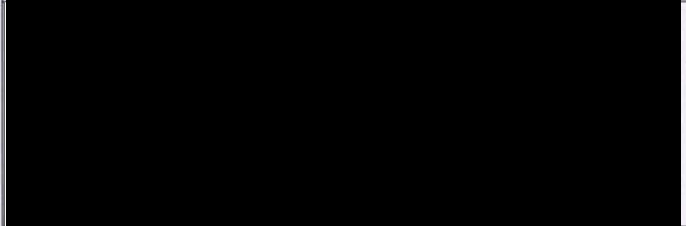
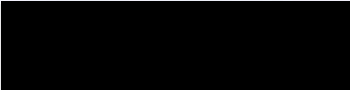
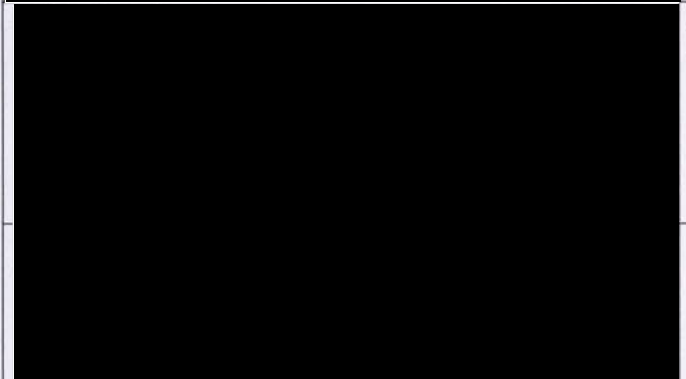
 <p>Institute of Scientific Instruments The Czech Academy of Sciences</p>	<p>DIRECTORATE:</p>	<p>Contractor: Institute of Scientific Instruments of the Czech Academy of Sciences, v.v.i.</p>
<p>CONTRACT CHANGE REQUEST No.: CRISA-OCZ-DEV-CR-00069_01</p>		<p>ESA Contract No.: 4000138900/22/NL/GP/gg Contract no. 8004-0001 OCZ Project 9014</p>
<p>TITLE OF AREA AFFECTED (WORK PACKAGE): WP-4100 Thermal Conductance Measurements</p>		<p>DATE: 05.06.2023</p>
<p>DOCUMENT ID: 8004-0001-CCN01</p>		<p>WP REF: 4100</p>
<p>INITIATOR OF CHANGE: OHB Czechspace s.r.o.</p>		
<p>DESCRIPTION OF CHANGE Thermal conductance measurements for 3rd material over the specified temperature range.</p>		
<p>REASON FOR CHANGE 1. Based on implementation of 3rd material within the Project, thermal conductance measurements are needed to ensure comparable results.</p>		
<p>PRICE BREAKDOWN (Currency)/PRICE-LEVEL Total CCN 1 price is 15,000.00 EUR FFP, for more details see Article 3 of the Annex 1.</p>		
<p>EFFECT ON OTHER CONTRACT PROVISIONS Please see Annex 1 attached hereto. All provisions that are not explicitly nor implicitly modified by the present CCN remain valid and in force.</p>	<p>END OF WORK 11/2024</p>	
	<p>Institute of Scientific Instruments of the Czech Academy of Sciences, v.v.i. CONTRACTS OFFICER with date: 9/6/2023</p> 	
	<p>OHB Czechspace s.r.o. CONTRACTS OFFICER: Lucie Cervera Siglerová Digitally signed by Lucie Cervera Siglerová DN: OU=Head of Finance and Administration/ Proxy of OHB Czechspace, O="OHB Czechspace, s.r.o.", CN=Lucie Cervera Siglerová, E= Lucie.CerveraSiglerova@ohb-czech.cz Reason: I am approving this document Location: Brno Date: 2023.06.14 12:49:43+02'00' Foxit PDF Reader Version: 12.1.1</p>	

ANNEX 1: CONTRACTUAL PART

CHANGES TO THE CONTRACT

The following changes are herewith made to ESTEC/Contract No. 4000138900 for the purposes of its CCN no 1.

