

DRD Collaborations UK Steering Board & Coordinators Meeting

5th December 2023

- News
- CG Draft



Apologies if not very responsive to emails these days...



STFC 2021 PARTICLE PHYSICS REVIEW OF
EXPERIMENTS AND EXPERIMENTAL CONSOLIDATED GRANTS

Guidelines for applicants
23 October 2021

CLOSING DATES: Experiment submissions – 2 February 2021 at 4pm
Grant proposals and Form X – 17 February 2021 at 4pm
(to include Capital Equipment requests)

Please read these guidelines carefully as the proposal format has changed.

DRD: 1-gas; 2-liquid;3-solid state;4-PID; 5-quantum; 6-calo; 7-elect/data;8-systems + training, industry

Towards forming DRD-8

Community meeting – December 6th

- Strong UK participation at meeting
- Proposal to form DRD8.

– interaction with other DRDs to be discussed

DRD-UK ½ day meeting

Afternoon of April 11th April 2024

following on directly from IOP conference

Thanks to Eva, Joost for agreeing to host.

Invited STFC to speak

News

STFC – DRD funds

Met with Mark Thomson last week

Recognises need for strategic R&F dedicated funds

Funding currently constrained by construction project overruns – this year & next

Will discuss potential funding strategies at STFC town meeting @ IOP

UK government silicon strategy

Richard, Gianluigi and myself have pushed for STFC involvement – has raised profile of this

Richard will meet with DSIT next week

CG Draft

- Huge thanks to everyone - we have a ~ complete first draft.

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To discuss:

- Industry & Training
- M&O costs spreadsheet
- Effort table

Author list

- Close to complete
 - Some institutes small number authors – include everyone involved (academics, PDRAS, engineers, techs, students...)
 - Check institute lists in DRDs
 - Each text says who is involved
- Contributing institutes: Birmingham, Cambridge, Imperial, Liverpool, Manchester, Warwick, York, STFC ISIS, STFC PPD*
- Put numbers in effort table if involved
- Non-HEP institutes
 - Should be on author list, have authors in table, have a statement who is representing at steering board.
 - DRD4:Leicester, DRD1: ISIS, York, DRD5:NPL

Effort table – the missing item

- Deadline: Monday 29th January.

A DRD-UK Effort

Institute	DRD Collaboration								
	1	2	3	4	5	6	7	8	Other
Birmingham	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Bristol	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Brunel	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Cambridge	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Edinburgh	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Glasgow	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Imperial	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
King's	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Lancaster	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Leicester	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Liverpool	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Manchester	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Oxford	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
QMUL	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
RAL PPD	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
RAL TD	—	—	3.0	—	—	—	3.0	—	—
RHUL	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Sheffield	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Sussex	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
UCL	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Warwick	—	—	X.Y	X.Y	—	X.Y	—	X.Y	X.Y
Total	X.Y	X.Y	X.Y	X.Y	X.Y	X.Y	X.Y	X.Y	X.Y

e.g. from an entry in our Form-X:



total 1.05 FTE yrs.

Need to split between DRDs

The numbers will not match with what you may have submitted to various DRD collaborations due to unitarity constraint of Form-X

Table 1: Effort expressed in FTE staff years dedicated to work in the DRD collaborations, as requested in the group CG submission or funded by other sources. Student effort is not included.

Added TD numbers with Marcus

PPD – Fergus/Jens – imagine somewhat arbitrary but can you add.

