

# **Impact and Innovation Deep Dive**

Outcome requested:	Audit and Risk Committee is asked to <b>consider</b> the Impact and Innovation Deep Dive
Executive Summary:	This paper undertakes a Deep Dive into risks associated with strategic risk area 6 of QMUL's risk registers: innovation and impact.
	The report describes a very broad risk area, driven by several different external and internal agendas, where risk controls are varied and span the breadth of QMUL. The Deep Dive highlights some areas where risks are well considered and suggests some areas where the risk registers may need updating to reflect current risk in this area.
QMUL Strategy: strategic aim reference and sub-strategies [e.g., SA1.1]	QMUL strategy strategic aims 2 and 5. Research strategy strategic aim 9. Public Engagement Strategy
Internal/External regulatory/statutory reference points:	N/A
Strategic Risks:	Risks associated with risk area 6 of the strategic risk registers
Equality Impact Assessment:	No issues of equality and diversity have been identified
Subject to prior and onward consideration by:	Prior consideration by QMSE
Confidential paper under FOIA/DPA	No
Timing:	To be considered on the 4 <sup>th</sup> February
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Date:	14 <sup>th</sup> January 2016
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#### Introduction

Impact and innovation are agendas within the landscape of higher education which have grown in magnitude significantly over the past 10 years, both as the desire to diversify income becomes more pressing and as research excellence and funding is increasingly tied to the outcomes of research. This paper outlines the background to this area, expands upon key risk points and contains an overview of different controls for risk in this area.

The terms 'impact' and 'innovation' are used in several different contexts across HE. For clarity, this paper uses the following definitions:

- Impact describes the non-academic results of our research, teaching and other
  activity. These impacts could be social, economic, environmental, political etc. and
  could include the creation of spin-out companies or the changing of public opinion.
- Innovation describes the development of research ideas into a 'product' that can be utilized by the non-academic community.

The desire within HE to focus on impact and innovation is driven by several agendas:

The REF - while QMUL's performance in REF2014 was excellent, in general the scores for impact were lower than those for outputs. Within the assessment exercise, impact scores are awarded for case studies of impact arising directly from published research. Each submission to a Unit of Assessment required one case study plus one more for every 10 researchers submitted. This element accounted for 20% of the marks in REF2014 and is expected to be the same or higher in 2021. Ensuring that there is sufficient quantity of high quality case studies is of high importance for both reputational and financial security.

Funder requirements – potential impact is often an important factor in grant funding decisions. Researchers are usually required to detail in applications the potential benefits to society and the non-academic community that might arise from their research and how they will ensure that these benefits are maximised and communicated to the relevant audience.

Income generation and diversification - impact and innovation activity can result in additional income for HEIs, whether directly through commercial activity such as the establishment of spin-out companies marketing a product, or through the innovation activity itself, for example provision of continuing professional development (CPD) training courses to external people.

#### **Risks**

For this paper, an extract from the risk registers was provided, with a breakdown of all risks associated with strategic risk 6. This risk register extract identifies several key risks at an organisational level:

- Enabling impact and innovation, including entrepreneurship
- Evidencing impact (in particular with regard to the REF)
- Co-ordination of impact work across QMUL
- Ensuring appropriate levels of income from technology transfer and consultancy
- Protecting intellectual property
- Engaging appropriately with business and external organisations

There are two recent or upcoming changes that may affect the risk exposure in this area:

- QMUL's REF results indicate room for improvement with regards to the impact element of the assessment.
- Much of the budget for both staff and delivery of the controls around impact described below are funded through the Higher Education Innovation Fund (HEIF); the allocation

for this for 2016/17 has not yet been announced. There is a risk relating to year-on-year changes to this scheme.

Controls for this risk area as identified in the risk register extract are diverse and varied, but the majority of organizational-level controls come under the remit of several key departments within the institution:

- Queen Mary Innovation, QMUL's independent technology transfer company. QMI is currently largely funded through HEIF, and leads in IP, patents, licensing, formation of spin-out companies as well as managing QMUL's innovation Fund which provides seed funding for impact activity. It also supports implementation of the new IP policy. Accountability to QMUL is provided by a majority on their board.
- The Business Development Unit works to forge and maintain links between academics and external organisations and to support QMUL academics with developing research partnerships, consortia and research grant applications. Teams within the BDU are organised into faculty-focused teams with a member of staff dedicated to each function. BDU will imminently appoint an Impact Manager who will work across QMUL faculties and PS departments to lead centrally on the agenda.
- Centre for Public Engagement, sitting under VP-PESE is responsible for supporting
  activity aimed at engaging those outside the institution with the results and processes of
  our research. They offer advice on activity, seeking funding for public engagement, run
  internal funding rounds and provide training for researchers at all career levels.
- Careers and Enterprise team sit within Student Services and are responsible for supporting student enterprise activity. They run a variety of programmes designed to foster innovation, including funding student entrepreneurs, internship and placement opportunities in businesses and charities and incubator space for businesses.

