Competitive technologies for aeronautical turbine hot structures. Develop the technology to perform 100% reliably and in high production (from 10 to more than 1000 components year) hot structures interturbine of the aeronautical engine of the middle segment	Regional - Basque calls - HAZITEK
TALDEA	Turbinas de ALta velocidad: DEsarrollo de tecnologías de fabricación Avanzada. Development of advanced manufacturing technologies to produce future high-speed turbines of future aeronautical engines in segments of medium and high thrust	Regional - Basque calls - HAZITEK
<b>KORTA</b>		
HI-PREST	Technologies for highly reliable mechanisms and sub-micrometric precision in critical applications and environments. A consortium of six Basque companies, led by SENER working together on a project to develop a high-performance scanner, with applications in telescopes, cameras and other optical instruments	Regional - Basque calls - HAZITEK
<b>LAZPIUR</b>		
Product development	Vanes and Blades prototypes	Others - Internal/Client Development
Product development	Ti Rings prototypes	Others - Internal/Client Development
Processes development	sensorized tooling	Others - Internal/Client Development

PROJECT	SUMMARY	CALL
LORTEK		
MICROFORM	The use of microperforations with variable size in the external skin of the aircraft wings allows to reduce the complexity in the design of the wings with Hybrid Laminar Flow Control (HLFC).	European-CLEANSKY 2
ROLIAC	Robust and Light AM Components for Military Systems	European-EDF
PERFORM	European Periphery Teaching Factory of the Future on Additive Manufacturing	European-EIT Manufacturing
REDAMP 2	Real time monitoring of DED Additive Manufacturing Process for zero defect manufacturing	European-EIT Manufacturing
AUTHENTIC	Automated thermographic inspection system for the inspection of aeronautic weldings	European-H2020
NEMARCO	New manufacturing routes (for NiCrSiFeB alloys) to replace cobalt in aircraft component	European-H2020
AMANECO	Assessment of additive manufacturing limits for ecodesign optimization in heat exchangers	European-H2020
HYPERCOG	Hyperconnected architecture for high cognitive production plants.	European-H2020
MULTIFUN	Enabling MULTI-FUNctional performance through multi-material additive manufacturing	European-H2020
AMABLE	Development of Aero Engine Component Manufacturing using Laser Additive Manufacturing	European-H2020 - FoF
FLASH-COMP	Flawless and sustainable production of composite parts through a human centred digital approach.	European-Horizon Europe
ADDITOOL	Implementation of metal additive manufacturing in the world of tooling	European-Interreg Sudoe
DURABLE	Maintenance drones and robots to enhance renewable energy systems in the atlantic area	European-Interreg
SAM	Sector Skills Strategies in Additive Manufacturing	European-Others
EFPP	European Connected Factory Platform for Agile Manufacturing	European-Others
CEFAM	Strategic program for the Training of Excellence in Additive Manufacturing of Metallic materials	National - CDTI - CERVERA
NINFA	Research for the development of aerospace solutions with new evaluation, design and inspection methods in Additive Manufacturing adapted to the entire supply chain	National - CDTI - CIEN
INNPROBAT	RESEARCH OF NEW PRODUCTION PROCESSES FOR THE REDUCTION OF THE COST OF BATTERIES AND THEIR ENVIRONMENTAL IMPACT	National - CDTI - MISIONES
TECMADIVA	Digitized Material addition technologies for the automated manufacturing and repair of high Added Value parts	National - CDTI - MISIONES
EDISON	More sustainable, digital and intelligent Additive Manufacturing technologies for an efficient industry	Regional - Basque Calls
ANDREA	Digital transformation and efficient use of resources through non-destructive inspections	Regional - Basque Calls
MINERVA	Advanced design and development of materials for the manufacture of new products for more sustainable energy and mobility using modeling and data analysis tools	Regional - Basque Calls
ETCHPRIN	Extension of New Technologies and Digitalization Tools for the Intelligent Production of Components for Hostile Environments	Regional - Basque Calls
MINAKU	Multilayer INtegrated Advanced CUtaneous sensing	Regional - Basque Calls
HIPERION	Generation of knowledge and capabilities for new space technologies and future planetary missions	Regional - Basque Calls
IMAGINE	IMAGINE: Manufacturing for Intelligent Industry (Tecnologías de fabricación híbridas para la industria inteligente)	Regional - Basque Calls

