



MINUTES OF THE 13th MEETING OF STFC COUNCIL HELD BY VIDEOCONFERENCE
28th May 2020

Attendees	
Council Members:	Mark Thomson (chair) (MAT) Richard Kenway (Co-chair) (RK) Maggie Aderin-Pocock (MAP) Isabelle Baraffe (IB) Mike Dunne (MD) Dick Elsy (DE) Anupam Ojha (AO) Ben Olivier (BO) Hiranya Peiris (HP) Sheila Rowan (SR) David Rugg (DR) Tony Ryan (TR) Frances Saunders (FS) Maya Riddle (MR) Private Secretary Janice Masone (JM) Minutes Secretary
Apologies:	None noted
In Attendance:	Ruth Elliot (RE) – UKRI Finance Director - from Item 4 Jayne Lawrence (JL) – Chair of Science Board
Invited Guests:	Mark Affonso (MA) – STFC Finance Director - Item 4 Peter Noble (PN) – COO - Item 4 James Hetherington (JH) – Director of Digital Infrastructure - Item 5 Amber Vater (AV) – Head of Strategy – Item 6 Neil Geddes (NG) - Director of National Labs - Item 6 Liz Fellman – Item 6 Chris Mutlow – Director of RAL Space - Item 6 Grahame Blair – Programmes Director –Item 7 Jason Green – Associate Director of External Innovations – Item 7

INTRODUCTION		
Chair, Mark Thomson		
1. Welcome and opening comments		
1.1	MAT welcomed everyone to the thirteenth meeting of STFC Council, which was held entirely by videoconference in order to comply with government guidance regarding travel and social contact during the COVID-19 Global Pandemic.	
1.2	No apologies were recorded for this meeting.	
1.3	<p>i. 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. The following conflicts were declared:</p> <ul style="list-style-type: none"> • Quantum Sensors- Sheila Rowan, Isabelle Baraffe and Ben Olivier • Space Deep Dive- Frances Saunders, Anupam Ohja, and Ben Olivier <p>ii. With conflicts declared and recorded, it was agreed these Council members would remain present during the relevant discussions.</p>	
1.4	<p>i. The meeting began with a brief re-cap of the joint meeting of Council and Executive Board (EB), which took place on the previous day (27th May 2020). At this meeting, Council members provided advice and feedback on the full and preliminary proposals being considered for submission to the Infrastructure Advisory Committee.</p> <p>ii. Of the full proposals, SKA emerged as the clear highest priority; however, other proposals showed promise with further work. Exo-Earth was identified as the strongest preliminary proposal. Taking into account advice from Science Board and Council, STFC's Technology and Accelerator Advisory Board (TAAB) would be next to provide input which would then inform EB's decision making. The deadline for submission is the end of June.</p> <p>iii. Council also received a presentation from Jayne Lawrence (JL) on the Balance of Programmes 2020 Exercise (BOP2) recently undertaken by Science Board. There will be an action on EB to consider how to implement recommendations arising from this exercise, mainly around the uplift for the Nuclear Physics programme.</p>	
2. Minutes, Matters Arising and Actions from 24th MARCH 2020		
2.1	Council approved the minutes from 24 th March 2020	
2.2	The actions from previous meetings were reviewed and were either complete or in progress	
2.3	Matters Arising None noted.	
Chair, Richard Kenway		
3. Executive Chair Update		
3.1	Richard Kenway (RK) invited Mark Thomson (MAT) to give an update on events and issues at STFC since the last meeting in March 2020.	
Corporate Update		
3.2	New UKRI CEO	

