PRODEX EXPERIMENT ARRANGEMENT CHANGE NOTICE

PEA: 4000134835 **CN No:** 2
Institute: Institute of Atmospheric Physics (IAP) of the Czech Academy of Sciences
Project: Development of FSUA for LISA mission – Phase B

Title of area affected: Funds and term	**Article(s) of the Arrangement:** 2 & 3 **Initiator of change:** ESA

Description of change:

- The project will be prolonged until end of December 2023 to include all activities before the mission adoption.
- Design of Engineering Model included
- The cost plan is updated.

Reason for change:

- The activities in the current phase have been extended until the mission adoption expected to happen in November 2023 with additional funding provided. Design of Engineering model needed.

Funds *in addition to* those stipulated in Article 2.1 :

EURO: 164,700

Total amount LoL including present CN: 200,360 EURO

Effect on other Arrangement provisions: N/A	**Commencement of Term:** 1 Jan 2021 **End of Term:** 31 Dec 2023

Institute

Institute's representative(s) Radan Huth	Date 18.5.2023

ESA

PRODEX Office representative(s): **A. Deep** **V. Dowson** **M. Lazerges**	Date 11.5.2023 11.5.2023 15.5.2023

Některé následující stránky nejsou určeny ke zveřejnění.

FINANCIAL PLAN

Project Name: Development of FSUA for LISA mission – Phase B
Institute: Institute of Atmospheric Physics, Prague, Czech Republic
PI: [redacted]

Starting date: 01/01/2021 Ending date: 31/12/2023

Table 4: Institute Costs in Euro – IAP costs

Table 1 below: (1): FTE = Full Time Equivalent allocation per year (1 full year of work is 1 FTE).

INSTITUTE COSTS	2021		2022		2023		**TOTAL**
	FTE[(1)]	Costs	FTE	Costs	FTE	Costs	**(Costs)**
[redacted], technical lead	0,08	3 218	0,09	3 413	0,35	17 500	**24 131**
[redacted], team lead.	0,04	1 437	0,03	1 282	0,20	10 000	**12 719**
[redacted], PA	-	-	-	-	0,25	22 500	**22 500**
[redacted], Hardware design	0,10	3 994	0,11	4 472	0,45	15 000	**23 466**
[redacted], FPGA design	-	-	0,06	2 540	0,30	15 000	**17 540**
[redacted], SW/EGSE	0,05	1 864	-	-	0,30	13 500	**15 364**
[redacted], EGSE/tests	-	-	-	-	0,50	25 000	**25 000**
[redacted], FEM simulation	-	-	-	-	0,15	6 750	**6 750**
							-
Total Manpower	**0,27**	**10 513**	**0,29**	**11 707**	**2,50**	**125 250**	**147 470**
Travel cost (* Exhibit A to Table 1)		-		1 570		5 600	**7 170**
Cost of items purchased by Institute, funded from PEA (** Exhibit B to Table 1)		792		889		13 700	**15 381**
Miscellaneous costs (*** Exhibit C to Table 1)		400		1 742		9 982	**12 124**
Overheads (10% of all costs):	Rate:	Overhads	Rate:	Overhads	Rate:	Overhads	
	10%	**1 171**	**10%**	**1 591**	**10%**	**15 453**	18 215
Grand Total		**12 876**		**17 499**		**169 985**	**200 360**

For information:
Items to be purchased by ESA on behalf of the Institute:

	2021	2022	2023	**Total**
Details: See Table 2	0	0	70 000	70 000

Exhibit A to Table 4: Travel plan for IAP

Year	*Destination and purpose*	*Number of trips*	*Number of persons per trip*	*Number of days per trip*	*Travel costs per person/trip*	*Total cost for all travelers per trip (EURO)*	*Total cost for all trips (EURO)*
2021						**-**	**-**
						-	**-**
						-	**-**
						-	**-**
Total 2021						**-**	**-**
2022	IDS Progress meeting, Paris	1	1	3	1 570	**1 570**	**1 570**
						-	**-**
						-	**-**
						-	**-**
Total 2022						**1 570**	**1 570**
2023	Project team meeting	2	1	2	1 400	**1 400**	**2 800**
	MCU interfacemeeting	1	2	2	1 400	**2 800**	**2 800**
						-	**-**
						-	**-**
Total 2023						**4 200**	**5 600**
Grand Total							**7 170**

Exhibit B to Table 4 - Items purchased by IAP.

Year	*Item, supplier, proposed country of purchase (*)*	*Unit price*	*Number of units*	*Total Price (EURO)*
2021	Optical encoder	577	1	577
	Commercial EEE parts	130	1	130
	Mechanical parts / material	85	1	85
				-
Total 2021	N/A	N/A	N/A	**792**
2022	Commercial EEE parts	677	1	889
Total 2022	N/A	N/A	N/A	**889**
2023	EGSE components	2 500	1	**2 500**
	EEE parts (MCU board, EGSE)	3 500	1	3 500
	PCBs (MCU board, encoder)	3 000	1	3 000
	Mechanical parts	1 000	1	1 000
	Connectors	2 200	1	2 200
	Power supply	1 500	1	1 500
Total 2023	N/A	N/A	N/A	**13 700**
Grand Total				**15 381**

Exhibit C to Table 4 – Miscellaneous costs (IAP).

Year	*Miscellaneous cost, designation*	*Total Price (EURO)*
2021	SolidWorks License contribution	400
Total 2021		**400**
2022	Ansys Maxwell SW license contribution	1 742
Total 2022		**1 742**
2023	Ansys Maxwell license	3 800
	Shipping, insurance, misc	2 182
	Equipment calibration	2 000
	Design SW license fee contribution (Libero, Questa, xPedition)	2 000
Total 2023		**9 982**
Grand Total		**12 124**

Table 5: Items to be purchased via ESA on behalf of the IAP

Year	*Item (*), supplier and proposed country of purchase (**), planned month/year of procurement (***)*	*Total Price (EURO)*
2021		
Total 2021		**-**
2022		
Total 2022		**-**
2023	Proto-flight EEE components for MCU EDM	60 000
	Proto components for FSUA EM	10 000
Total 2023		**70 000**
Grand Total		**70 000**