PROJECT	SUMMARY	CALL
<b>LORTEK</b>		
OPTICED	Process optimization for zero defect manufacturing of large parts	Regional - Basque Calls
ALENCO	Development of the SLM process for precipitation-hardening alloys for high-performance aeronautical components	Regional - Basque Calls
RESTERIA	Development of a resonant induction platform for the optimization of inductive thermography tests through the application of Artificial Intelligence	Regional - Basque Calls
LOTUR-AI	Predictive Quality of Arc Welding processes	Regional - Basque Calls - DFG
DEMobility	Smart Mobility Industry	Regional - Basque Calls - DFG
DEFECT	On-line monitoring and off-line inspection techniques for the detection of defects in metal additive manufacturing processes	Regional - Basque Calls - DFG
KA-IA	Kudeaketa Automatikoa Inteligentzia Artifizialaren bidez (Automatic Management through AI)	Regional - Basque calls - HAZITEK
OMNIJOIN	The adaptation of its production processes in the field of arc welding joining processes to the macro-trend known as Industry 4.0.	Regional - Basque calls - HAZITEK
EGOKIA	Digital knowledge sharing space	Regional - Basque calls - HAZITEK
SEMFEM	SUSTAINABLE & EFFICIENT MAGNET FREE ELECTRIC MOTORS FOR EV	Regional - Basque calls - HAZITEK
INDATIA	PROJECT TO ACCELERATE THE USE OF DATA AND AI IN THE BASQUE INDUSTRY	Regional - Basque calls - HAZITEK
MONDAI	Development of multi-level conversations between manufacturing assets applying artificial intelligence technologies	Others - PCyT - MCC
<b>MESIMA</b>		
FAKTORIA	Development of advanced manufacturing technologies to produce future high-speed turbines: waterjet cutting and trimming	Regional - Basque calls - HAZITEK
<b>METROLOGÍA SARIKI</b>		
NINFA	Advanced additive manufacturing for aeronautical components. 3D tomography inspection systems and protocols for AM parts	National - CDTI - CIEN
ABIO	Inspection, monitoring and new developments on metrology tools	Regional - Basque calls - HAZITEK
FAKTORIA	Advanced manufacturing and materials technologies for the new generation of high-speed turbines. 3D inline inspection system	Regional - Basque calls - HAZITEK
KAIA	Inspection, monitoring and new developments on metrology tools	Regional - Basque calls - HAZITEK
<b>MONDRAGON UNIBERTSITATEA</b>		
MULTIMAG	Multi-functional, multi-material magnetic components and structures for electrification	European-Horizon Europe
EKOHEGAZ	Digitalization in the intelligent and sustainable aeronautical industry for the zero-emission aircraft	Regional - Basque calls - ELKARTEK
EKOPROP	Enabling technologies for intelligent and sustainable propulsion of zero-emission aircraft	Regional - Basque calls - ELKARTEK
FAKTORIA	Research into new Technologies and production processes of the Basque aeronautical manufacturing network for future High Speed Turbines	Regional - Basque calls - HAZITEK
<b>NAITEC</b>		
VALIDDANTENNESS	Validation of addtive manufacturing of antennas for space applications	European-NAEN Euroregion



PROJECT	SUMMARY	CALL
<b>SATLANTIS</b>		
NEMOS	The main objective is to detail design an EO mission for maritime surveillance for defence applications based on small satellites.	European-EDIDP
SEOSAT	Spanish Earth observations System Implementation Phase - multiple Studies	European-ESA
C3S	Cognitive Cloud Computing. Feasibility study for a real-time cloud-based deprocessing system in space infrastructure for methane detection and quantification applications	European-ESA
CIBERSEGURIDAD	The objective of this project is to implement a CASB tool, thanks to which SATLANTIS will be able to mitigate the risk of data loss thanks to the visibility and control of the main in cloud applications.	Regional - Basque Calls - Ciberseguridad Industrial
BIZKARGI	This is a business strategy project whose ultimate objective is to offer the market a very high resolution standardized comprehensive solution for earth observation applications that includes both the SATLANTIS payload and the entire satellite platform.	Regional - Basque Calls - DFB 3i
LUR-BAT	Functional Prototype and Service Center for Earth Observation Mission over Euskadi	Regional - Basque calls - HAZITEK
INFOCUS	INTELLIGENT AND SUSTAINABLE DESIGN AND MANUFACTURING OF NEW PRODUCTS WITH SURFACE PROCESSES FOR OPTOELECTRONIC APPLICATIONS	Regional - Basque calls - HAZITEK
IO22 BDIH	Proof of Concept of optical scanning solution for parts for quality assurance in the BDIH node with OptiScan sensor and M3 software	Regional - Basque Calls – KONEXIO
<b>SENER</b>		