		<p>i. Professor Dame Ottoline Leyser will take over from Professor Sir Mark Walport as CEO of UKRI at the end of June. MAT had a positive initial meeting with her and reported she had a sound understanding of labs and institutes, he, along with everyone at STFC, is looking forward to working with her and welcoming her to STFC's sites.</p> <p><u>STFC Executive Director vacancies</u></p> <p>ii. Executive Director, Business and Innovation: MAT reported that Paul Vernon has been appointed to this role and hopes to start in early July. Council members extended sincere thanks to Liz Kirby for all her hard work and leadership in the interim and were pleased to hear that she would continue to lead on the Hartree/IBM work.</p> <p>iii. Executive Director, Facilities: A strong list of candidates has emerged following the appointment of top recruitment agency Perrett Laver. MAT would ideally like to see more diversity in the list and asked Council members to forward any further suggestions. The shortlisting exercise will be held in mid-June, interviews will be in early July.</p> <p><u>Procurement Review and Commercial Review</u></p> <p>iv. Following a review of procurement processes MAT a UKRI in-house team has been established to manage complex procurement, this includes 20 specialist procurement experts who will be embedded in STFC.</p> <p>STFC had similarly benefited from the creation of a new commercial function within UKRI, which included four embedded posts in STFC following a review of Commercial Services.</p> <p>v. Council was delighted with these developments, agreeing they would have a positive impact on STFC as the organisation had experienced significant challenges in both of these areas.</p> <p><u>UKRI Environmental Sustainability Strategy</u></p> <p>i. STFC is developing an internal strategy to link into the UKRI one, it is likely to come to Council in the autumn. Council members welcomed this, recognising that environmental change is one of the greatest challenges facing our world today.</p>
	3.3	COVID-19- STFC Response
		<p>i. MAT highlighted STFC's strong response to the Covid shutdown. Staff are well informed with regular, relevant communications, robust business continuity and a number of wellbeing packages have been put in place to help colleagues get through this difficult time.</p> <p>ii. Around 5% of staff are attending STFC sites either working directly on research to fight the pandemic or in support/security functions. The majority of staff have made the transition to home working but there is a small percentage who are in technical roles that cannot be done at home.</p> <p>iii. Diamond, Octopus (CLF), Scientific Computing and the Hartree Centre are all actively engaged in conducting or supporting research to combat Covid. STFC staff are working with medical equipment manufacturer, Penlon, a key member of the Ventilator Challenge UK consortium, comprising Airbus, BAE Systems, Ford, Rolls-Royce & Siemens. The aim is to build 10,000 ventilators at pace (3000/wk)</p>

		<p>iv. Council members agreed that STFC was playing a major role in the fight against Covid and recommended ensuring stronger and more visible external communication of these activities.</p> <p>v. Dick Elsy (DE) is leading the Ventilator Challenge UK consortium. DE expressed sincere thanks to STFC staff involved in supporting the ventilator challenge, highlighting the positive impact of their selfless work during a difficult time. Further information can be found here: https://www.ventilatorchallengeuk.com/</p> <p>vi. Richard Kenway (RK) is a member of UKRI Covid Task Force. He briefly outlined the work they were doing to actively encourage and prioritise short-term wins against the pandemic whilst also considering mechanisms to prioritise and allocate funds to address Covid issues in the longer term. RK indicated that STFC input and advice on gaps or areas where the UK should invest and prioritise would be welcome.</p> <p><u>STFC Recovery Plans</u></p> <p>i. Although STFC is still at alert level 4, recovery planning is well under way. During late May pilot studies are running at CLF and ISIS to test at low level how social distancing measures can be used effectively in a laboratory setting.</p> <p>i. In early June the studies will be paused to enable a lessons learned review to take place. Outputs and lessons learned from the pilot studies will then inform Department and STFC's Bronze team to give assurance of capability to move to level 3 at which point EB will be asked to formally approve the move to level 3.</p> <p>ii. Through the summer months there will be a phased move to up to 30% of staff activity on site by September. Plans are flexible enough to revert to level 4 should that be necessary. For staff based at Polaris House, plans are being developed by UKRI, albeit on a longer timescale.</p> <p>iii. Council members commended STFC's response to the Coronavirus lockdown and looked forward to receiving further updates as things developed.</p>
		<p><u>Live Issues</u></p>
3.4		<p><u>Diamond II</u></p> <p>i. The Wellcome Trust are reviewing their research funding strategy and may change to more direct interventions rather than investing in infrastructures which may impact their interest in supporting Diamond II.</p> <p>ii. Council discussed the options and scope of the project and wished to understand the costs and resulting improving to existing capabilities. The Diamond Director is schedule to attend FSAG before attending Council in July. Tony Ryan (TR) will provide Frances Saunders (FS) with a list of questions for the FSAG session and also in preparation for July Council.</p> <p><u>ESS</u></p> <p>iii. Some members of Council expressed concern about the UK's role in the ESS project and what this meant for UK science, particularly the neutron community, with operating costs would be prohibitive for many users. It was felt that the decision to join ESS had been mainly political and didn't reflect the needs of the community, which may have been better served by upgrading existing neutron facilities such as ISIS. Despite these concerns,</p>

