D1.1.4 - Fourth Financial Report including financial reporting for each WP/activity and for each partner, analysis of critical financial- administrative aspects and proposed solutions to solve possible deviation from the original plan in the reference period

Work package:	WP1 – Coordination and management
Intermediate Objective:	IO 1. 4
Deliverable type:	X Document, report
	Websites, Share Point, patent filings, videos, etc.
	Other: please specify
Dissemination level:	Public
	X Restricted
Estimated delivery (bimester):	B4
Actual delivery date:	May / June
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Reviewed by:	
Note:	At the time of the proposal this report was thought as the result of the management and coordination activities necessary to report the project financial progresses. The same content has been requested by the MUR to be reported directly on the monitoring platform GEA. Therefore, this deliverable was prepared by the Coordination Office after the reporting of bimester B4 on GEA.

IR0000032 – ITINERIS, Italian Integrated Environmental Research Infrastructures System - CUP B53C22002150006 (D.D. n. 130/2022) Funded by EU - Next Generation EU
Mission 4 “Education and Research” - Component 2: “From research to business” -
Investment 3.1: “Fund for the realisation of an integrated system of research and innovation infrastructures”

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1. Introduction

This report provides a comprehensive overview of the ITINERIS project's financial progress achieved during the fourth bimester.

The detailed expenses incurred during this period (from 01/05/2023 to 31/06/2023) are outlined in Chapter 2. This information aligns with the reimbursement request submitted on the GEA platform.

Chapter 3 presents a summary of the total financial progress made since the project's start.

2. Expenses reported in the bimester B4

The details of expenses shown/costs accrued by the project participants in the bimester B4 and included in the fourth requests for reimbursement are reported in the following tables.

Request ID: IR0000032_DDR4
Reference period: B4
Total amount: 651.881,42 €
VAT: 511,61 €

Table 1- Expenses reported in B4 - by implementing entity

Implementing entity	*Operating Unit*	*Total amount (incl. VAT) €*
UNIFI-Università degli Studi di Firenze	UNIFI-CPC	5.406,71 €
	UNIFI-DAGRI	8.392,01 €
	UNIFI–SMA	25.432,36 €
		39.231,08 €
UNIVE-Università Cà Foscari Venezia	UNIVE-DAIS	19.547,08 €
		19.547,08 €
INFN - Istituto Nazionale di Fisica Nucleare	INFN-GE	12.251,6177 €
	INFN - LNS	14.936,13 €
		27.187,75 €
Consiglio Nazionale delle Ricerche	CNR-IBBRNA	23.728,32 €
	CNR-IBE	5.331,81 €
	CNR-IGG	38.593,83 €
	CNR-IMAA	174.098,63 €
	CNR-IRETFI	28.139,93 €
	CNR-IRETLE	134.531,10 €
	CNR-IRETRM	73.993,71 €
	CNR-IRSA	10.487,00 €
	CNR-ISACBO	43.466,61 €
	CNR-ISACLT	8.368,47 €
	CNR-ISACLE	25.176,03€
		565.915,51€
TOTAL		**651.881,42€**

Table 2 - Expenses reported in B4 - details

WP	Activity	Operating Unit	a. Fixed term personnel specifically hired for the project	b. Scientific instrumentation and technological equipment, software licenses and patent	f. Training activities	e. Indirect costs, including running costs	Total amount (incl. VAT) €
WP1 - Coordination and Management	1.1 Management and quality control	CNR-IMAA	52.926,00 €			3.704,82 €	56.630,82 €
	1.2 ITINERIS web portal and communication	CNR-IMAA	13.607,00 €			952,49 €	14.559,49 €
WP2 - Access to facilities, fair data and related services	2.1 Development of a sustainable and strategic framework for access to distributed National ENVironmental Research Infrastructures	CNR-IMAA	15.114,00 €			1.057,98 €	16.171,98 €
	2.2 Design and Developing of the national environmental RIs HUB	CNR-IMAA	6.336,00 €			443,52 €	6.779,52 €
	2.3 Support the implementation and the adoption of FAIR-enabling best practices	CNR-IRETLE	36.762,00 €			2.573,34 €	39.335,34 €
	2.4 Interdisciplinary data interoperability	CNR-IRETLE	24.156,00 €			1.690,92 €	25.846,92 €
WP3 - ITINERIS Training Programme	3.1 Set-up of the ITINERIS training programme	CNR-IRETLE	33.000,00 €			2.310,00 €	35.310,00 €
	3.2 Management of the ITINERIS training programme for the access, atmospheric and solid Earth domains	CNR-IMAA	10.791,00 €			755,37 €	11.546,37 €
	3.3 FAIRness and terrestrial biosphere domains	CNR-IRETRM	13.662,00 €			956,34 €	14.618,34 €
WP4 - Atmosphere	4.1 CNR-IMAA activities for integration and harmonization with the Italian Network of Environment RIs	CNR-IMAA	19.517,00 €			1.366,19 €	20.883,19 €
	4.10 CeTrA integration and harmonization within the Italian Network of Environment Ris	UNIVE-DAIS	18.268,30 €			1.278,78 €	19.547,08 €
	4.11 Aerosol typing	CNR-IMAA	10.197,00 €			713,79 €	10.910,79 €
	4.12 Aerosol sources identification	CNR-ISACLE	15.015,00 €			1.051,05 €	16.066,05 €
	4.13 Aerosol characterization in controlled environment	INFN - GE	8.613,00 €	2.837,11 €		801,51 €	12.251,62 €