APOS-UE	Project on indoor navigation of soldiers or small mobile platforms. SENER Aeroespacial is responsible for the data fusion part of the sensors developed to provide the navigation solution.	European-ESA - GSTP
EXCEED COMINT	Trusted and system-on-Chip for European Defense applications. The EXCEED project is aimed at creating a European supply chain of reconfigurable, flexible and trustable processor family targeting a number of ruggedized and secure defence applications such as secure communications controllers, signal processing arrays, flexible radio, flexible cryptography, secure positioning, navigation and timing and mission critical controllers.	European-EDA
OPTIMISE	Innovative positioning system for defence in GNSS-denied areas. This project will propose a PNT “toolbox”, offering a set of emerging technologies -or a smart combination of disruptive technologies- having all advantages and limits (that will be assessed and evaluated), as well as a backbone software architecture to integrate them.	European-EDA
ADVANCED TVC FOR MICROLAUNCHERS	Design, developing and test of an Advanced Thrust Vectoring Control (TVC) for micro-launchers.	European-EDA
EO-DDL PDT EM	Development of a full dual (X and K) band EO Data Downlink System (EO-DDL), targeting data rates higher than 2 Gbps per channel. The DDL includes two on-board sub-systems: the Payload Data Transmitter (PDT) assembly and the Ultracompact Dual Band steerable (mechanically) Antenna (UDBA) assembly.	European-EDA
USSP	Unmanned Semifixed Sea Platforms: design, manufacturing and validation of the interface between the underwater vehicles and the platform itself, including the capture and mooring system, as well as the power and data transfer system	European-EDIDP
CARAMUEL	led by HISPASAT, is working on the feasibility phase of the first geostationary quantum key distribution mission, one of the main technologies that will define secure communications of the future.	European-ESA
AURORA	The AURORA project provides a suite of European tools for the development and validation of auto-coding in-flight software that optimizes interoperability and the exchange of information on the platform. Simplifying the process yields a more reliable solution, significantly shorter software programming times and lower production costs. The auto-coding in-flight software is applicable in both scientific missions and commercial missions, including the telecommunications market and the so-called NewSpace.	European-H2020
EROSS	EROSS (European Robotic Orbital Support Services) objective is to demonstrate the European solutions for the Servicers and the Serviced LEO/GEO satellites, enabling a large range of efficient and safe orbital support services. The project will assess and demonstrate the capability of the on-orbit servicing spacecraft (chaser) to perform rendezvous, capturing grasping, berthing and manipulating of a collaborative client satellite (target) provisioned for servicing operations including refuelling and payload transfer/replacement.	European-H2020



PROJECT		SUMMARY	CALL
SENER			
ET PACK	Satellite de-orbiting system, based on a space tether.		European-H2020
HIPATIA	HIPATIA (Hellcon Plasma Thruster for In-Space Applications). The Spanish scientific team SENER Aeroespacial-UC3M leads a consortium with Airbus, the National Centre of Scientific Research, both in France, and the company Advanced Space Technologies in Germany. This consortium will validate the performances and operation of a new electric space propulsion technology that could be used in various types of satellites or small space platforms: the Helicon Plasma Thruster (HPT), testing the functioning of the new prototype.		European-H2020
BMOM	The objective of Business Model For Orbital Maneuvering Kit - BMOM is making a business model for a Deorbit Kit in order to turn the flagship result of ET PACK project into a genuine innovation with a disruptive socio-economic impact in the space sector while increasing the competitiveness of the European space industry. The project ET PACK is developing a Deorbit Kit (DK) that will be bolt-on to satellites and activated at the end-of-life for post mission disposal.		European-H2020