		<p>Council members appreciated that STFC and BEIS were working hard to minimise the cost to the UK and mitigate impact on the community.</p> <p><u>Hartree (National Centre for Artificial Intelligence Solutions NCAIS)</u></p> <p>iv. The NCAIS project had recently received a very positive amber-green assessment from a Gateway 2 review. The Review Team found that the NCAIS ‘Hartree Phase 4’ project is built on sound foundations, is well-justified and appears eminently deliverable. However, some additional controls and resources need to be in place for the next stage of work.</p> <p>v. Next stage for the project is UKRI ExCo ratification before the Business Case is considered by BEIS Project Investment Committee in June.</p> <p>vi. NCAIS is a potential “announceable” as it touches on many key policy points for Government.</p> <p><u>Extreme Light Infrastructure (ELI) –</u></p> <p>vii. This international project was reviewed by Science Board as good science but not the highest priority for the UK, particularly given the recent investment in EPAC at CLF. A compromise position had been negotiated which sees the UK join as a founding observer with no financial commitment until 2023. Council was content with this outcome.</p> <p><u>Extremely Large Telescope (ELT)</u></p> <p>viii. Council learned that STFC will be seeking cover for increased costs from BEIS or UKRI. If this is not forthcoming, funding will need to be found from the core budget which is already under pressure. It was agreed that this was a potentially serious issue for STFC. In answer to questions from Council members, MAT confirmed that Brexit would not impact on this project.</p> <p><u>DiRAC</u></p> <p>ix. DiRAC provides essential super-computing support to the PPAN community. Funding has been under pressure for a few years and it is now in need of a significant hardware upgrade, which will require an investment of around ~£40m.</p> <p>x. STFC continues to flag this as an “oven ready” option for UKRI/BEIS/Govt capital spend in FY20/21. This shortfall could be addressed through the Infrastructure Fund (as part of e-Infrastructure), it will be one of STFC’s highest priorities.</p> <p>xi. Discussion of DiRAC led to the broader topic of the current FEC funding model. Council members felt that weaknesses in this model had been exposed and exacerbated by Coronavirus and the subsequent reduction in student income will have a huge impact on universities. MAT concurred with this view and told Council members that UKRI is assessing the situation with a view to mitigating the impact on universities in the longer term.</p>
		<u>Recent Events and highlights</u>
	3.5	<p><u>Recent Executive Chair highlights</u></p> <p>i. Despite the lockdown, MAT’s diary remains busy and he is keen to remain visible and accessible to staff and stakeholders alike as well as ensuring business as usual continues despite the challenges. Highlights are as follows:</p> <ul style="list-style-type: none"> • Virtual STFC Town meeting • Diamond II critical design review meeting • ESS Covid-19 update meeting