Responsibility for impact and innovation activity sits across VP-Research (research Impact, REF and staff enterprise) and VP-Public Engagement and Student Enterprise. As such, the new **Research Strategy** released in 2015 (see appendix 1) and the **Public Engagement Strategy**, currently being revised by VP-PESE, also form a key part of control measures. **Plans for REF2021** to include processes for supporting and assessing impact are also in the process of being finalised (see appendix 2).

#### Case studies

The following case studies identify some of the risks and mitigating controls associated with impact and innovation. They were chosen to represent challenges that are broadly relevant across QMUL. Many risks associated with impact are very specific to a subject area so this paper focuses on case studies which can be applied across most subjects. The case study from the Maths risk register was chosen as it reflects risks associated with the research impact agenda (REF) particularly well, and these challenges and approaches to resolving them, are common across the sector.

# Research Risk Register – Lack of coordination, support and enhancement of impact work across QMUL

Because impact and innovation support and activity is spread across QMUL's faculties and PS directorates, there is a risk of an uneven portfolio of activity. The two key controls in the risk register are the research strategy, which has now been released with a focus on impact in strategic aim 9, and the impact group. This is a group of academic champions from each School/Institute, who meet to share practice and discuss key issues. Most recently the group has advised on the procurement of a database to record impact which will allow scrutiny of activity which may be managed in-house by Schools/Institutes. As plans for the REF gain pace,

this group will be regularly revised to make sure that it is making a positive impact – in particular the group is currently primarily used for practice sharing and there may be a need for an increased advisory/assessment capacity. More informally, within PS there exists a Cross-PS impact forum, where staff from teams responsible for supporting impact in various capacities meet to share practice and discuss common areas of work. This is currently attended by staff from the Centre for Public Engagement, Business Development Unit, Careers and Enterprise and the Centre for Academic and Professional Development who are involved with some impact training delivery. The new Impact Manager will also work to consolidate the existing efforts to coordinate impact activity.

# Research Risk Register - Sustainable financial model for QMI not implemented

QMI have been historically funded by QMUL, but a key aim for the 2015 research strategy is for them to be financially sustainable by 2018/9, minimizing the risk to QMUL. Several key approaches are being overseen by the board:

- QMI's business plan was agreed by QMSE in August 2015
- An independent financial model for QMI operations has been developed, which
  incentivises their activity by moving them from a QMUL-funded service model to valuegenerating operation; this model is not yet in operation
- Increased human resource approved late last year
- New funds to be released from the Special Investment Scheme and the alumni fund to mirror a successful approach by Oxford
- 2015 IP policy is now being supported via QMI engagement with Faculties which will ensure that QMI are a key part of any IP and income generation processes

# Maths risk register - Failure to develop a strategy for ensuring impact from research.

The School of Mathematical Sciences has a strong focus on the need to ensure that strong impact cases are produced for REF2021. The School has identified a new impact champion to be in post from January 2016 and have formed an impact group which will meet to identify and scrutinize possible case studies for REF2021, which has identified a list of case studies of which at least four are likely to be developed further. They have also made several recent appointments with experience in impact areas. At a faculty level, incentivisation schemes for impact are being explored to encourage staff to engage with the agenda.

The School risk register notes a lack of central support and guidance in this area. The School feel that professional support for evidence collection, writing case studies and a deep understanding of the breadth of possible impact types is needed, with enough resource to have individual guidance to staff submitting impact case studies.

Centrally, the appointment of a new Impact Manager will work to support this agenda, with a case being made for a further three posts to support impact at a faculty level. VP-Research has also finalised plans for the preparation for REF2021, with a clear focus on supporting impact, including a post which will have some capacity in this area. Finally, a new impact database is in procurement stages, which will allow for tracking and evidencing impact over time, supporting the writing of impact case studies.