PERIOD	SENER Aeroespacial is part of the European consortium for PERIOD (PERASPERA In-Orbit Demonstration) Project. The “orbital factory” envisioned by PERIOD will pioneer construction of major components such as antenna reflectors, assembly of spacecraft components and satellite payload replacements, directly in space. This is the precursor to future manufacturing of large structures in orbit. Airbus Defence and Space is leading a team of seven European innovators, bringing their own expertise in fields such as robotic operation, virtual reality, and in-space assembly: SENER Aeroespacial, DFKI, EASN-TIS, GMV, GMV-SKY, ISISPACE and Space Applications Services.		European-H2020
ACTECA	ACTECA - Accelerators and Associated Technologies for Large Scientific Facilities. Development of a high power RF summing cavity, with 160 inputs for applications in particle accelerators and more direct application in the DONES /IFMIF projects (National Fusion Laboratory).		National - CDTI - CIEN
POD COMINT	Development of a prototype of COMINT equipment (Inteligencia de Comunicaciones) located in a POD for tactical usage in aircrafts and UAVs.		National - DGAM
COMINT E2	Development of a basic prototype of COMINT equipment (Inteligencia de Comunicaciones) for satellite communications and mobile communications.		National - DGAM
ARCO	Development of a convoy of vehicles with mixed functionality (tele-operated and autonomous). SENER Aeroespacial is responsible for the navigation unit. The project aims to obtain the requirements definition of a military product (following the requirements of the Spanish Army) and to reach a TRL5/6 demonstrator.		National - Spanish Ministry of Defense
HI-PREST	HI-PREST, Technologies for highly reliable mechanisms and sub-micrometric precision in critical applications and environments. A consortium of six Basque companies, led by SENER Aeroespacial and comprising the companies EGILE Mechanics, FAGOR Automation, IBARMIA Innovatek, KORTA and ULMA Embedded Solutions, is working together on a project to develop a high-performance scanner, with applications in telescopes, cameras and other optical instruments		Regional - Basque calls - HAZITEK
MADE	Researching and developing new materials and manufacturing routes (additive) to create a new generation of electromechanical devices: electric actuators for space applications.		Regional - Basque calls - HAZITEK
TMBE	The main objective of the TMBE (Towards Model Based Enterprise) project is research into advanced technologies for companies managed by intelligent digital models applied to the design of products, processes and business models.		Regional - Basque calls - HAZITEK
MFOC	Development of technology, methodology and applications for the use of MPSoC (Multi-Processor System on Chip) systems. The Project, led by SENER Aeroespacial, will validate the proposed technological concept, its potential and its advantages for the use of this type of system in on-board flight equipment.		Regional - Madrid Calls - Open Innovation Program
NEReA	(Non Explosive Release Actuator), which has been developed entirely by SENER with its own technology and is currently in the qualification phase.		Others - Internal Development
CLIM Pre-Dev	Development of know-how and procedures for telescopes alingment TMA (Three Mirror Anastigmatic).		Others - AIRBUS DS
TAP	Teleoprated ASCOD Platform. Design and development of a modular and interoperable system that allows transforming a manned ASCOD platform into an unmanned platform with teleoperable and/or supervised autonomous modes of operation.		Others - General Dynamics European Land Systems
MIRROR	The overall MIRROR activity has the objective to develop a multi arm robot system that can relocate over a spacecraft, deploying Orbital Replacement Units (ORUs) or reflector Single Mirror Tiles (SMTs) from their stowed location to their operational location.		Others - GMV AD

PROJECT	SUMMARY	CALL
<b>TECNALIA</b>		
HECATE	Hybrid ElectriC regional Aircraft distribution TEchnologies	European-CLEAN AVIATION
PHIVE	Development of power electronic technologies for >1kV aerospace applications	European-CLEAN SKY 2 - SYS
ERICE	Super hydrophobic and erosion resistant coating for turbine scroll and downstream pipe	European-CLEAN SKY 2 - SYS
FASELAG	FAil-Safe Electro-mechanical actuation for LAnding Gear: development of an electromechanical actuation system (EMAS) for extension-retraction of main and nose landing gears for future SMALL A/C. Development of ECU HW&SW	European-CLEAN SKY 2 - SYS
VALEMA	Validation tests of electromechanical actuators and its dedicated control units at TRL 6 level. Development of ECU HW&SW	European-CLEAN SKY 2 - SYS
EMA4FLIGHT	Development of Electromechanical Actuators and Electronic control Units for Flight Control Systems. Development of ECU HW&SW	European-CLEAN SKY 2 - SYS