ARTICLE 1 - SUBJECT OF THE CONTRACT - APPLICABLE DOCUMENTS

The work below is added:

- Thermal conductance measurements for 3rd material over the specified temperature range

ARTICLE 3 – PRICE & PAYMENT

Paragraph 3.1 is replaced by the following:

3.1 The total price of this Contract amounts to:

65,000.00 EUR
(Sixty-five thousand EURO)

broken down per (Sub) contractors as follows:

Name of Entity and Country	ESA Entity Code	Original contract in Euro	CCN 1 in Euro	Total in Euro
Institute of Scientific Instruments of the Czech Academy of Sciences, v.v.i.	1000017793	50,000	15,000	65,000
Total		50,000	15,000	65,000

ARTICLE 5 – COMPLEMENTS AND AMENDMENTS TO THE GCC

CLAUSE 4: ORIGINALS OF THE CONTRACTS

The following provision is added to Clause 4 of the GCC:

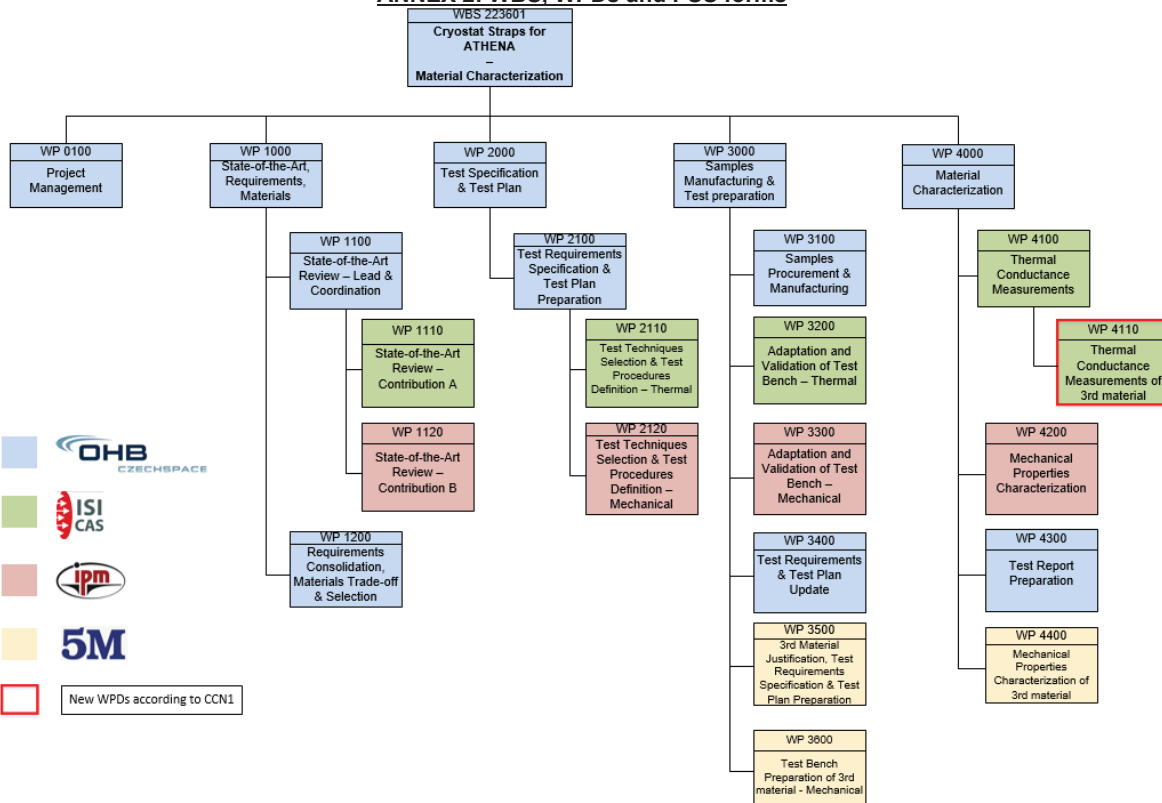
The Parties agree that electronic signature of this CCN shall have the same force and effect as hand-signed originals and shall be binding on both Parties to this Contract.

APPENDIX 1: PAYMENT PLAN AND OTHER FINANCIAL CONDITIONS

The following replace the MPP of the original contract.