# Alignment of risks:

- Several risks which impact on impact and innovation are found in other areas of risk
  registers and hence do not show in the risk register extract considered as part of this
  deep dive (which focussed only on risk area 6): the reliance on HEIF costs for salary
  support is a key example.
- No faculty risks have been identified within SMD, which may be because of the lower need for faculty-level of scrutiny of impact this distance away from REF2021. SMD have recently updated their risk register to reflect faculty-level risks surrounding impact.

- This risk group does not feature in the majority of School/Institute registers. This is likely
  because of the recent conclusion of REF2014, but as most Schools/Institutes have
  indicated through internal groups that impact case studies for REF are a risk of note,
  there is a need to consider risks in this area both in terms of income generation and for
  REF2021.
- There are no risks within this extract of the risk registers from PS directorates associated with impact and innovation. However those departments with a remit to support impact and innovation have risks elsewhere in their registers (for example under 'high quality staff' and 'quality and quantity of research').
- There may be a need for explicit acknowledgement of risks associated with impact and innovation to be placed within risk 6 in the PS directorate risk registers as well as elsewhere. Audit and Risk Committee may wish to consider whether some level of duplication is acceptable where risks and controls sit across multiple risk areas.
- The work of Careers and Enterprise is not routinely mentioned as a control in this risk area outside of reference to a student enterprise strategy, even though this work is a key part of QMUL's strategic aim 5.4.
- Risks and risk controls in this area vary significantly across registers, likely due to the large variety of types of impact and innovation activity and the different approaches necessitated within different subject areas. However, there are some control factors identified which could be used more widely at a School/Institute level,
- There is a lack of identification of risks surrounding the need to incentivise and encourage staff to engage in impact and innovation activity (although it is alluded to in the Maths and Dentistry risk registers). There are a significant number of controls already being implemented in this area, including inclusion of this type of activity in academic promotion criteria, an IP policy that offers more direct benefits to the inventor and recognition through awards and the annual research and innovation reviews.

#### Conclusion

Impact and innovation covers a wide range of activities, and is managed by departments across PS and within individual Schools. Centralised oversight and coherence is a work in progress and recent or imminent changes such as the appointment of an impact manager, the finalisation of the research and public engagement strategies and plans for including impact in the REF planning will work to support this.

Identification of risks surrounding staff buy-in should be added to the Research and/or Public Engagement risk register as a first step, and Schools/Institutes/Faculties should consider the best way to incorporate their own particular risks in this area.

Improving the consistency of control measures used may be achieved by adding these to the QMUL-level risk register, and discussing with Faculty/PS risk owners how these controls may be best incorporated into Faculty/PS level registers in future updates. It is anticipated that as Schools/Institutes/Directorate risk registers are updated, they will be able to use some of the controls indicated at faculty level to address their own specific risks.

# **Appendices**

#### Appendix 1: Research strategy 2015: Strategic aim 9: Innovation and Impact

Strategic Aim 9: Innovation and Impact

QMUL seeks to foster innovations arising from our research and their impact for the benefit of society, and will promote policies and practices that advance this.

- 1. QMUL will adopt and disseminate policies on Intellectual Property and related issues that recognise and incentivise the work of researchers in engaging with a diverse range of industries and developing innovations.
- 2. QMUL will support the innovation and impact work of researchers, making allowance for the time and other resource commitments made, and recognising these contributions through our appraisal and promotions processes and staff bonus schemes.
- 3. QMUL will increase its work to embed innovation and impact activities within the organization, and to ensure that the outcomes of these are fully recorded, through the appointment of and support for dedicated staff resource.
- 4. QMUL Innovation will increase its visibility and engagement with QMUL researchers and work towards sustainability via increased income streams.
- 5. QMUL will continue to increase and realize its potential for innovation through growth in disclosures, licensing and spin---outs.
- 6. QMUL will build longer---term innovation and impact relationships with significant business and other partners most relevant to its developmental strategy, using these where applicable to access direct, joint or leveraged funding for innovation.

# **Associated Indicators of Progress**

- IOP 14. The numbers of inventions disclosed to Queen Mary Innovation Ltd will place QMUL in the top ten UK HEI by 2018/19.
- IOP 15. The number of, and income generated through, licensing agreements and spin---out companies will place QMUL in the top ten UK HEI by 2018/19.
- IOP 16. Research income from industry and commerce will double by 2018/19.
- IOP 17. Queen Mary Innovation will become financially sustainable by 2018/19.

