

MINUTES OF THE TWENTY-FIRST MEETING OF STFC COUNCIL HELD AT RUTHERFORD APPLETON LABORATORY AND BY VIDEOCONFERENCE 30th SEPTEMBER 2021

Attendance: 30th September 2021

Council Members:

Mark Thomson (chair) (MAT) Sheila Rowan(Co-chair) (SR)

Jon Butterworth (JB)

Mike Dunne (MD) – pm only

Patricia Hodgson (PH)

Anu Ojha (AO) Ben Olivier (BO) Hiranya Peiris (HP)

David Rugg (DR) Andy Schofield (AJS)

Secretariat:

Maya Riddle (MR), Private Secretary Janice Masone (JM),

Minutes Secretary

In Attendance:

Ruth Elliot (DS), UKRI Finance Director, UKRI observer –

pm only

Tara Shears (TS), Chair of Science Board

Joanne Allison (JA), Deputy Director, Corp Strategy,

Governance & Performance, UKRI - Item 4

David Rogers (DRo), Deputy Director Research & Development Investment Strategy, UKRI- Item 4 & 5 Liz Fellman (LF), Exec Director Strategy, Planning &

Comms - Item 4 & 5

Philip Amison (PA), Associate Director of Strategy - Item 4

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Alan Partridge (AP), Exec Director National Labs – Item 6

Seb Oliver (SO), chair of ETCC – Item 7 Maggie Wilson, (MW) Programmes, Item 7

Grahame Blair (GB), Exec Director Programmes – Item 7

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Neil Geddes (NG), Exec Director National Labs Science &

Technology – Item 8

Dave Newbold (DN), Director of Particle Physics – Item 8

Apologies: Maggie Adarin-Pocock (MAP), Dick Elsy (DE), Pam Thomas (PT)

Invited Guests: Paul Monks (PM), BEIS CSA

Chair	Mark T	homson	
1.	Welcon	ne and Opening Comments	
	1.1	Mark Thomson (MAT) welcomed Council members, those in attendance and invited guests to the twenty-first meeting of STFC Council which took place at Rutherford Appleton Laboratory and by video-conference on 30 th September 2021.	
	1.2	The following information regarding attendance was noted:	
		 Maggie Adarin-Pocock, Dick Elsy and Pam Thomas gave their apologies for this meeting 	
		ii. Mike Dunne and Ruth Elliot attended from lunch time onwards	
		iii. Paul Monks, BEIS Chief Scientific Advisor, was in attendance	
	1.3	MAT reminded Council members that they are required to keep the Secretary informed of any changes to their personal register of interests as they arise. No conflicts were reported for this meeting.	
2.	Minute	s and Actions from 29 th July 2021	
	2.1	The minutes of the meeting held on 29 th July 2021 were agreed as an accurate record of the meeting.	
	2.2	The actions from previous meetings were reviewed and were either complete or in progress	
	Sheila l	Rowan	
3.	Report from the Executive Chair		
		Rowan (SR) invited Mark Thomson (MAT) to give his presentation to Council rs. The main discussion points are noted below.	
	0.4	Cavid Dagayamı Undata	
	3.1	 Covid Recovery Update Council members welcomed the news that STFC had recently moved to STFC Operational Alert Level 2 which is "normal site operation" and focuses on restricting the occupational exposure to Covid-19 risks offsite. Across STFC, around 75% of staff had now returned to site working at least part of the time. 	
		 Council members supported the introduction of carbon dioxide monitors in communal areas such as meeting rooms but cautioned against complacency as numbers of staff on STFC sites increased. 	
		iii. MAT offered assurance that staff are being actively encouraged to wear masks in communal areas and make regular use of hand sanitising stations when at work. Alongside this, STFC's Bronze Team continued to monitor site occupancy and any instances of Covid-19 reported by staff and are prepared to revert to Operational Alert Level 3 if the situation, or government guidance changes.	
	3.2	People Update. i. Recruitment and Retention: Recruiting and retaining skilled engineers and scientists continues to be a major challenge for STFC. This has been exacerbated by a national skills shortage and an increasingly competitive market.	

