

Staff Exchange 2023 rules summary

Minimum number of participating organisations	3 in 3 different countries ²
Minimum number of beneficiaries from EU Member States or Horizon Europe Associated Countries³	2
Max number of participants from Academic sector⁴	No restrictions ⁵
Max number of participants from Non-academic sector⁶	No restrictions ⁵
Number of associated partners (*)	No minimum Mandatory Letter of Commitment
Max number of person months	360
Secondment duration⁷	1 – 12 months
Same sector interdisciplinary secondments⁸	≤ 1/3 of the total pm implemented
Ranking lists⁹	8 (scientific) panels ¹⁰
Budget 2023	78,5 Mio €

(*) Only Third country partners (i.e. KEK and ICRR) have to provide a Letter of Commitment.
«Associated Partners» refers also to european Institutions linked to a beneficiary.

Eligibility of secondments between different organizations

"HOSTING"
(receiving seconded staff members)

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		Academic organisation in MS/AC (1)	Non-academic organisation in MS/AC (2)	Associated Partners eligible for funding	Associated Partners non-eligible for funding
"SENDING" (sending staff members from organization)	Academic organisation in MS/AC (1)	1/3	✓	✓	✓
	Non-academic organisation in MS/AC (2)	✓	1/3	✓	✓
	Associated Partners* eligible for funding	✓	✓	✗	✗
	Associated Partners non-eligible for funding	✗	✗	✗	✗

only interdisciplinary

- Only partners from middle or low income countries are eligible for funding. Not Japan!
- Secondments are interdisciplinary if the activity performed integrates aspects from 2 or more different scientific disciplines (example: particle physics and information technology)

Staff Exchange budget 4600,00 € per person month:

- 2300,00 € Salary top-up and/or travel/accomodation expenses
- 1300,00 € Research training and networking
- 1000,00 € Management and indirect costs

Luckily the MSCA financial guides allows some flexibility between the 3 budget categories:

“unused amounts” (of networking and management funds) “may be used for other action-related purposes, such as to increase the salary of a researcher, to cover travel and subsistence costs of a staff member (in MSCA-SE only)”

MSCA Staff Exchange call timing

Call 2023: submission deadline **february 28th 2024**

Call 2024: submission deadline **march 5th 2025**

Evaluation Report expected 5 months after submission deadline

Signature of the Grant Agreement process will start 8 months after submission deadline

i.e. Project will start the year after submission one (with usual few months flexibility)

Tentative Project Structure

Replicate JENNIFER2 organization:

3 detector-specific work packages + 2 work packages technology oriented with mixed and synergic work from different communities.

WP1: Belle II physics analysis, detector performance, data taking.

WP2: T2K physics analysis, ND280 commissioning, new data taking

WP3: HyperK construction

WP4: Computing. Software, Machine Learning

WP5: Advanced detector technologies

WP6: Outreach

Received Eols

Institution	contact	WPs	J2 member
CNRS	Isabelle Ripp Baudot	All.	Y
DESY	Carsten Niebuhr	1,4,5,6	Y
HEPHY	C.Schwanda	1,4,5,6	Y
INFN	AP and.....	All	Y
JSI	R.Pestotnik	1,4,5,6	Y
NCBJ	A.Zalipska	2,3	Y
IFJ-PAN	A.Bozek	1,2,3	Y
TAU	A.Soffer	1,4,6	Y
CEA	S.Bolognesi	2,3, maybe 4	Y
Uni Geneve	F.Sanchez	2,3,4,5,6	Y
Prague UKP	Z. Dolezal	1,4,5,6	Y
IFAE	Thorsten Lux	2,3,4	Y
CAEN	F.Giordano	1,2,3,5	Y
ETHZ	D.Sgalaberna	2,3,4,5	NO
Sevilla	G. Megias Vazquez	2,3	NO
Oviedo	ML Sanchez	3,4	NO
King's College	F. Di Lodovico	2,3,4,6	Y

Only missing J2 are METU and FBK

Interest from Uppsala (Belle2 group)

Should find a way to associate some small group to a larger beneficiary

UK beneficiaries will not be funded by EU, but they concur anyhow to reach the maximum project budget.

