

## Annex 3 Projects financed in the period 2015-2020

	R&D programme (projects)			
	Title-description	Leading Company	Total budget*	
1	LUMES: Development of a 150-kg unmanned helicopter with 30-kg payload. LUA: Development of a 25-kg unmanned helicopter with 5-kg payload.	Babcock	€5,649,782.34	
2	Flight Control System: Flight control system for LUA and LUMES unmanned helicopters.	Babcock	€2,331,653.36	
3	Payloads: high-resolution cameras, telecommunication cells and other equipment.	Babcock	€7,375,868.87	
4	Development of land mobile unit, for LUA or LUMES transport; includes deployable control centre.	Babcock	€816,880.80	
5	Drone and instrument operator training simulator.	Babcock	€863,606.51	
6	Transport payload for the deployment of assistance equipment, versions for LUA and LUMES.	Babcock	€232,320.00	
7	Air traffic management for segregated airspace in emergency operations.	Babcock	€2,106,835.91	





	R&D programme (projects)			
	Title-description	Leading Company	Total budget*	
8	Forest inventory: management system to optimize preventive forestry work and forest management and inventory.	Babcock	€1,351,537.02	
9	Post-fire restoration: production of cartography for potential development of vegetation after a fire, taking into account the composition of the soil and the relief of the terrain.	Babcock	€336,749.27	
10	Pest control: application of management for forest pest control and to determine the phytosanitary status of agricultural crops.	Babcock	€469,048.88	
11	Fire management: management system for fire monitoring and civil protection.	Babcock	€3,575,561.13	
12	Land management: assistance with monitoring and control of compliance with land management, CAP-subsidised agricultural practices and land dynamics.	Babcock	€998,992.55	
13	Fisheries surveillance: management system for the control of the fishing fleet and the inspection of fishing practices.	BABCOCK	€545,431.52	
14	Shellfishing control: management system for the inspection of marine infrastructures and for shellfishing control.	BABCOCK	€32,347.79	
15	Combating pollution: inspection system for monitoring the quality of marine waters and combating pollution.	BABCOCK	€1,173,339.24	
16	Salvage and rescue: system for the recognition and identification of vessels and floating bodies at sea.	BABCOCK	€1,071,174.93	
17	Water Basins: system for the management of water basins and identification of riverside areas.	BABCOCK	€182,258.49	
18	TARGUS: Development of a 1,200-kg fixed-wing OPV (optionally piloted vehicle) with a payload of more than 100 kg.	INDRA	€31,552,529.45	
19	USV: Development of an autonomous marine vehicle (unmanned vessel).	INDRA	€4,107,685.07	





	R&D programme (projects)		
	Title-description	Leading Company	Total budget*
20	CMPD: Mission and Data Processing Centre for UAV operations in various scenarios.	INDRA	€3,336,784.73
21	SMART LOGISTICS 4.0 and other sustainability initiatives for TARGUS and USV.	INDRA	€1,795,851.75
22	Aeronautical simulation: virtual reality and augmented reality for remote piloting.	INDRA	€1,834,148.25
23	LoL (Loss of link): On-board systems to compensate for loss of communication links to base stations.	BOEING R&T E.	€1,257,171.58
24	LoS (Loss of Separation): On-board systems to compensate for the inability to detect and avoid collisions.	BOEING R&T E.	€2,165,672.44
25	LoG (Loss of GPS): On-board systems to compensate for the loss of signal from navigation and positioning assistance infrastructures, such as GPS.	BOEING R&T E.	€2,287,041.07
26	LoE (Loss of Engine): On-board systems to compensate for loss of engine drive.	BOEING R&T E.	€643,941.14
27	LoO (Loss of Ownership): On-board systems to compensate for loss of control over the UAV due to interference.	BOEING R&T E.	€341,375.50
28	LoP (Loss of Energy-Power): On-board systems to compensate for loss of electric power on boards.	BOEING R&T E.	€228,031.41
29	CMNG: Comprehensive contingency management for situations in which different loss scenarios converge.	BOEING R&T E.	€511,577.01
30	SM: Contingency simulator for testing the different strategies.	BOEING R&T E.	€2,161,391.62
31	DW (Drone Waves): Safety measures for the operation of aircraft flying at low altitude in complex environments with obstacles.	BOEING R&T E.	€1,385,395.55

\* Total contribution (Xunta+participating entity), including VAT.