		<ul style="list-style-type: none"> • Neutron Review • CERN Working group on Governance • Trilateral meeting with France & Germany • Extraordinary CERN Council Session: ESPP update • STFC site specific senior managers engagement meetings <p><u>Science Highlights</u></p> <ol style="list-style-type: none"> i. The EPAC site at RAL shut down for two weeks while safety measures were put in place for staff according to guidance from Public Health England, work resumed in mid-April. ii. Despite Covid-19 restrictions, there had been real progress in the construction of the NSTF. The Large Space Test Chamber vessel was delivered from Italy and is now being installed. Building handover is likely to be in July 2021. iii. The SPICE (Spectral Imaging of the Coronal Environment) team at RAL Space has been busy commissioning the instrument since 24 February. On 21 April, a long series of commands were uploaded which enabled researchers to take a full spectra image of the Sun. iv. METIS – one of a suite of first light instruments for the ELT passed its Preliminary Design Review by ESO and is now formally in the design phase. UK ATC is responsible for the spectrometer whose primary science targets include analysing the atmospheres of nearby extra-solar gas giants v. Ernest Rutherford Fellowships- Ten talented researchers, who are in the early stages of their career and have clear leadership potential, have been awarded five-year fellowships to help them realise their research ambition. vi. Council members were very impressed by all of these achievements, particularly in light of the lockdown.
Chair: Mark Thomson		
4.	Financial Impacts of Coronavirus –presentation	
4.1	Council members welcomed Peter Noble (PN) and Mark Affonso (MA) to the meeting for this agenda item.	
4.2	<p>MA outlined the approach taken to model financial impacts across the organisation.</p> <ol style="list-style-type: none"> i. In the pre-Covid-19 provisional budget agreed with UKRI, Executive Board planned to over-commit by around 1% to cover critical pressures. Using this as a baseline, while flagging longer-term impacts, STFC is now working to understand the potential financial impacts of the Coronavirus. ii. The central planning scenario assumes 3 months at level 4 followed by a gradual ramp up to level 3/30% occupancy over the next three months. STFC is feeding into UKRI-wide commissions on grants, studentships, institutes, major projects in a manner that fully captures impacts on the organisation and avoids double counting. iii. Key assumptions for planning included: <ul style="list-style-type: none"> • Stable or reducing costs for staff, international subscriptions, travel, events, consumables and utilities; • Increasing costs for some STFC specific grants not covered by 	

		<p>central UKRI schemes; IT and communication licences, security and modifications to labs to accommodate social distancing and PPE</p> <ul style="list-style-type: none"> • Reduced income from slippage/reduction in project income, delays in achievement of project milestones and reduction in rent from innovation tenants
	4.4	<p>i. The overall balance of Covid-19 impacts for 2020/21 is expected to be broadly neutral and are likely manageable without a major change to STFC's provisional allocation if there is flexibility to manage variances across ring-fences.</p> <p>ii. Council noted the emerging risks highlighted in MA's presentation:</p> <ul style="list-style-type: none"> • Exposure to income reduction is difficult to forecast at this stage and could be higher than estimated if there is a long recovery. • There are risks around foreign exchange rate fluctuation and uncertainty around international contributions to ISIS. • For major construction projects, whilst there are reduced costs in 2020/21, slippage will lead to overall increases in costs that will affect future years.
	4.5	<p>i. Next steps will be to formally register and identify mitigation for the risks associated with the Coronavirus and commence work on longer-term impacts such as building strategic and operational awareness and responsiveness to the post lockdown situation in the UK.</p> <p>ii. MA and his team are working closely with the UKRI Corporate Hub to agree the formal budget allocation for 2020/21 by July.</p>
	4.6	<p>i. Council members commended this work and shared experiences from their own organisations around loss of productivity, supply chain issues, implementing safety measures and increased costs resulting from the formal re-baselining of major projects.</p> <p>ii. Council members flagged possible downstream impact on the labs caused by changes to universities and industry because of Coronavirus. MA confirmed the next stage of this work would be looking into that. UKRI is also doing some work to assess the overall impact across the research base.</p>

