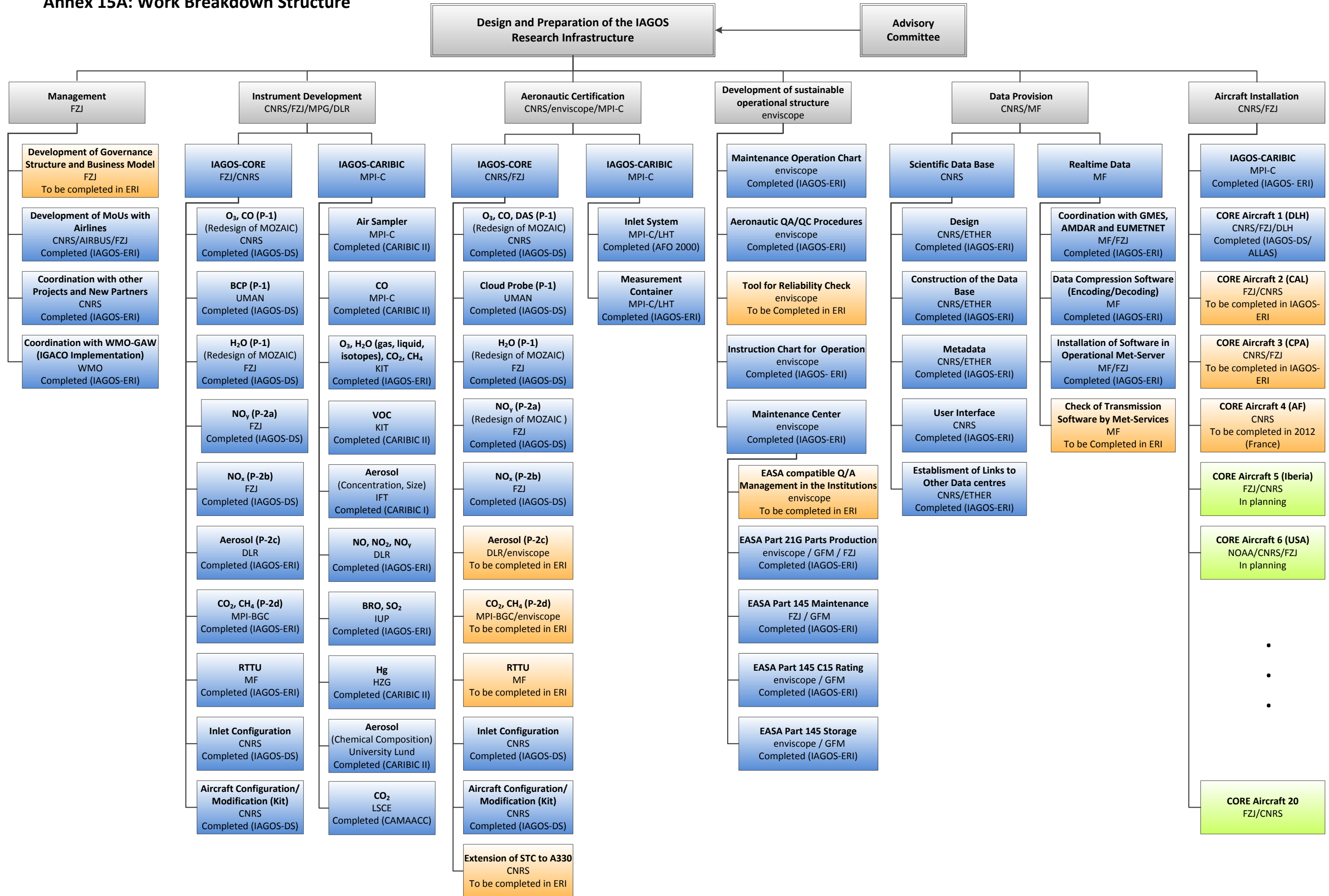


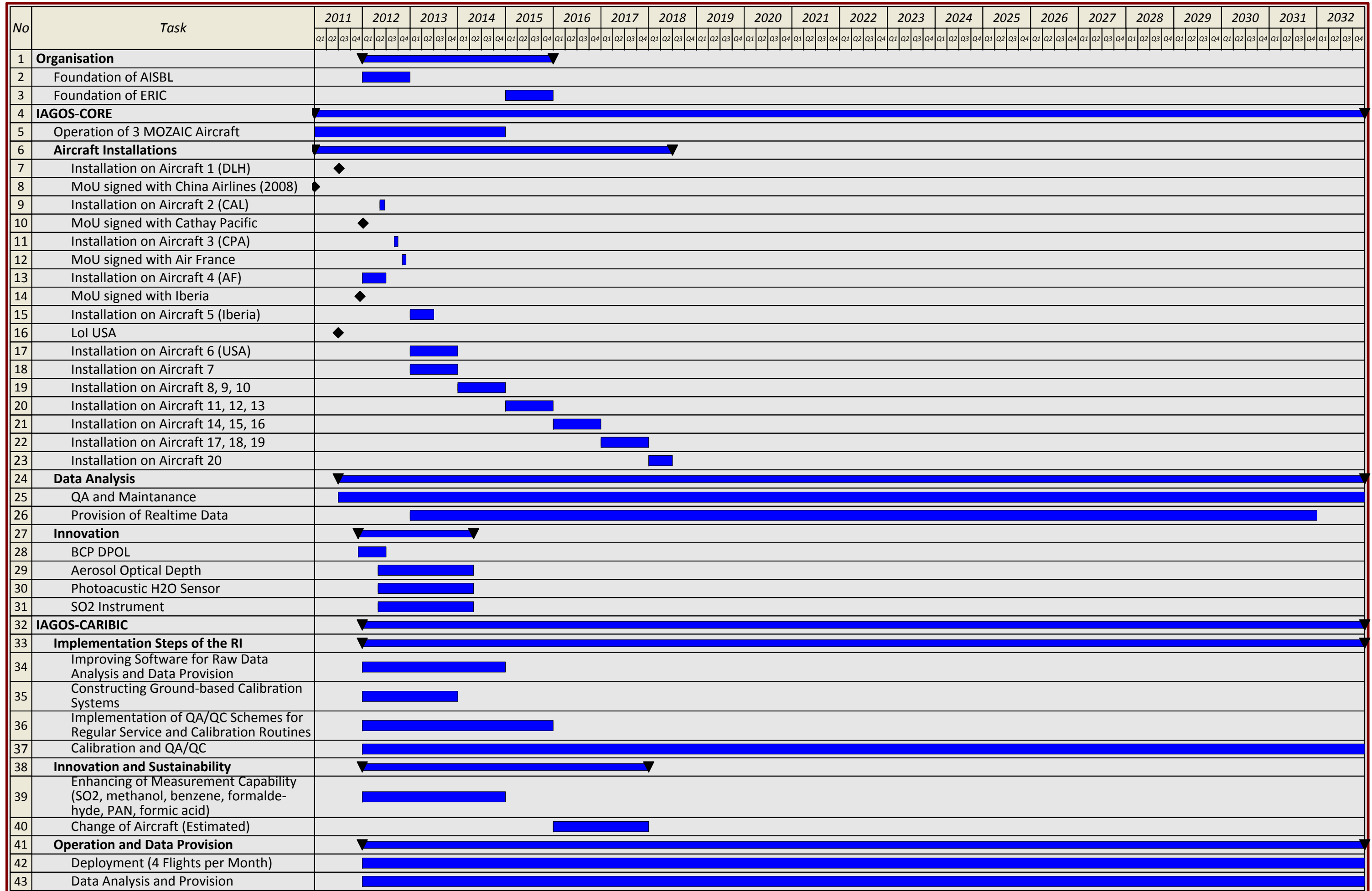
Annex 15A: Work Breakdown Structure



No	Task	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12
1	MOZAIC I																				
2	MOZAIC II																				
3	MOZAIC III																				
4	IAGOS-DS																				
5	ESFRI Roadmap																				
6	ALLAS																				
7	M1																				
8	M2																				
9	IAGOS-ERI																				
10	M3																				
11	CARIBIC II																				
12	CAMAACC																				
13	AFO2000																				
14	CARIBIC I																				

Annex 15B: Gantt Diagram Pre-Studies

Annex 15 C: Gantt Diagram for Implementation of IAGOS



Annex 16A: Annual Breakdown of Overall Expenditure for Implementation and Operation

Expenditure Total		< 2012	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
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Office & Labspace

Institutes	150€/m2/yr	0	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	
Maintenance Centre (Rented)	150€/m2/yr	0	200	200	200	400	400	400	400	400	400	400	400	