- ii. Although the whole organisation experiences these issues, new high-profile activities such as the Extreme Photonics Applications Centre (EPAC), National Satellite Test Facility (NSTF) and the National Quantum Computing Centre (NQCC) are particularly impacted. As a current example, MAT highlighted a case study for EPAC, which has a 50% vacancy rate, their analysis of the external market has shown a significant pay differential (of up to 40%).
- iii. An equally serious challenge is present in succession planning, as expert staff in key roles begin to retire, STFC's inability to retain graduates and mid-career staff creates gaps in expertise and knowledge that are difficult to overcome.
- iv. As mitigation, STFC and UKRI are developing a Talent Attraction Framework and a strong case for pay flexibility is being developed by STFC and UKRI with much appreciated support from BEIS. MAT is optimistic that these measures will in time see an improving picture for STFC.
- v. **Apprenticeship Scheme:** Council members were delighted to learn that STFC's Apprenticeship Scheme had been awarded GOLD status for the new Investors in People "We Invest in Apprentices" accreditation. Council members joined MAT in extending congratulations and thanks to the Apprenticeship Team and the apprentices for this fantastic outcome.
- vi. **Equality, Diversity and Inclusion (EDI):** Council members questioned how the efficacy of artificial intelligence tools designed to attract a more diverse pool of candidates, was measured, and how all EDI characteristics could be effectively measured at recruitment level.
- vii. This led to a wider discussion on the quality of EDI data available in the organisation and whether the inclusivity of processes around promotion and other incentives could be reliably measured. MAT confirmed this was the aim, but that getting reliable EDI data was a challenge. An action was agreed to provide an overview of EDI data for STFC staff at the next meeting.
- viii. A broader exploration of funding lines and effecting fundamental change in the UK research system followed. MAT clarified that STFC's activities were focused primarily around improving the diversity of its workforce. However, UKRI, fully supported by STFC and the other Councils, is taking steps to make a positive change in the wider community through incentivising inclusivity internally and in all levels of research and innovation.
- ix. Council commended STFC's proactive approach toward improving EDI and felt this was an area where STFC could show real leadership in UKRI. Several Council members expressed a desire to see UKRI's emphasis on positive incentivation of good behaviour supplemented with appropriate sanctions for poor behaviour, noting the latter had been a challenging area for UKRI to implement.

3.3 Political Update

- i. Horizon Europe: The UK has met all entry requirements for association with Horizon Europe, but confirmation is yet to be received. Council members offered their support in resolving this, and MAT has personally followed up with both BEIS and UKRI. Paul Monks (PM) offered assurance that this was essentially high politics in action and BEIS is confident it will be resolved in good time.
- ii. **Spending Review (SR):** The UKRI submission does address core science funding, many of the ringfences have been removed which is generally seen

	as a positive step. The biggest challenge for STFC is likely to be at UKRI level once the allocation from BEIS is confirmed.
	iii. Skills Factory: This is one of STFC's SR priorities. It is a big "ask" but has the potential to be very (positively) impactful, and if realised will align with many of the government's top priorities. PM advised looping in the Department for Education. The Secretary of State for Education (Nadim Zahawi) has visited Harwell and is already aware of the proposal.
	iv. National Space Strategy: The National Space Strategy was announced at RAL Space's flagship building R100 by George Freeman MP, the Minister for Science. STFC is very positive about the contribution it can make to achieving the 10 Point plan driving the delivery of the strategy. Council members felt the National Space Strategy highlighted the importance of commercialisation and advised STFC to build good relationships with campus partners such as the Satellite Applications Catapult.
3.4	Live legues
3.4	Live Issues Council received an update on the live issues occupying STFC's senior management since the last meeting. The following points were noted:
	i. EMBL: Noting EMBL's ambitions to expand, Council raised several points and questions related to STFC's new role in managing the EMBL International Subscription. STFC has a strong track record here and Council welcomed seeing STFC positioned as the guardian of International Subscriptions for the UK but encouraged MAT to give careful thought to the governance model and risks that could impact upon STFC.
	ii. ESS: Council noted that operations have been delayed to the start of 2028 and a formal re-baselining of the project is expected to be agreed in December. The UK is holding a firm line that it will contribute no more than 10% toward cost sharing in 2026 and 2027 and for Steady State Operations.
	iii. AIT-NEO : Work is underway to re-assess this joint programme with the USA. MAT has asked the Programmes Team to prepare an options analysis in the style of a ministerial briefing. Council will receive a more detailed update in November.
3.5	Highlights MAT was proud to provide an update on just some of the recent STFC related highlights.
	i. New Robotic Telescope (NRT): The UK contribution to the world's largest robotic telescope gets underway thanks to £4 million funding from STFC. The NRT will four times more sensitive and ten times faster than the previous record holder. It will be built by an international consortium at La Palma.
	ii. Fusion Energy Research: A new centre of excellence in extreme scale computing in fusion, the result of a successful collaboration between UKAEA and STFC will be located at STFC's Hartree Centre at Daresbury Laboratory. This centre will address the significant technical challenges associated with fusion energy.
	iii. Campus Visits: Council commended STFC's sustained strategy to proactively invite senior government officials and other key stakeholders to visit both RAL and Daresbury. MAT's presentation shows how this strategy has already paid