The whole research strategy can be found online here: http://www.gmul.ac.uk/strategy/researchstrategy/

#### **Appendix 2: Plans for REF2021**

Attached as separate document

#### **Appendix 3: Comments from SPO**

Risk 6 – Impact & Innovation

Observations based on the content of the risk registers

- No faculty risks have been identified within SMD. Risk owners may wish to take this forward to ensure there is full representation across the faculties.
- This risk group does not feature in Professional Services or any Professional Service directorate risk registers.
- Would risk owners expect to see risks relating to the support around facilitating this risk area within the Professional Services register?
- Would risk owners expect to see risks identified in the Research Services register?
- This risk group does not feature in the majority of School/Institute registers. This could be
  as a result of the conclusion of REF 2014 so many areas may not consider it a risk at the
  moment. However, we may see in 2016 that as QMUL begins preparations for the next REF
  exercise, this risk could feature more prominently across registers.

Observations based on the structure of the risk registers

There are two areas still using half numbers to score risks (Economics & Finance and Dentistry). This issue has been raised within a recent communication sent to Schools/Institutes.

- One strategic objective section remains blank within Dentistry. Again, this issue has been raised within the recent communication.
- As part of the message to Schools/Institutes it was requested that risk owners should use
  job titles when assigning individuals to Lead Officer or Owner roles instead of using
  individual names. No individual names have been used in this exercise.
- There are a number of areas across QMUL where controls are recorded as 'B' (been identified and are being implemented) or 'C' (been identified as missing or complete, or implementation has not commenced), yet there are no further actions or notes recorded in the respective registers relating to the controls. The Strategic Planning Office will highlight this issue with Schools/Institutes.

#### **Appendix 4: Risk Register Extract**

Attached as separate document

# **Arrangements for REF 2021**

#### 1. Introduction and key points

A previous paper on REF preparations was circulated to Schools and Institutes, and a summary of the feedback obtained can be found in Appendix 1. These comments have been taken into account in the following revised proposal. The main areas to highlight are:

- From spring 2016, individual REF-focused meetings (described as "REF Status meetings" in the following) will be held with all Schools/Institutes, as a separate but contiguous meeting to the annual research review.
- The first set of such meetings, in April/May 2016, will cover all relevant areas of outputs, impact and environment, exploring the status and plans in each. A more detailed description is given below.
- As well as working via the mechanisms described below, the Faculty Deans for Research will
  play a key role in holding responsibility for monitoring and reporting on the broad issues
  covered by the research Environment measure, guided by those used in REF2014.
- An integrated approach to Impact is planned, bringing together Professional Services staff and Faculty and School/Institute level impact leads from an early stage.
- A new REF Officer post is proposed to be introduced from 2016, in the initial stages supporting work on REF impact case studies, and convening and servicing the steering groups. As the preparations for the REF move on this post will provide higher-level support, modeling outcomes, overseeing data management and supporting and analyzing the preparations. An expected list of duties is included in Appendix 2. This post will also play a key role on impact, in coordination with School/Institute, Faculty and PS impact staff. It will be line-managed by the eo-research.
- The involvement of an Academic Lead is included from an earlier stage than for REF2014.

The arrangements described below assume a similar structure for the next REF as for 2014, and that submission will take place at the end of 2020, with results announced at the end of 2021. As such, these proposals are subject to change, most obviously since the structure and timing of the next REF have not yet been announced, but also as we learn from experience and respond to challenges that arise.

#### 2. Oversight Structure

The following three main REF specific groups are proposed. Membership lists are given in Appendix 3 along with the organogram.

A **REF Strategy Group** as for REF2014. This will oversee the general direction of preparations without being involved in day-to-day arrangements, and will set guidelines for operations, make decisions on any key issues such as UoA coverage and selectivity, and review and commission input from the **Equality and Diversity Panel** and any appropriate input from the **Special Circumstances Panel**.

A **REF Coordination Group** will be a central and easily understood focus for managing the operational matters around the preparations and submission. A cross Faculty and PS group to improve communication and sharing of information between Schools and Institutes and PS Directorates, this will report progress into the REF Strategy Group and seek advice as needed. The Coordination Group will liaise with any relevant **Review Panels** set up to provide advice on submissions, such as reviewing draft documents.

A **REF Data Group**, overseeing the collection and veracity of relevant data, will be set up. Data will include those around research grants, PhDs, impact, research outputs and staff. Such metrics are expected to play a role of increased importance in the next REF. This group will also be responsible for any modeling of outcomes under different options. The REF Data Group will report into the Coordination Group.