Experiment specific WP have their own structure

WP1: Belle II running and analysis

WP2: ND280 + data analysis

WP3: various items to choose: better focusing to 4 or 5 well defined tasks

Carefully select milestones and deliverables

WP1: Belle II

INFN, DESY, CNRS, HEPHY, JSI, IFJ-PAN, UKP, TAU, CAEN

- detector performance
- LFV-LFU, New physics with rare B decays
- CP violation
- Tau physics
- dark sector, long lived particles, QCD axions
- Spectroscopy, fundamental QCD

WP2: T2K

INFN, CNRS, CEA, KCL, NCBJ, IFJ-PAN, IFAE, Sevilla, UniGE, ETHZ, CAEN

List of raised items:

- Near detector ND280: calibration, commissioning
- SK calibration
- Data analysis: neutrino cross sections
- Data analysis: Oscillation

WP3: HyperK

INFN, CNRS, CEA, KCL, NCBJ, IFJ-PAN, IFAE, Oviedo, Sevilla, UniGE, ETHZ, CAEN

List of raised items:

- Water Cerenkov construction and commissioning
- Underwater Electronics, digitizers, LV and HV supply..... (INFN, UniGE...)
- Multi PMT (INFN)
- Time generation and distribution system (CNRS, CEA)
- Simulation and reconstruction (IFJ-PAN, Sevilla)
- Linac for calibration (NCBJ)
- Geomagnetic field compensation system (Oviedo)
- Near detector ND280 (IFAE, CEA)
- Intermediate Water Cerenkov (KCL)

WP4: Computing and ML

INFN, DESY, HEPHY, CNRS, CEA, IFAE, UniGE, ETHZ, UKP, Oviedo, TAU, JSI, KCL, CAEN

- Cloud distributed computing : INFN, King's, CNRS
- Network: INFN, KCL
- ML applications for data reconstruction: CNRS, TAU, CEA, UniGE, Oviedo, UKP, IFAE, JSI, KCL, INFN, DESY, HEPHY
- ML applications for real time filtering, trigger, DAQ. ML on FPGAs : DESY (KIT, Giessen)

See S.Pardi slides for Computing and network

We will NOT mention AI in the proposal, for which EU requires ethical declarations, but just applications of existing ML algorithms to data reconstruction and filtering.

WP5: Advanced detector technologies

INFN, DESY CNRS, HEPHY, JSI, IFAE, UniGE, ETHZ, CAEN

- Vertex detector and tracking with CMOS sensors (INFN, DESY, CNRS, HEPHY) including trigger and cooling
Pixel detector (UKP)
- photon detection: SiPM in high radiation environment (INFN, JSI)
- Cerenkov detectors: Large area picosecond photo detectors and MCP PMTs for future RICH (JSI). Water Cerenkov upgrade for neutrino detectors (...)
- Beam detectors: polarimeter, luminosity monitor (CNRS)
- Emulsion Analysis R&D for future FASERnu detector: DESY (Bonn)

ND280 upgrade (mentioned by INFN, UniGE, IFAE.....) : which detector? Can fit in the above list?

WP6 : Outreach and Communication

- Masterclasses
- Virtual Reality
- PhD co-supervision
- School? Joint with KEK Summer Student Program ? (INFN, TAU, UniGE....)
- Simple detector kit for cosmic muons and natural radioactivity (DESY)

Budget

General rule in previous projects was: 50% Belle2 and 50% neutrinos

Rule respected also including «mixed» WPs

360 months mean 180 months per community..... Next task is to figure out how to share them:

→ in first approximation just downscale by 67% JENNIFER2 budget.

We all know that in 3 years we could use all the budget, but after second year we will see the situation

Special requirements

Each public sector beneficiary must have a Gender Equality Plan to be allowed to sign the Grant Agreement

We should try to implement the EU Green Charter: i.e. reduce carbon footprint in any possible ways, INCLUDING travels!

→ Seriously consider longer secondments

Next Steps

A general JENNIFER3 email list will be created, including all interested people (please inform me of anybody missing). Messages to such list will aim to J3 activities and task definition.

A second J3 list with contact persons and financial officers will be created for budgetary and technical communications related to project uploading on EU portal and submission.

Group leaders: please make the exercise of calculating a proto-budget for your group, in terms of secondment. Please start with about 70% of your JENNIFER2 budget. Try also to make a first secondment plan.

Next meeting:

February 1st, 10:00 CET: <https://infn-it.zoom.us/j/8439782351?omn=95126927279>