	dividends in increasing understanding and appreciation of the importance and value of STFC (and UKRI's) national infrastructure.
	iv. Leading on from the discussion of STFC's visits strategy, Council then considered STFC's Stakeholder Engagement Strategy and identified a need to strengthen engagement with universities and industry. This will be discussed in more detail at the next joint meeting of EB and Council
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	strategy Update- Presentation
	welcomed Joanne Allinson (JA), David Rogers (DRo) Liz Fellman (LF) and Philip (PA) to the meeting. MAT invited JA to give an overview on UKRI's Strategy for 027
4.1	JA outlined how UKRI is structuring its strategy development around five strategic pillars, underpinning guiding principles and UKRI's vision for an outstanding Research and Innovation (R&I) system.
	 i. The pillars represent major areas of activity for UKRI and reflect its unique position to work across partners and stakeholders in the Research and Innovation (R&I) System to add value and contribute to the delivery of national priorities.
	ii. The UKRI Strategy will support the development of a new suite of Council Strategic Delivery Plans and a new Corporate Plan. The Strategic Delivery Plans will describe how each Council contributes to delivering the Strategy.
4.2	JA invited Council members to give feedback on the five strategic pillars, underpinning principles and UKRI's vision for an outstanding R&I System.
	 i. Council welcomed and supported this development, commenting that it was very timely and will encourage further synergy and alignment between UKRI Councils' strategic priorities.
	ii. Council members gave JA some helpful suggestions to consider which are summarised below:
	 Public Engagement, People, Sustainability, and the theme of "enriching lives" are each key element of the five pillars and should have a prominent role in the strategy.
	UKRI's role in supporting new, breakthrough ideas, concept developments could be strengthened in this strategy
	 Ensure language is suitable for external audience, clear, understandable, no acronyms.
	iii. Council members thanked JA for the opportunity to review and discuss UKRI's draft Strategy and looked forward to seeing the next iteration in due course.
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MAT inv	ng Review Update – Presentation vited David Rogers (DRo) Liz Fellman (LF) and Philip Amison (PA) to give an update
to Cour	ncil on UKRI and STFC Spending Review (SR) activities.
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5.1	UKRI SR Submission David Rogers (DRo) gave Council an overview of what is expected from the BEIS
	4.1 Spendi MAT in