Milestone (MS) Description	Schedule Date	Institute of Scientific Instruments of the Czech Academy of Sciences, v.v.i.
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
TOTAL (EUR):		65,000

ANNEX 2: WBS, WPDs and PSS forms



New WPDs according to CCN1

Meeting	Purpose	Companies attending	Initial Date(s)	Updated Date(s)	Work Package or Milestone
KO	<ul style="list-style-type: none"> Kick-off the contract activities 	OCZ, ISI, IPM, ESA	T0	T0	KO
CP1	<ul style="list-style-type: none"> Review the state-of-the-art survey on candidate materials 	OCZ, ISI, IPM, ESA	T0 + 1M	T0 + 1M	WP-1100, WP-1110, WP-1120
SRR	<ul style="list-style-type: none"> Evaluate the material selection Assess the consolidated technical requirements Acceptance of TN-01 	OCZ, ISI, IPM, ESA	T0 + 2M	T0 + 3M	End of Task 1 SRR
MRR	<ul style="list-style-type: none"> Ensure that the testing techniques and test facilities will be suitable to the need of this study Acceptance of TN-02 and TN-03 (drafts) 	OCZ, ISI, IPM, ESA	T0 + 4M	T0 + 6M	Partial End of Task 2 MRR
MRR Closeout	<ul style="list-style-type: none"> Ensure that the testing techniques and test facilities will be suitable to the need of this study 	OCZ, ISI, IPM, ESA	T0 + 4M	T0 + 8M	End of Task 2 MRR
CP2	<ul style="list-style-type: none"> Collect and review the inputs (wrt. samples and test-benches validation) needed for the update of TN-02 and TN-03 Acceptance of TN-05 (draft) Ensure that the testing techniques and test facilities for 3rd material will be suitable to the need of this study 	OCZ, ISI, IPM, 5M, ESA	T0 + 7M	T0 + 11M	WP-3100, WP-3200, WP-3300, WP-3500, WP-3600
TRR	<ul style="list-style-type: none"> Ensure that the samples have been procured/manufactured and equipped with their test instrumentation Ensure that test facilities and test procedures are adequate and ready to proceed to testing The format of test data will be agreed. Acceptance of TN-03 and HW-01 Acceptance of TN-05 and 3rd material samples 	OCZ, ISI, IPM, 5M, ESA	T0 + 8M	T0 + 15M	End of Task 3 TRR
TRB	<ul style="list-style-type: none"> Confirm successful completion of tests with respect to requirements Confirm that tests have been performed in compliance with the test procedures Review the updated compliance matrix (wrt. technical requirements) Acceptance of TN-04 	OCZ, ISI, IPM, 5M, ESA	T0 + 15M	T0 + 23M	End of Task 4 TRB
FR	<ul style="list-style-type: none"> Review the results and conclusions Acceptance of Final Review data package 	OCZ, ISI, IPM, 5M, ESA	T0 + 18M	T0 + 26M	FR

Project:	CRYSA: Cryostat Straps for ATHENA – Material Characterization	Phase:	0
WP ref.:	WP-4110	Issue:	01 Date: 05/06/2023
WP title:	Thermal Conductance Measurements of 3rd material		
Contractor:	ISI	WP manager:	██████████
Start event:	TRR	Start date:	T0 + 15 M
End event:	TRB	End date:	T0 + 23 M
1. OBJECTIVES			
<ul style="list-style-type: none"> Thermal conductance measurements for selected materials over the specified temperature range 			
2. INPUTS			
<ul style="list-style-type: none"> 3rd material samples TRR datapack ESA approval to start Task 4 (at TRR meeting) 			
3. ACTIVITY DESCRIPTION			
<ul style="list-style-type: none"> All cryogenic tests will be done in the laboratory at ISI Brno, using immersion of the individual apparatus into LHe bath in Dewar vessels Thermal conductance measurements using our apparatus CM1 (involves sample preparation and installation, evacuation of the measuring chamber, cooling down the sample to the limit temperature, controlled heating of the sample and recording of the temperatures, evaluation of the obtained data – thermal conductivity calculation) Support for WP-4200 (wrt. the CME measurements and the low temperature treatment of the samples) Implementation of all results into the test reports Consultancy for WP-4300 			
4. EXCLUDED TASKS			
N/A			
5. OUTPUTS			
Documentation			
<i>DRL code</i>	<i>Definition</i>	<i>Delivery date</i>	
TN-04 (input)	Test report	TRB	
Hardware			
<i>DRL code</i>	<i>Definition</i>	<i>Delivery date</i>	
Software			
<i>DRL code</i>	<i>Definition</i>	<i>Delivery date</i>	