Existing groups within QMUL will interact with these groups as per the organogram in Appendix 3. All groups will be set up and meet in early 2016, to review lessons from REF2014, needs for 2021, and their remit and actions for the future, with reports to the REF Strategy Group which will meet as needed to receive or revise these.

# 3. Review meetings with Schools and Institutes

Regular meetings with Schools and Institutes to review REF preparations, here called REF Status meetings, are essential. A summary of the proposed arrangements is given below.

Assessors: The REF Reviews as conducted by Schools/Institutes in 2016 and 2017 will use internal assessors that they have chosen, although it is recognized that for 2016 it may not be possible or advisable to conduct full reviews of individual outputs, case studies, etc. This assessment may necessarily include outputs or impact case studies that are in progress and steps planned to complete these. Another aim will be to identify any staff that might benefit from additional support, as well as more widely to assess School/Institute plans as well as needs. The REF reviews conducted by Schools/Institutes in 2018 and 2019 will use external assessors. These will be chosen in the end by Faculties and remain confidential, although we recommend that the Faculties seek detailed advice and suggestions from Schools/Institutes in order to obtain appropriate expertise and coverage of disciplines. Arrangements for assessors in 2020 will be more responsive as we enter the final stages.

Selectivity: Whether or not the next REF will require one hundred per cent submission of eligible staff is not yet known; in any case, all staff on a contract which includes research as a major component should be seeking to achieve a level of research that will enable them to be submitted. It is recognized that generally some advice and support may be needed to assist with this and REF Status meetings should aim to enable such needs to be assessed. If submission of all eligible staff is not a requirement of the next REF then we would be seeking to submit as many staff as possible; however the eventual decision on which REF-eligible staff to include in a submission will be made by the REF Strategy Group, after taking into account the views of the Schools/Institutes as put forward during the REF Status meetings, as well as any other arguments that may be relevant to an assessment of the best way to optimise the outcome for QMUL as a whole. This also applies to the choice of which UoA to submit to.

**2016:** January-March: Schools/Institutes to conduct the first REF Review, an internal review of the state of their preparations, the work done so far supporting outputs, environment and impact, as-

sessing current relevant supporting data, and reporting on these and plans and needs, to feed into the REF Status meetings in April/May. From there reports will be made to the REF Strategy Group via the Coordination Group and Faculty Executives, with final feedback by mid-year.

The REF Review will include data relevant to Environment, the identification and system of evidence collection for potential Impact case studies, the current general status of Outputs and plans for all eligible staff, and issues around researcher support, equality and diversity, career development and the research environment more generally. This first REF Review should be able to identify the type of support that the School/Institute and/or individual members of staff may need to optimize progress. More detailed guidance will be issued in early January.

**2017:** January-March: a second REF Review to be conducted by Schools/Institutes, along the lines of the first Review, and here using internal assessors, who will cover Environment and Impact case studies as well as Outputs. Templates will be provided for assessors to improve comparability and the level of input. This Review will be discussed in the REF Status meetings in April/May and reported to the groups as described for the 2016 meetings, with mid-year feedback and actions to follow.

**2018:** January-March: a third REF review, this time using external assessors as selected by Faculties. To improve the quality of feedback, templates and criteria for the assessors will be provided, developed by the REF Coordination Group. This review will also include an explicit Impact review using external assessors selected by Faculties. Reports to the REF Status meetings and to the Coordination Group and Faculty Executives as above with mid-year feedback and actions to follow.

**2019:** January-March: a fourth REF review, along the lines of the third.

**2020:** A detailed timetable for this year will be provided as was done for 2013. This will include a fast response assessment throughout the year to allow staff more recently appointed (or those where the Faculty feels that there is a strong case for review) to be assessed, led by the REF Strategy group. Full REF submission by QMUL in late 2020 for formal assessment and outcomes in 2021.

#### 4. Dedicated staff

Dedicated staff resource is essential, and should fit with the oversight structure. The following is proposed:

**Academic Lead:** In line with the general view of the efficacy of this post, it is proposed to identify an Academic Lead from 2018, with increased FTE for 2019 and 2020.

**Environment:** The Faculty Deans for Research hold extensive and broad knowledge about their Schools/Institutes and this can provide vital input into the preparations for monitoring the environment aspects of the REF in particular, as well as their more general input into the structures defined below. It is suggested then that they have oversight of Environment directly. This will be supported by dedicated editing/writing support in the last two years of the process.