		SR submission to Treasury. The BEIS Secretary of State has been very involved in the process providing advice and challenge throughout.
		i. Comments and questions focused on how the chosen approach will address ten years of flat cash core budgets and whether the "ask" was inflation-proof. DRo confirmed that UKRI has balanced ambition with credibility, and whilst there is a high level of commitment in the early phase of the SR period, headroom will appear in subsequent years which should address both issues.
		ii. Overall, Council members were supportive of UKRI's approach and offered sincere praise to DRo and his colleagues for their work, acknowledging that capturing the requirements of a diverse organisation like UKRI was not an easy task.
	5.2	STFC SR Submission Council was reminded of STFC's priorities for SR21. Council members also supported STFC's approach and felt a strong case was made for supporting the core programme and investment in technology and innovation.
6.	_	nd Governance
		welcomed Alan Partridge (AP) to the meeting to lead the discussion on the ed governance for the Diamond II (DII) Upgrade Programme and the Diamond Light (DLS).
	6.1	AP outlined a solution proposed by BEIS, with input from HM Treasury, for the wider DLS governance structure and control framework which resolves the current accountability issues. i. In summary, the proposal is for the Diamond CEO to be appointed as Accounting Officer (AO) with accountability to the BEIS Principal Accounting Officer (PAO) and assigns the management of the Diamond II Programme to a DLS SRO. In this model, funds will continue to flow through and be managed by STFC/UKRI and UKRI will become the programme sponsor. ii. This arrangement is yet to be finalised and an update of the Joint Venture Agreement (JVA) is still required to align the DLS governance structure with Government controls and Managing Public Money requirements, following the 2011 ONS classification of DLS as a public body. iii. Whilst Council welcomed the progress in resolving these issues, caution was advised, any new governance structure for DLS should assure appropriate.
		advised, any new governance structure for DLS should assure appropriate
		transparency and accountability in the management of the organisation.
7.	Educat	ion, Training & Careers Committee (ETCC) Annual report
		welcomed Seb Oliver (SO) to the meeting for this discussion.
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	7.1	SO provided an overview of the role of ETCC, which included oversight of studentships (at any one time there were about 900 PhDs); and managing STFC's fellowship programmes (around 100 had been appointed in STFC fields over the past couple of years. This number includes FLFs, ERFs and Stephen Hawking Fellowships).
		 i. Council members asked whether the ETCC was reviewing the impact of Covid-19 on their student community to identify whether any additional support might be required. SO confirmed that thus far initial assessments conducted by STFC and UKRI had not identified any serious impact on students but this is

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		something the ETCC will continue to monitor.
		ii. Progression and completion rates were discussed, and Council recognised the good work done by ETCC in keeping academic supervisors accountable. It was acknowledged that the modern student faced a lot more pressure than in the past and SO flagged the importance of stable funding for students to enable them to complete their courses. Council asked to kept updated on the talent pipeline and any blockages.
		iii. Council proposed holding an event to bring the cohort of STFC fellows together to celebrate their achievements during a difficult time and to encourage networking opportunities. If such an event was held, Council expressed the wish to be involved. SO will explore this with ETCC members and the STFC office.
8.	Particle	Physics Review
<u>. </u>	Council	welcomed Grahame Blair (GB), Neil Geddes (NG) and Dave Newbold (DN) to the for this discussion.
	8.1	This agenda item was a continuation of the discussion from the issues raised in paper STFC(UKRI) 21/21 and gave Council the opportunity to consider a more detailed proposal for a decadal review of particle physics.
		 GB, NG and DN explained that the proposed review will be undertaken in two parts, a) review the overarching science questions and landscape to produce a 20-year vision and b) propose a balanced 10-year programme which realistically addresses these strategic aims.
		ii. Council considered the outcome of yesterday's discussion and the information presented at this meeting and strongly recommended that before launching a major review, a much clearer articulation of the problem and the desired outcome was required. Council further advised clarifying that the review is a consideration of the longer term STFC aspirations, rather than a short-term prioritisation.
		iii. Considering this feedback from Council, GB, NG and DN will revise the proposal and return to Council in November for further discussion.
		ner business
	8.1	On the first day of this meeting Council members had the opportunity to tour some of RAL's major facilities and were unanimous in finding it an inspiring and interesting experience. Council wished to record in these minutes their sincere thanks to everyone who had given their time to organise and conduct these tours. Upon learning that Robert McGreevy, (director of ISIS at the time of this meeting) was shortly due to retire, Council agreed to send him a short note of thanks to mark the occasion.
	8.2	Science Board membership Council noted that the approach taken in pre-selecting a candidate for the next round was liable to make harder the work of STFC in improving the gender balance of Science Board. Council expressed the strong view that this should be addressed in future rounds

- i. MAT explained that STFC is very committed to improving the gender balance on all of its advisory bodies and has been very proactive and successful in most cases. In this instance, STFC was satisfied that every effort had been made to seek out and encourage applications from the most diverse range of candidates available in the community.
- ii. Council suggested reviewing the requirement to have served on other STFC panels before being considered for Science Board in order to attract early career membership which it was agreed could really have a positive impact on STFC's whole advisory structure.
- iii. Tara Shears (TS) highlighted the value and diversity of the non-core membership of Science Board which has in the past played a key role at Science Board and provided balanced insights from the PPAN and PALS community. TS wished to encourage STFC to make more use of the non-core membership going forward.

12. Closing Remarks

MAT thanked members and guests for their contribution. The next meeting will be virtual although Council members are welcome to attend in person at Rutherford Appleton Laboratory.