Industry & Training

- Industry
 1. Industry programme board [travel money]
 2. i) Technology roadmap.
ii) UK trusted company database
 3. Technology trials [Funds requested]
- Training
 1. Centre of doctoral training [aspiration – funds not requested here, but suggest we discuss with STFC already]
 2. Instrumentation graduate training programme with residential school [funds requested]

Funds - spreadsheet

	Added to the CG				
	Financial Year				
Request (£k)	2025-26	2026-27	2027-28	2028-29	2029-30
Maintenance & Operating (M&O) Costs: Industrial Engagement	54.5	54.5	54.5	54.5	54.5
Maintenance & Operating (M&O) Costs: Training	35	68	11	68	11
Travel - Short Term (UK + Abroad)	29	29	29	29	29
Travel - Long Term	76	76	76	76	76
TOTAL	194.5	227.5	170.5	227.5	170.5
Exchange Rate Element					
STFC EFFORT (SY)					
Engineer Effort	0.90	0.90	0.90	0.90	0.90
Technician Effort	0.60	0.60	0.60	0.60	0.60
Other (specify)					
TOTAL	1.5	1.5	1.5	1.5	1.5

Details in text of document & calculations in 3rd tab of spreadsheet & in backup slides
 (How do we complete the travellers list efficiently ? Volunteer to check each cost part ?)

Next actions: project bids

- ½ page cases
- Discuss at SB meet
- Hold steering board vote to determine which to pursue as our first combined DRD-UK bids

Reminder

R&D scheme project ideas

Expect many will follow from DRD CG activities list

– Steering board decides at that meeting which to pursue initially

- Would like more than five, given possibility of other funds
- Projects make use of CG personnel (outside funds)
- Each project will have own PI, with DRD-UK steering board acting as a project management oversight board