WP	Activity	Operating Unit	a. Fixed term personnel specifically hired for the project	b. Scientific instrumentation and technological equipment, software licenses and patent	f. Training activities	e. Indirect costs, including running costs	Total amount (incl. VAT) €
	4.14 Impact of atmospheric boundary layer height on aerosol and trace gases concentration at the ground	CNR-ISACBO	26.037,00 €			1.822,59 €	27.859,59 €
	4.15 Atmospheric boundary layer height (ABLH)	CNR-IMAA	11.385,00 €			796,95 €	12.181,95 €
	4.16 Emission from natural and anthropic fires	CNR-ISACLT	7.821,00 €			547,47 €	8.368,47 €
	4.2 CNR-ISAC-BO activities for integration and harmonization within the Italian Network of Environment Ris	CNR-ISACBO	14.586,00 €			1.021,02 €	15.607,02 €
	4.4 CNR-ISAC-LE activities for integration and harmonization with the Italian Network of Environment Research Infrastructures	CNR-ISACLE	8.514,00 €			595,98 €	9.109,98 €
WP5 - Marine Domain	5.7 Implementing a deep-sea e-highway: data and power gateway for deep-sea observatories	INFN - LNS	13.959,00 €			977,13 €	14.936,13 €
WP6 - Terrestrial Biosphere	6.1 Terrestrial Biosphere component coordination and strength of the Italian ICOS network of flux measurement sites to guarantee near real time data transmission to the ITINERIS hub	CNR-IRETRM	15.660,00 €			1.096,20 €	16.756,20 €
	6.11 Data harmonization for the sustainable use of natural resources	CNR-IBBRNA	11.154,00 €			780,78 €	11.934,78 €
	6.15 Nature-Based Solutions Database	CNR-IGG	5.016,00 €			351,12 €	5.367,12 €
	6.16 Strengthening a national network with eight measuring sites and an Ecotron to support NBS assessment framework based on EU strategies but adapted to the Italian needs	CNR-IRETRM	10.263,00 €			718,41 €	10.981,41 €
	6.17 Data production experimental centre on tropho-energetic and space use behavioral traits of aquatic organisms	CNR-IRETLE	20.394,00 €			1.427,58 €	21.821,58 €
	6.19 Environmental Biotechnology	CNR-IBBRNA	11.022,00 €			771,54 €	11.793,54 €

WP	Activity	Operating Unit	a. Fixed term personnel specifically hired for the project	b. Scientific instrumentation and technological equipment, software licenses and patent	f. Training activities	e. Indirect costs, including running costs	Total amount (incl. VAT) €
	6.2 Harmonisation, integration, and enhancement of environmental, agronomic and crop data from long-term experimental and modelling trials	UNIFIDAGRI	7.843,00 €			549,01 €	8.392,01 €
	6.3 Harmonization and integration of information from free-air manipulative platforms in terrestrial ecosystems	CNR-IRETFI	26.299,00 €			1.840,93 €	28.139,93 €
	6.4 Italian natural history collections (NHCs)	UNIFI–SMA	20.429,00 €		3.339,56 €	1.663,80 €	25.432,36 €
	6.7 Improvement of monitoring in Italian southern freshwater and terrestrial ecosystem: structural, functional, biodiversity indicators of ecological and physical processes and integration of multiple data flow into a national system	CNR-IRSA	9.801,00 €			686,07 €	10.487,07 €
	6.8 Improvement of monitoring in Italian northern terrestrial and freshwater ecosystem: structural, functional, biodiversity indicators of ecological and physical processes and integration of multiple data flow into a national system	CNR-IBE	4.983,00 €			348,81 €	5.331,81 €
WP7 - Geosphere/Landsurface	7.4 Upgrade and networking of the ground-based and airborne instrumental facilities for geophysical exploration and land surface monitoring	CNR-IMAA	22.836,00 €			1.598,52 €	24.434,52 €
	7.6 Integrated platform for surface movements monitoring	UNIFI-CPC	5.053,00 €			353,71 €	5.406,71 €
WP8 - Virtual Research Environments and Cross-disciplinary Activities	8.1 Virtual Research Environment for Critical Zone services (CZ VRE)	CNR-IGG	20.427,00 €			1.429,89 €	21.856,89 €
	8.2 Virtual Research Environment for aquatic biomass services (BIOMASS VRE)	CNR-IRETLE	11.418,00 €			799,26 €	12.217,26 €
	8.6 Virtual Research Environment for carbon cycle services (CARBON VRE)	CNR-IRETRM	29.568,00 €			2.069,76 €	31.637,76 €