FLEXGAN	K-band GaN-based SSPA for flexible payloads and multicarrier operation for 5G satellite concept	European-H2020-IL-LEIT-SPACE
CURE	Copernicus for Urban Resilience in Europe	European-H2020-IL-LEIT-SPACE
AMULED	Air Mobility Urban Large Experimental Demonstrations	European-SESAR
TINDAIR	Tactical Instrumental Deconfliction and Automatic Resolution	European-SESAR
Uspace4UAM	Large scale demonstrations project	European-SESAR
AMU-LED	Air Mobility Urban Large Experimental Demonstrations	European-SESAR
AEROTAPE	Fuselage high performance thermoplastic composites based on customized stack thermoforming process	European-Smart-EUREKA
PLASTAIR	New aeronautical components of thermoplastic compound through highly efficient forming processes	National - CDTI - CERVERA
AVANWINGLET	Advanced manufacturing technologies and the optimization of media and processes to produce configurations of composite material winglets.	National - CDTI - CIEN
AEROBOTICS	Research in new technologies associated with robotic AEROnautical developments for sustainable production	National - PTA
APERTURAS	Advances in Electric Propulsion with Turbomachines	National - PTA
CRIPICOMP	CRlogenics, batteries and hydrogen combustion in air transport	National - PTA
AERCOST	Components and systems of the future	National - PTA
TRASCEND	Advanced low cost materials and processes for high cadence aircraft	National - PTA
CODISAVA-2	Advanced distributed control for air transport safety and energy efficiency	Regional - Basque calls - ELKARTEK
EKOHEGAZ	Digitalization in the intelligent and sustainable aeronautical industry for the zero emissions airplane	Regional - Basque calls - ELKARTEK
EKOPROP	enabling technologies for a intelligent and sustainable propulsion of the zero emissions aircraft	Regional - Basque calls - ELKARTEK
HI-PREST	Technologies for a new generation of ultra-precision and high-stability automated systems	Regional - Basque calls - HAZITEK
E-Flight	Aerostructures for electric aircraft	Regional - Basque calls - HAZITEK
PRELUDIO	Development of electric propulsion system for aircraft	Regional - Basque calls - HAZITEK
SENDOA	Process development for the manufacture of high-strength aluminum components	Regional - Basque calls - HAZITEK

PROJECT	SUMMARY	CALL
<b>TECNUN</b>		
CODISAVA 2	Advanced distributed control for air transportation safety and energy efficiency	Regional - Basque calls - ELKARTEK
PROH2BIO	Hydrogen-electric Hybrid PROpulsion and BIO-inspired designs for sustainable air transport	Regional - Basque calls - ELKARTEK
PIBA55	Obtaining Noise Maps Using a Microphone Array Network Using Spatial Estimation and Distributed Consensus	Regional - Basque calls - PIBA
<b>TEKNIKER</b>		
LiTRAS	Linear Innovative Thrust Reverser Actuator System	European-CLEAN SKY 2
RECYCOMP	Development of equipment for composite recycling process of uncured material	European-CLEAN SKY 2
INNOTOOL	Development of Thermoplastic press-forming Tool for Advanced Rear End Closing Frame Prototype and Tooling 4.0 for Assembly and transportation of the Advanced Rear End Prototype	European-CLEAN SKY 2
WEIBAL	Development of an innovative system for measuring the weight and unbalance of an aircraft	European-CLEAN SKY 2
i-TRIBOMAT	Intelligent Open Test Bed for Materials Tribological Characterisation Services	European-H2020
MadebyEurope	Added Value Manufacturing KIC	European-H2020
DIH2-TEK	Pan-European Network of Robotics DIHs for Agile Production	European-H2020
IRISS	The InteRnational ecosystem for accelerating the transition to Safe-and-Sustainable-by-design materials,	European-Horizon Europe
Masterly	Development of innovative smart automated handling systems	European-Horizon Europe
LUBRINTEL	New intelligent lubrication systems for metal processing	National - CDTI - CIEN
5R	Robotic technologies in smart manufacturing	National - CDTI - CIEN
SENECA	Strategic raw materials of secondary origin for independence and energy transition	National - CDTI - MISIONES
HIPERION	Generation of knowledge and capabilities for new space technologies and future planetary missions	Regional - Basque calls - ELKARTEK
Precitek	Precision engineering to improve manufacturing means	Regional - Basque calls - ELKARTEK
COGILE	Key Enabling technologies (KET) for efficient COoperation between workers (lanGILE) and the intelligent systems of the Factory of the Future	Regional - Basque calls - ELKARTEK