	Solutions programme (projects)			
	Title-description	Scope	Companies	Total budget
32	Manager of geo-referenced data set obtained by UAVs.	LAND-1	UTE: INSITU- CARTOGALICIA -SIXTEMA	€418,455
33	Acquisition, maintenance and automation of topographic and cartographic bases using unmanned aerial vehicles.	LAND-2	UTE: EPTISA- SRM-CERES	€1,379,997
34	Monitoring the dynamics of land use and land planning assistance using unmanned aerial vehicles.	LAND-3	UTE: COTESA- ALTIA- AEROMEDIA	€1,275,945
35	Solutions for forest management and control, using unmanned aerial vehicles.	LAND-4 (1)	UTE: 3EDATA- USC-CETEMAS-	€1,092,095
36	Detection and treatment of forest pests.	LAND-4 (2)	COTESA	
37	Strengthening the maritime safety of the Galician fishing fleet.	SEA-1 (1)	UTE: IMATIA-	€1,486,337.39
38	Control of fishing activities on the Galician coast.	SEA-1 (2)	CARTOGALICIA -IND. FERRI	
39	Automation of oceanographic sampling by UAV.	SEA-2 (1)	UTE: INDRA-	€2,450,000
40	Automation of oceanographic sampling by USV.	SEA-2 (2)	SPI-ADANTIA	
41	Camiño Cardiosaludable: deployment of cardio-protection systems using UAVs.	CAMIÑO	BABCOCK	€922,155.52
42	Service for the development and demonstration phase of an information processing platform for Galician agricultural plots, within the framework of the PRIMARE project.	AMTEGA-1	UTE: SERESCO- PROYESTEGAL -GRADIANT	€1,042,011
43	Service for the development and demonstration phase of a georeferenced information	AMTEGA-2	UTE:	€1,472,550





	Solutions programme (projects)			
	Title-description	Scope	Companies	Total budget
	management system for the control of agricultural activity in Galicia within the framework of the PRIMARE project.		SERESCO- PROYESTEGAL -GRADIANT	
44	Service for the development and demonstration phase of the expert system for the automated and intelligent control of agricultural activity associated with Common Agricultural Policy (CAP) grants, within the framework of the PRIMARE project.	AMTEGA-3	UTE: SERESCO- PROYESTEGAL -GRADIANT	€772,062

\* Contribution by the Xunta, including VAT.

	Infrastructures programme (projects)	
	Name	Total budget
45	CIAR	€10,900,000
46	Industrial and Technology Park	€2,500,000**

\*Co-financed by MINECO (€8,000,000), GAIN (€1,300,000), IGAPE (€1,300,000) and INTA (€300,000).

\*\* Estimated value of investment in development (financed by GAIN).





	Entrepreneurship Programme (Business Factory Auto - BFAero 1st and 2nd calls)			
	Description	Name	Phase	
47	Integrated system (hardware and software) for optical and thermographic data acquisition from wind turbines in motion (without stopping), with laser technology.	GeneraDron		
48	Production of electrical energy via Hydrogen fuel cells for UAVs and USVs.	H2 Dron Energy Galicia		
49	Development of systems for non-destructive measurements and inspections with active sensors (radars) and passive sensors (antennas) on radio frequency bands.	RadioUAV. Beyond the visible applications	Incubation	
50	Development of payloads for UAVs to establish stable contact between the aerial vehicle and a vertical structure. This payload will allow for non-destructive inspection tasks based on ultrasound, for example.	Contact-Drone		
51	Multi-sensor geo-referenced data capture device, with onboard multiplatform capacity, as a modular and complete hardware-software solution allowing data capture control and basic integration/processing.	Freedron		
52	Development of a radar payload for lightweight drones, capable of penetrating materials such as brick or cement. Thus enabling the search for victims buried under rubble in scenarios such as earthquakes.	ALIVETOR		
53	Optimized design and additive manufacturing of structural parts of UAVs in order to reduce their weight and increase their flight range.	LUPEON	Acceleration	





54	A versatile, functional and very efficient drone. Vertical take-off aircraft with up to 5 times the autonomy and range of any multi-copter.	UAVWorks VTOL aircraft	
55	Development of a data analysis platform on which advanced ADS-B technology-based functionalities will be integrated.	Data-Analytics ADS-B platform	
56	It provides the energy and public sectors with comprehensive data acquisition solutions using unmanned aircraft, designed according to customer requirements.	Venturi. Complete solutions with VTOL aircraft	
57	Service for detection, neutralization and destruction of Asian wasp nests applying RPAs technologies.	Velutina 2.0 drone	Acceleration
58	Design and manufacture of aeronautical structures, reinforcements and chassis for drones, made of ultra-light and resistant composite material.	IXO Carbon composites	