5.	UK research e-Infrastructure
5.1	<p><u>Digital research infrastructure- STFC (UKRI) 20/17.</u></p> <ul style="list-style-type: none"> i. Following discussion at the March Council meeting and consultation with STFC computing community, Richard Kenway (RK) highlighted the main issues and questions, which need to be agreed between STFC and the UKRI Director of Digital Research Infrastructure (DI). These are: <ul style="list-style-type: none"> a. The critical need for investment in UKRI Digital Infrastructure (DI) and how STFC can help make the strongest possible case to UKRI and above for proper planning and investment into this area in order to create a sustainable digital infrastructure: b. For planning purposes, what principles should be used to distinguish STFC resources and shared UKRI-funded DI services? c. How can STFC ensure visibility of the requirements of its research communities in the high-level tensioning of planned UKRI services? d. Should STFC develop mitigation strategies to protect its science programme in case UKRI plans do not prioritise suitable DI resources? e. How can STFC help make the case for appropriate long-term funding for People, Skills, and Software? ii. RK requested the support of Council members in the discussion of these items with the UKRI Director of Digital Research Infrastructure on how best to coordinate with UKRI the provision of the digital research infrastructure required to support STFC's research and innovation activities.
5.2	<p><u>UKRI e-Infrastructure roadmap & governance</u></p> <ul style="list-style-type: none"> i. Council welcomed the UKRI Director of Digital Research Infrastructure, James Hetherington (JH) to give an update on the governance structure, strategy and prioritisation process at UKRI level. ii. JH began by sharing his early vision for the development of an E-Infrastructure Strategy. JH hopes to develop a strategy, which sees the alignment of people, data, code, security and research to create something auditable and accountable iii. Underpinning the strategy, JH plans to develop a computing infrastructure with a single sign-on shared across communities with the ability to be open source in the future, although that would not be within the scope of the project to decide. iv. JH also sees great opportunities for international collaboration, citing the recent example of the UK's role in the international consortium on Coronavirus response. v. JH explained that details around the governance structure were still in the very early stages of planning, but the aim is to create an effective model to support robust technical review and understanding scientific tensioning/prioritising. JH's initial plans are to engage with all communities before engaging experts to design the prioritisation process to be used.
5.3	<u>Discussion of issues and priorities</u>

		<ul style="list-style-type: none"> i. Council members questioned JH about how he envisaged prioritising access to facilities and how this would be informed by the peer review process currently employed by the STFC community. ii. Council members emphasised the critical role of DI in STFC's research, it is a priority for STFC to have access to appropriate facilities, and working out the governance details is a matter of urgency. STFC has expertise in this area generally across the piece; Council asked JH to consider how STFC can have a role in offering technical assistance to UKRI to ensure efficient operation of this infrastructure as it developed. iii. Council members agreed it was important to understand the scale of community needs/ quantitative challenges over the next 10 years. The question of resourcing is an important one, Council members reiterated that STFC could assist in this area.
	5.4	<p><u>Closed Session (Council Members only)</u></p> <ul style="list-style-type: none"> i. Council members supported the development of a DI strategy but are deeply concerned by the apparent move to centralise this concept, it was imperative that Council/STFC has some influence on the strategy and governance policy. ii. MAT assured Council members that he is closely involved in the development work and there are plans to establish a Strategy/Steering Board which will be chaired by MAT and Lynn Gladden (EPSRC Exec Chair). This Board will provide the strategic vision, oversight and direction to ensure the governance and prioritisation processes are fit for purpose. <p>Text from this section has been redacted : official sensitive</p>
6.	Space Deep Dive Draft Report	
	6.1	Neil Geddes (NG), Chris Mutlow (CM), Liz Fellman (LF), Philip Amison (PA) and Amber Vater (AV) joined the meeting for this discussion.
	6.2	<ul style="list-style-type: none"> i. STFC is leading across UKRI on a Space Deep Dive. STFC Council are asked to review and endorse the report before it is submitted to UKRI Executive Committee in July 2020 for final approval. ii. The Space Deep Dive Report was prompted by the establishment of a new cabinet level body, the National Space Council. It aims to bring together information outlining the breadth of research and innovation activity across UKRI in relation to Space. The report is intended to be an internal (to UKRI) document only. iii. AV described some of the challenges the team had faced in balancing views from across UKRI. AV cautioned that if a strong, coherent report is not produced and agreed soon, UKRI will not be in a strong position to contribute to (i) emerging National Space Strategy (draft expected end of May) (ii) discussions at the National Space Council (first meeting planned for autumn 2020) (iii) to any Spending Review submissions. iv. Executive Board recently reviewed the draft report and felt that at present there is a risk that the balance of the report does not truly reflect the balance of activities. Specific recommendations included reducing the number of case studies in the main report and including a high-level summary diagram