WP	Activity	Operating Unit	a. Fixed term personnel specifically hired for the project	b. Scientific instrumentation and technological equipment, software licenses and patent	f. Training activities	e. Indirect costs, including running costs	Total amount (incl. VAT) €
	8.9 Virtual Research Environment services for the isotope database (ISOTOPE VRE)	CNR-IGG	10.626,00 €			743,82 €	11.369,82 €
Totale complessivo			**603.058,30 €**	**2.837,11 €**	**3.339,56 €**	**42.646,45 €**	**651.881,42 €**

3. Financial report

The overview of the total financial progresses realized from the beginning of the project and reported to MUR with the first 4 requests for reimbursement is provided in the following tables, with an insight into the implementing entities, the work packages and the cost items.

Table 3 - Financial progress by Implementing Entity

		Total amount (incl. VAT) €			
Implementing Entity	**B1**	**B2**	**B3**	**B4**	**TOTAL**
Consiglio Nazionale delle Ricerche				565.915,51	**565.915,51**
UNIFI - Università degli Studi di Firenze		9.046,38	295.208,25	39.231,08	**343.485,71**
INGV - Istituto Nazionale di Geofisica e Vulcanologia					
UNIVE - Università Ca' Foscari Venezia	8.065,29	28.175,38	92.607,26	19.547,08	**148.395,01**
ISPRA – Istituto Superiore per la Protezione e la Ricerca Ambientale					
INFN - Istituto Nazionale di Fisica Nucleare				27.187,75 €	**27.187,75 €**
OGS - Istituto Nazionale di Oceanografia e di Geofisica Sperimentale					
TOTAL	**8.065,29**	**37.221,76**	**387.815,51**	**651.881,42**	**1.084.983,98**

Table 4 - Financial progress by Work Package

		Total amount (incl. VAT) €			
Work package	**B1**	**B2**	**B3**	**B4**	**TOTAL**
WP1 - Coordination and Management				71.190,31 €	**71.190,31 €**
WP2 - Access to facilities, fair data and related services				88.133,76	**88.133,76**
WP3 - ITINERIS Training Programme				61.474,71	**61.474,71**
WP4 – Atmosphere	8.065,29	28.175,38	92.607,26	152.785,74 €	**281.633,67**
WP5 - Marine Domain				14.936,13	**14.936,13**
WP6 - Terrestrial Biosphere		9.046,38	12.197,53	156.437,81	**177.681,72**
WP7 - Geosphere/Landsurface			283.010,72	29.841,23	**312.851,95**
WP8 - Virtual Research Environments and Cross-disciplinary Activities				77.081,73	**77.081,73**
TOTAL	**8.065,29**	**37.221,76**	**387.815,51**	**651.881,42**	**1.084.983,98**

Table 5 - Financial progress by cost item

		Total amount (incl. VAT) €			
Cost item	**B1**	**B2**	**B3**	**B4**	**TOTAL**
a. Fixed term personnel specifically hired for the project	7.537,65	16.533,85	26.144,88	603.058,30 €	**653.274,68**
b. Scientific instrumentation and technological equipment, software licenses and patent		14.913,28	332.959,96	2.837,11	**350.710,35**
c. Open Access, Trans National Access, FAIR principle implementation					
d. Civil infrastructures and related systems					
e. Indirect costs, including running costs	527,64	2.435,07	25.371,11	42.646,45 €	**70.980,27**
f. Training activities		3.339,56	3.339,56	3.339,56	**10.018,68**
TOTAL	**8.065,29**	**37.221,76**	**387.815,51**	**651.881,42**	**1.084.983,98**

4. Analysis of critical financial administrative aspects and proposed solutions

The fourth bimester of the project saw steady progress, with no changes to the project scope or objectives. All project activities continued as planned, and no critical financial or administrative issues were identified.
A significant achievement in the fourth bimester was the publication of calls for the selection of fixed-term personnel, exceeding initial plans.
Substantial progress was made also with purchasing procedures across all relevant work packages (WPs). While not all procedures reached their anticipated milestones, such as decisions to contract signed, preparatory activities were initiated for all. This minor delay will not impact project implementation, and the administrative and financial plans will be fully realized and reported in the coming months.
The realized spend increased significantly due to the first payments to researchers, technologists, and technicians employed by the Implementing Entities, particularly at the CNR operating units.