Personnel Requirements (Pyr/yr)

Scientists	120 k€/yr	0	16.1	16.1	15.1	14.2	14.2	13.7	13.7	13.7	13.7	13.7	13.7	158
Engineers	110 k€/yr	0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.5	13.5	13.5	13.5	145
Technicians	80 k€/yr	0	6.5	7.0	7.5	7.5	8.0	8.0	8.5	8.5	8.5	8.5	8.5	87
PhD Students	50 k€/yr	0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	121

Travel

National	500 €/trip	0	40	40	40	40	40	40	40	40	40	40	40	440
European	1000 €/trip	0	22	22	22	22	26	26	26	26	26	26	26	270
International	5000 €/trip	0	10	10	10	10	12	12	12	12	14	14	14	130

Expenditure Total		< 2012	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
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Investments

IAGOS-CORE

Aircraft Modification Kits	220 k€/unit	4	2	3	2	3	3	3	0	0	1	0	0	17
Aircraft Installation	130 k€/unit	1	3	3	3	3	3	3	1	0	0	1	0	20
Realtime Data Transmission Unit	25 k€/unit	1	3	3	3	3	3	3	1	0	0	0	0	19
Package-1 & Pump Box	110 k€/unit	3	4	3	3	4	4	2	2	0	1	0	0	23
BCP	20 k€/unit	5	3	4	3	3	3	2	2	0	1	0	0	21
Data Base Server	20 k€/unit	1	0	0	0	1	0	0	0	1	0	0	0	2
Package-1 Development	120 k€/unit	0	1	0	0	0	0	0	0	0	1	0	0	2
Water Vapour Sensor	25 k€/unit	4	4	4	3	3	3	2	2	0	1	0	0	22
Package 2 (all 4 versions)	130 k€/unit	4	6	7	8	2	1	0	0	1	1	0	1	27
Package-2a/b/c/d Development	500 k€/unit	0	1	1	1	1	1	1	1	1	1	1	1	11

IAGOS-CARIBIC

Container	350 k€/unit	1	0	0	0	0	0	0	0	0	0	0	0	0
Inlet System	250 k€/unit	2	0	0	0	0	0	0	0	0	0	0	0	0
H2O (total/gas)	75 k€/unit	1	0	0	1	0	0	0	0	0	0	0	0	1
H2O isotopes	90 k€/unit	1	0	0	1	0	0	0	0	0	0	0	0	1
PTR-MS	180 k€/unit	1	0	0	1	0	0	0	0	0	0	0	0	1
DOAS	35 k€/unit	1	0	1	0	0	0	0	0	0	0	0	0	1
CPC	115 k€/unit	1	0	1	0	0	0	0	0	0	0	0	0	1
Aerosol-MS	200 k€/unit	0	0	0	1	0	0	0	0	0	0	0	0	1
SO2	150 k€/unit	1	0	1	0	0	0	0	0	0	0	0	0	1
Aircraft Changeover	300 k€/unit	0	0	0	0	1	1	0	0	0	0	0	0	2
Calibration Setup	20 k€/unit	0	2	0	0	0	0	0	0	0	0	0	0	2
e-Infrastructure (Labs)	5 k€/unit	1	1	1	1	1	1	1	1	1	1	1	1	11

Maintenance Centre

Furniture Service Area	25 k€/unit	0	1	0	0	2	0	0	0	0	0	0	0	3
Furniture Storage Area	20 k€/unit	0	0	0	0	1	0	0	0	0	0	0	0	1
QM System	10 k€/unit	0	1	0	0	1	0	0	1	0	0	0	0	3
Certification of New Developments	70 k€/unit	0	0	0	0	0	0	0	2	0	0	2	0	4
Replacement O2 Fl.	1.5 k€/unit	0	0	0	0	1	1	1	2	2	3	3	3	16
Replacement Druckm.	1.5 k€/unit	0	0	0	0	0	0	0	1	1	1	1	1	5
Replacement Investments	15 k€/unit	0	0	0	0	0	0	0	0	1	0	0	0	1

Annex 16B: Annual Breakdown of Overall Costs for Implementation and Operation

Cost Total without Inflation		< 2012	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total (k€)
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Office & Labspace