		<p>showing cash flow and people resources across UKRI.</p> <p>v. Council members agreed with the suggestions made by EB and commended AV and PA on the work done so far, the report had markedly improved from the first draft. Council suggested some further improvements including using more schematics and diagrams, highlighting sovereign capability and STFC's lead role in space science within UKRI.</p> <p>vi. In principle, once the edits are complete, Council endorsed submitting the report to UKRI ExCo in July.</p>
7.	Quantum Technology for Fundamental Physics report	
	7.1	Grahame Blair (GB) and Jason Green (JG) joined the meeting for this discussion.
	7.2	<p>i. Quantum Technologies for Fundamental Physics (QTFP) is a £40m Strategic Priorities Fund (SPF) programme run jointly by STFC and EPSRC that aims to transform our approach to understanding the universe and its evolution. It has been bought to Council as it represents a significant investment for STFC.</p> <p>ii. The programme's objectives include establishing a new community that brings together the quantum technology and fundamental physics communities; generating research outputs deemed excellent by international peer review; and becoming an active part of the National Quantum Technology Programme (NQTP).</p> <p>iii. The first research call for QTFP will allocate the majority (up to £36m) of the programme's funds. The call sought bids from research consortia in the area of applying quantum technology to fundamental physics. The call specified that the consortia must be interdisciplinary teams comprising researchers from both the quantum technology and fundamental physics communities.</p> <p>iv. Jayne Lawrence (JL) reported that Science Board had discussed the creation of this new community and whether it would be part of the Consolidated Grants round. GB confirmed that there was currently no funding line for this but it is hoped that opportunities will arise during the next five years.</p> <p>v. Council members recognised the potential in bringing together two communities; this could be highly productive and was an exciting development.</p> <p>vi. GB highlighted the training element; Council members advised setting up a mentoring programme across the disciplines or running a summer school in due course.</p> <p>vii. Over all, Council is content that this is a broadly balanced programme that will deliver excellent science for the UK</p>
8.	Any other business	
	8.1	<p><u>Dates for Council Meetings 2021</u></p> <p>i. Council members considered the proposed dates for meetings in 2021. Most preferred continuing with the virtual format alongside a reduced number of face to face meetings.</p>
	8.2	<u>Advisory Panel for Public Engagement (APPE)</u>

		<p>Anupam Ojha provided a brief update on the recent meeting of the STFC Advisory Panel for Public Engagement (APPE):</p> <ul style="list-style-type: none"> i. The panel supported the STFC PE team in its work to mitigate the removal of the pathways to impact which provided early career researchers with public engagement opportunities ii. The Coronavirus lockdown had seen an intense increase in online activities which could potentially lead to new opportunities in public engagement iii. It was agreed that the Chair of APPE and STFC leads should attend a Council meeting in July or September (agenda permitting) to talk to Council about their work and pursuit of new opportunities
	9.3	<p><u>Industry and Business Partnership Board</u></p> <ul style="list-style-type: none"> i. Dave Rugg reported that two new members are required for this board. These members should have a broad experience across a wide range of areas. Council members should contact Dick Elsy (DE), DR or the Board Secretary with any suggestions.
	9.4	<p><u>EDI Committee</u></p> <ul style="list-style-type: none"> i. Sheila Rowan (SR) reported that this committee had discussed the Deep Dive Implementation Plan, a report will come to Council in due course.
11.		<p>Closing Remarks MAT thanked members and guests for their contribution, and everyone agreed the first fully virtual meeting of Council had gone well. The next meeting will take place by videoconference on 23rd July 2020.</p>