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# PNRR\_IRIS WP2

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09.02.2024



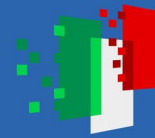
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## General status

- WP2 work is ongoing, we don't see any major issues
- New technical personnel well integrated in the group, giving support to the activities
- Most of the activities have been devoted to place the orders

## ORDERS PLACED IN 2023:

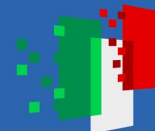
- Almost all the orders have been placed between Dec'23 and Jan'24, last ones are on the way.
- Huge effort both for administration and for LNF\_IRIS team.



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## General status: orders placed in 2023 (almost 400.000€)

ITEM	COST	SUB-ITEMS	EFF. COST	NOTES
5 axis mov. system	150.000	Movement system	73.560	
		Alignment tools (T-probe)	37.700	
		<i>Probe holder, mechanics</i>	<i>8.000</i>	<i>postponed to the purchase of probes</i>
Pulsed wire bench	100.000	Movement system	61.662	
		Granite benches	26.340	
		<i>Electronics</i>	<i>30.000</i>	<i>voltage analyzer, pulse generator, laser</i>
Mole system	240.000	<i>Complete bench</i>	<i>240.000</i>	<i>documents &amp; quotation ready</i>
Calibration magnet	100.000	Probes Calibration system	170.190	extra cost but complete system (incl. PS, 3 NMRs, SW...)
Calibrated probes	40.000	2 3D Hall probes	14.075	1 handheld & 1 for installation on bench
		<i>1 3D Hall probe</i>	<i>20.000</i>	<i>thin, compact Hall probe. Documents ready</i>
Ancillaries	20.000		13.000	thermal imaging camera, oscilloscope, multimeter, LCR



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## Short Term Activities (next 6 months)

- Finalize all the orders:
  - Probe holder, mechanics
  - Pulsed wire bench
  - Mole system
  - Thin 3D hall probe
  - License for Laser Tracker
- Installation of the devices already ordered:
  - Calibration system
  - 5 axis mov. System



## Long Term Activities

- Complete the installation of all the devices
- Optimization of the magnetic laboratory spaces (i.e. built of mezzanine).
- Start magnetic measurements of SC magnets at room temperature.

## Needs from other Services

- Administration support for the orders finalization.
- Mechanical Engineering support (Mario del Franco had already allocated 10% FTE for the project)
- Logistics

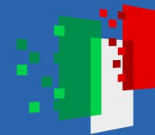




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**Thank you for the attention!**

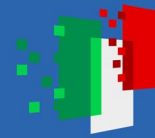




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## Backup slides





## Foreseen changes in scope and cost

- So far, nothing to declare (small variations and compensation between items of same category)
- Increase of budget to pay for the technologist's second year (WP2 had planned a 1-year contract, but the INFN call has been standardized at 2-year for all the positions)
- We are looking for an extra 100k€ budget for civil engineering in order to solve a problem: we need room for the instruments (see next slide)



## Upcoming issues

The increase of the number of instruments requires a re-organization of spaces inside the laboratory.

We are exploring the feasibility of a mezzanine:

- technical solution has been found
- preliminary estimation of cost is about 10 + 70 K€ → looking for a patron





## Resources: manpower status

### New personnel recruited

1 technologist & 2 technicians: A. Selce, L. Capuano, L. Petrucciani

Contracts started in June 2023

### Staff

LNF staff is regularly working on the project (L. Sabbatini, A. Vannozzi, M. Del Franco)

Training: participation at the CAS School on magnets last November

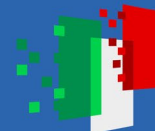
### PhD

we have been hosting a PhD student (D. Cuneo) from WP5 for 10 months. Very fruitful collaboration!



## Upcoming tenders and orders

- Mole bench: supplier identified, documents ready
- Thin and compact Hall probe: supplier identified, documents ready
- Electronics for pulsed wire: choosing the technical details
- Minor items: still to be defined (precision mechanics, ancillaries, ...)
- We are now dealing with the changes in the purchasing procedure (NovaPA). We hope this is the last administrative trouble.



## Actions

Action	In charge	Status	Due date	Comments
Mole bench: placement of order	A. Vannozzi (RUP) L. Sabbatini (documents)	waiting for the reallocation of funds (30/01) Waiting for clarification on NovaPA portal	Feb 2024	delivery: 12 month after order receipt
Compact Hall probe	A. Vannozzi (RUP) L. Sabbatin (documents)	see above	Feb.2024	
Electronics for pulsed wire bench	L. Sabbatini (collaboration with C. Petrone CERN)	definition of technical requirements	Order placement by March 2024	
Evaluation of leftovers and strategy for last purchases	L. Sabbatini (WP leader)	some options already explored	April 2024	