TrebezIA	Intelligent and agile BRTA ecosystem to accelerate the implementation of the new generation of robotics in the factories of the future of Euskadi	Regional - Basque calls - ELKARTEK
EDISON	Digital and Intelligent Additive Manufacturing Technologies for a more sustainable industry.	Regional - Basque calls - ELKARTEK
PROFLOW	Fluid Production for the Smart Industry	Regional - Basque calls - ELKARTEK
MINTT	Optimization of the manufacturing process chain in applications for the aeronautical sector and science industry	Regional - Basque calls - ELKARTEK
MINERVA	Advanced design and development of materials for the manufacture of new products for energy and mobility	Regional - Basque calls - ELKARTEK
Front 22	Development of safe and sustainable coatings that comply with the European green deal	Regional - Basque calls - ELKARTEK
MINAKU	Development of Multipoint, Wireless, Self-powered and CUtaneous sensors for the surface monitoring of metallic components	Regional - Basque calls - ELKARTEK
LANVERSO	Development of digital tools at the service of the company	Regional - Basque calls - ELKARTEK

PROJECT		SUMMARY	CALL
TEKNIKER			
ABIO	Abio: Smart Manufacturing		Regional - Basque calls - HAZITEK
GLACIER	Development of a sub zero SMART cooling system to optimize the machining of composite and thermoplastic fibers		Regional - Basque calls - HAZITEK
LEMAK	New structures in Sandwich material for High Cadence Rudders for the Empennage of the Future		Regional - Basque calls - HAZITEK
ULCAVEEN	ULtrasonic CAVitation pEENing in components subjected to mechanical fatigue		Regional - Basque calls - HAZITEK
InFOCUS	Diseño y fabricación inteligente y sostenible de nuevos productos con procesos de superficies para aplicaciones optoelectrónicas		Regional - Basque calls - HAZITEK
E-Flight	Studies and technological developments for electric airplanes		Regional - Basque calls - HAZITEK
FIDATU	your intelligent digital aeronautical factory		Regional - Basque calls - HAZITEK
HORACE	Triboelectric energy harvesting for mars exploration		Others
MetroLDR	Metrology for space large deployable reflectors		Others
MIPU	MICRO-PUMP FOR BALL BEARING LIQUID RE-LUBRICATION		Others
ROD-BUSHING	Tribological study under configuration “ROD-BUSHING”		Others
HISRU	Photoelectrochemical system for CO2 reduction to produce fuels and sewage treatment		Others
Winglet motor	Development of electric motor for EMA winglet		Others
TTT GROUP			
NINFA	FA Suply Chain		National - CDTI - CIEN
ECrODUR	Advanced coatings		Regional - Basque calls - HAZITEK
UPNA			
TESLA	Development of the advanced technologies for future European satellite applications. Main results: Microwave/millimetre (1 to 300 GHz) and sub-millimetre (above 300 GHz) wave frequencies, in multiple domains, including electromagnetic design and theoretical analysis/modelling, advanced materials and manufacturing technologies, and experimental characterization (e.g. high-power effects and space qualifications)		European-H2020 - MSCA
MIRACLE	Prove the feasibility of developing a radiative cooling device based on a Photonic Meta-Concretes (PMC). Main results: prove the feasibility of this idea, fabricate a prototype, and start the roadmap to be used in other applications		European-H2020 - FETOPEN
INTERSPACE	Filters and passive components for future ground and space millimeter wave integrated radio systems. Main results: design, manufacture and measurement of passive components in millimeter frequencies		National - MICINN (AEI)
FRONT-millIRAD	Radiofrequency antennas and headers for advanced radiometers in millimeter frequencies that enable the new generation of earth observation instruments. Main results: design, manufacture and characterization of components		National - MICINN (AEI)
FUTUREFILTER	High-frequency passive filters and components for future high-capacity ground and space communications systems in a hyper-connected world. Main results: high performance filters		National - MICINN (AEI)
GAS	Noel antenna configurations based on Gap waveguide technology		National - MICINN (AEI)
BANDAQ	Analysis of satellite payloads and optimization of machining geometries for high capacity satellites in Q Band. Main results: compact Q-band antenna feed chain configuration		Regional - Navarra Calls
LANs-6G	New lens antenna technologies for new space & 6G. Main results: high performance antennas		Regional - Navarra Calls
GGWFILTROS	High-frequency devices for communications satellites with advanced manufacturing. Main results: GGW tecnology and metal 3D printing (SLM)		Regional - Navarra Calls