Institutes	150	0	165000	165000	165000	165000	165000	165000	165000	165000	165000	165000	165000	1.815.000
Maintenance Centre (Rented)	150	0	30000	30000	30000	60000	60000	60000	60000	60000	60000	60000	60000	570.000

Personnel

Scientists	120000	0	1792000	1792000	1672000	1564000	1564000	1518000	1518000	1518000	1518000	1518000	1518000	17.492.000
Engineers	110000	0	1199000	1199000	1199000	1199000	1199000	1199000	1199000	1254000	1254000	1254000	1254000	13.409.000
Technicians	80000	0	504000	544000	584000	584000	624000	624000	664000	664000	664000	664000	664000	6.784.000

PhD Students	50000	0	520000	520000	520000	520000	520000	520000	520000	520000	520000	520000	520000	5.720.000
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Travel

National	500	0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	220.000
European	1000	0	22000	22000	22000	22000	26000	26000	26000	26000	26000	26000	26000	270.000
International	5000	0	50000	50000	50000	50000	60000	60000	60000	60000	70000	70000	70000	650.000

Cost Total without Inflation		< 2012	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total (k€)
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Investments

IAGOS-CORE

Aircraft Modification Kits	220000	880000	440000	660000	440000	660000	660000	660000	0	0	220000	0	0	3.740.000
Aircraft Installation	130000	130000	390000	390000	390000	390000	390000	390000	130000	0	0	130000	0	2.600.000
Realtime Data Transmission Unit	25000	25000	75000	75000	75000	75000	75000	75000	25000	0	0	0	0	475.000
Package-1 & Pump Box	110000	330000	440000	330000	330000	440000	440000	220000	220000	0	110000	0	0	2.530.000
BCP	20000	100000	60000	80000	60000	60000	60000	40000	40000	0	20000	0	0	420.000
Data Base Server	20000	20000	0	0	0	20000	0	0	0	20000	0	0	0	40.000
Package-1 Development	120000	0	120000	0	0	0	0	0	0	0	120000	0	0	240.000
Water Vapour Sensor	25000	100000	100000	100000	75000	75000	75000	50000	50000	0	25000	0	0	550.000
Package 2 (all 4 versions)	130000	520000	780000	910000	1040000	260000	130000	0	0	130000	130000	0	130000	3.510.000
Package-2a/b/c/d Development	500000	0	500000	500000	500000	500000	500000	500000	500000	500000	500000	500000	500000	5.500.000

IAGOS-CARIBIC

Container	350000	350000	0	0	0	0	0	0	0	0	0	0	0	0
Inlet System	250000	500000	0	0	0	0	0	0	0	0	0	0	0	0
H2O (total/gas)	75000	75000	0	0	75000	0	0	0	0	0	0	0	0	75.000
H2O isotopes	90000	90000	0	0	90000	0	0	0	0	0	0	0	0	90.000
PTR-MS	180000	180000	0	0	180000	0	0	0	0	0	0	0	0	180.000
DOAS	35000	35000	0	35000	0	0	0	0	0	0	0	0	0	35.000
CPC	115000	115000	0	115000	0	0	0	0	0	0	0	0	0	115.000
Aerosol-MS	200000	0	0	0	200000	0	0	0	0	0	0	0	0	200.000
SO2	150000	150000	0	150000	0	0	0	0	0	0	0	0	0	150.000
Aircraft Changeover	300000	0	0	0	0	300000	300000	0	0	0	0	0	0	600.000
Calibration Setup	20000	0	40000	0	0	0	0	0	0	0	0	0	0	40.000
e-Infrastructure (Labs)	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	55.000

Maintenance Centre

Furniture Service Area	25000	0	25000	0	0	50000	0	0	0	0	0	0	0	75.000
Furniture Storage Area	20000	0	0	0	0	20000	0	0	0	0	0	0	0	20.000
QM System	10000	0	10000	0	0	10000	0	0	10000	0	0	0	0	30.000
Certification of New Developments	70000	0	0	0	0	0	0	0	140000	0	0	140000	0	280.000
Replacement O2 Fl.	1500	0	0	0	0	1500	1500	1500	3000	3000	4500	4500	4500	24.000
Replacement Druckm.	1500	0	0	0	0	0	0	0	1500	1500	1500	1500	1500	7.500
Replacement Investments	15000	0	0	0	0	0	0	0	0	15000	0	0	0	15.000