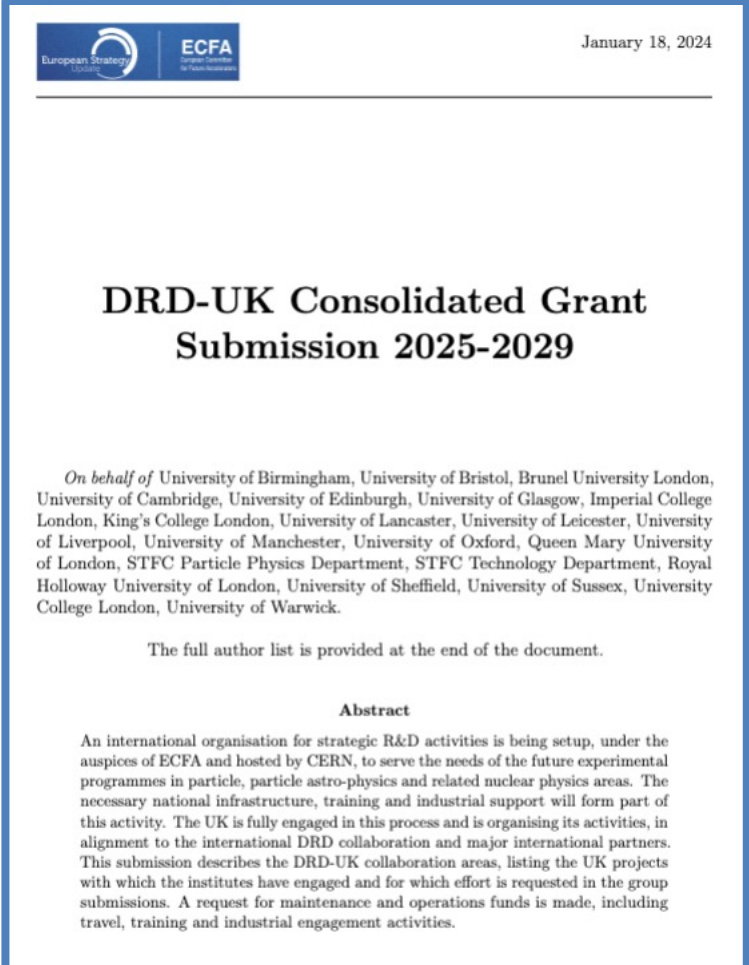
We need to prioritise for after CG

I was too ambitious to try to do in parallel during CG process

Will use effort in CG tables to gauge institute commitment and strength of areas

Summary

- CG submission preparations advanced
- Complete the effort table



The image shows the cover page of a document titled "DRD-UK Consolidated Grant Submission 2025-2029". At the top left, there are logos for "European Strategy" and "ECFA". At the top right, the date "January 18, 2024" is printed. The title is centered in a large, bold font. Below the title, a paragraph lists the participating institutions: "On behalf of University of Birmingham, University of Bristol, Brunel University London, University of Cambridge, University of Edinburgh, University of Glasgow, Imperial College London, King's College London, University of Lancaster, University of Leicester, University of Liverpool, University of Manchester, University of Oxford, Queen Mary University of London, STFC Particle Physics Department, STFC Technology Department, Royal Holloway University of London, University of Sheffield, University of Sussex, University College London, University of Warwick." Below this, it states "The full author list is provided at the end of the document." Further down, there is an "Abstract" section which describes the international organization for strategic R&D activities being set up under the auspices of ECFA and hosted by CERN, serving the needs of future experimental programmes in particle, particle astro-physics and related nuclear physics areas. The abstract mentions that the UK is fully engaged in this process and is organizing its activities in alignment with international DRD collaboration and major international partners. It also notes that the submission describes the DRD-UK collaboration areas, lists UK projects, and requests maintenance and operations funds for travel, training, and industrial engagement activities.

European Strategy
ECFA
January 18, 2024

DRD-UK Consolidated Grant Submission 2025-2029

On behalf of University of Birmingham, University of Bristol, Brunel University London, University of Cambridge, University of Edinburgh, University of Glasgow, Imperial College London, King's College London, University of Lancaster, University of Leicester, University of Liverpool, University of Manchester, University of Oxford, Queen Mary University of London, STFC Particle Physics Department, STFC Technology Department, Royal Holloway University of London, University of Sheffield, University of Sussex, University College London, University of Warwick.

The full author list is provided at the end of the document.

Abstract

An international organisation for strategic R&D activities is being setup, under the auspices of ECFA and hosted by CERN, to serve the needs of the future experimental programmes in particle, particle astro-physics and related nuclear physics areas. The necessary national infrastructure, training and industrial support will form part of this activity. The UK is fully engaged in this process and is organising its activities, in alignment to the international DRD collaboration and major international partners. This submission describes the DRD-UK collaboration areas, listing the UK projects with which the institutes have engaged and for which effort is requested in the group submissions. A request for maintenance and operations funds is made, including travel, training and industrial engagement activities.

Backup

Travel

With thanks to Nigel for costing discussion

Travel				
DRD fraction of UK interest	0.29			
	Dec.'22	Jun '22	average	
RD50 UK attendance	17	22	19.5	
international meetings per year	2			
fraction short term	0.2			
	L'pool Jul 23			
DRD3 UK meeting attendance	38			
national face-to-face meetings per year	1			
fraction short-term	0.9			
non-expt testbeam, irradiations... Attendance /yr	10			
fraction short-term	0.1			
short term (3 days or less) cost GBP	400			
long term (week or longer) cost GBP	1000			
short term	59,310			
long term	151,724			
fraction on expt travel budgets	0.5			
short term	29,655			
long term	75,862			

Summer School

With thanks to Daniel for costing example

Summer School				
Costing estimates				
	Student	Lecturer	Students	Lectures & Tutors
Accommodation	£120.00	£120.00	£21,000.00	£4,200.00
Food	£60.00	£60.00	£10,500.00	£2,100.00
Travel	£100.00	£400.00	£3,500.00	£2,800.00
Social event	£100.00	£100.00	£3,500.00	£700.00
Days	5	5		
Number	35	7		
Total			£38,500.00	£9,800.00
Overall costs				
Admin costs	£1,000.00			
Total	£49,300.00			
Contingency	15%			
Total	£56,695.00			
Instrumentation cost first school	35			
Upgrades	10.5			

Industry

Industrial Engagement	
Industry Programme Board	4000
5 members, 1 trip per year, at 400 GBP	
UK industry visits, 5 trips per year at 400 GBP	
Database support	500
Industrial fabrication fund	50000