PROJECT	SUMMARY	CALL
UPV/EHU		
HUC	Development and validation of a powder HIP route for high temperature Astroloy to manufacture Ultrafan® IP Turbine Casings. A new sintering process to manufacture turbine casings.	European-CLEAN SKY 2
INTER-Q	Interlinked process, product, & data quality framework for zero defect manufacturing. Digital solutions, intelligent systems, hybrid digital twins and AI-driven optimization tools to assure the quality in smart factories. Main results: use of blockchain and radical quality testing techniques	European-H2020 FoF
PARADISSE	A Productive, Affordable and Reliable solution for large scale manufacturing of metallic components by combining laser-based ADDitive and Subtractive processes with high Efficiency . The overall objective of PARADISE project is to rationalize, to structure and to make available to the stakeholders of manufacturing value chain the knowledge and the tools for combining two antithetical processes: Laser Metal Deposition (LMD) and Machining (milling and turning). Additive and subtractive manufacturing processes .	European-H2020 FoF
ADAM^2	Analysis, Design, And Manufacturing using Microstructures. It is proposed a unified manufacturing pipeline that will focus on all stages involving Analysis, Design, And Manufacturing using Microstructures produced by multi-material 3D printers. Main results: The results of this project will lead to scientific-technological development that impacts CAD and tool manufacturing European markets and are expected to reduce the exploitation of heavy materials between an order of magnitude to two orders, in volume.	Eusopean-H2020 FETOPEN
MHAYA	Towards the new industrial ecosystems of 2030, driven by the new generation of cognitive Machine Tools, capable of Learning and Acting autonomously and empathetically	National - CDTI - MISIONES
TASTE	Aerodynamic technologies for next generation of geared turbofans. Rigs, compressor and turbine components for next testing programs of high-speed engines. Main results: designs and processes for components to be used at CTA and LIFT.	National - CDTI - RETOS
ITENEO	A global approach to improve the manufacturing of casings for the new aero engines. Improving manufacturing technologies used in the next wave of engines for aircrafts (NEO). Main results: High-feed turning and turn-milling modelling, Cryogenic cooling on Ni-Co alloys. Polishing by robotic polishing and final check control by optical means.	National - CDTI - RETOS
ENVIDIA	Virtual Environment of Design and Manufacturing of Aeronautical Turbines. Modeling and simulation of key processes for high speed turbines. Leading to the concept of Virtual Engine, and allowing to migrate to a completely new engine configuration in a safe, robust, efficient and economically viable way.	National - CDTI - RETOS
HCR Taylor	NEW PRODUCTION OF TOOLS ORIENTED TO MANUFACTURE HIGH ADDED VALUE COMPONENTS OF TURBOMACHINES (HAUTE COUTURE TAYLOR MADE)	National - Proof of concept
FAKTORIA	New technologies and processes of Basque Manufacturing supply chain companies for next future high-speed turbines. Manufacturing technologies for future turbines related with Ultrafan new aircraft engine. Main results: machine and optimised processes for 2030 engine programs.	Regional - Basque calls - HAZITEK
COMPLETER	Components for test bench elements of critical system . A new process for production of complex components for high-speed turbines Main results: A new industrial process with great impact in turbine and compressor component manufacturing.	Regional - Basque calls - HAZITEK
BEATRICE	High-performance broaching tools for new transport systems . Optimization of broaching tools, substrates, geometry, coatings, in high-speed conditions. Main results: new broaching tools for several sectors, automotive and aeronautics .	Regional - Basque calls - HAZITEK
ABIO II	Development of machine and systems for competitive Manufacturing of aeronautical components. Optimization of machines and production lines to improve OEE in aeronautical production. Main results: software for smart control of production lines.	Regional - Basque calls - HAZITEK
FIDATU	your intelligent digital aeronautical factory	Regional - Basque calls - HAZITEK
WOLCO		
TALDEA	Development of advanced Cutting-Tools	Regional - Basque calls - HAZITEK
FAKTORIA	Development of advanced Cutting-Tools	Regional - Basque calls - HAZITEK



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