**Data:** the Data lead will be responsible for oversight of the systems needed to identify research information, including outputs; this includes liaison with the JRMO, Finance, Planning, the Library, HR, the RDO and ITS.

**Impact:** Professional support for evidencing impact and writing was felt to be helpful in the preparations for REF 2014 and the staffing plans described below incorporate this. The VP-Research has

agreed the procurement of a new impact database that integrates with Elements (previously known as PubLists) and it will be recommended that all Schools/Institutes utilize this to record impact evidence.

The PS impact officer, to be appointed shortly, will work with the REF Officer (see below) and relevant teams across QMUL on the overall approach to impact. The final structures and roles for oversight of impact will depend on new PAR cases and appointments from Schools/Institutes, Faculties, the VP Research Office and Professional Services that are currently under development and will be decided in the first part of 2016, however it is expected that the REF Officer and PS Impact Officer as a minimum will be in post in early 2016.

For the next REF, as for 2014, it is expected that Impact case studies will be peer reviewed by 'research users' as well as academic colleagues. As such, we propose a series of Faculty panels to assess impact for the reviews in 2018 and 2019. These panels will comprise staff from within QMUL who have expertise in the relevant areas of impact (eg the Centre for Public Engagement, QMI and Business Development) but also external assessors drawn from business, creative industries, policy and education, in order to mimic the research users process for impact. This will also ensure that Schools/Institutes are making good progress with the impact case study templates and will help them select the best cases, as well as identifying areas where further evidence is needed.

**REF Officer:** This post directly addresses several gaps in the first draft plan that were identified by Schools/Institutes and those involved in the REF2014 submission. Many responses raised the issue of the level of professional support evident in the plans and the volume of work created for the planning and administration posts. This post would be brought in full time as soon as possible; funding has been identified to cover this post until 2016/17 and a PAR case will be brought in by the VP Research in 2016 for subsequent support.

In the immediate term, the post would focus on REF impact case studies, on assessing the extent to which equality and diversity issues were a challenge in the last exercise, and on setting up groups and processes. They will work with the Professional Service Impact post that will be advertised in early January. The post will also look to identify any potential gaps in provision for environment statements and work with faculties to address these. They will work with the Equality and Diversity lead in HR to identify any issues with equality and diversity in QMUL submissions and work with Schools and Institutes to address these. As the preparations for the REF move on, the post would provide high-level support, modelling outcomes, overseeing data management and supporting and analyzing the REF Review processes. Academic colleagues in the last REF process noted a high administrative burden due to the need to do this kind of work at tight turnaround speeds in order to assess the impact of the submission of staff before making decisions.

An indicative list of duties is included in Appendix 2. This post would add capacity and allow the planning lead and administration officer (who would be brought in later in the process than in the initial proposals) the ability to focus on their own domains, in particular on ensuring the accurateness of data provided to Schools/Institutes. This post will also focus on impact, working with the PS Impact Officer. The position will report to the Executive Officer (Research).

Administrative support: Whilst we expect the REF Officer to be able to handle needs during the first year of review in 2016, later years will bring a rapidly increasing administrative burden. There will be a need to support the REF Strategy Group, Coordination Group and Data Group as well as the Special Circumstances and Equality and Diversity Panels, and the Faculty Executives and Review Group communications. A 0.5 FTE post in 2017 appears a minimal requirement and a total of 1.0 FTE support for subsequent years is indicated as preparations ramp up. This has been split between an Administration Officer supporting the main secretarial and communication needs of the structures, and a Planning Officer who will focus on the collection and veracity of overall data, working closely with all relevant PS areas.

The following Table summarises the staffing recommendations. The level of additional resource that may be needed to support these will be decided in PAR; some of these posts may involve fixed term secondments.

Table 1: Summary of dedicated staff resource

Role	2016	2017	2018	2019	2020
Academic Lead	0	0	0.5	0.5	0.5
REF officer and Impact Lead	1.0	1.0	1.0	1.0	1.0
Administration Officer	0	0.5	0.5	1.0	1.0
Writing/editing support	0	0	0.5	1.0	1.0
Planning Officer	0	0	0.5	0.5	0.5

#### 5. Next steps

Information on these plans will be provided to Heads and Directors of Research. They will be asked to circulate this more widely within Schools/Institutes, and it will also be shared in e-bulletin and VP-Research updates. Explicit guidance for the conduct of the first Research Reviews by Schools/Institutes and the subsequent REF Status meetings in April/May 2016 will be circulated in January 2016.

Regular updates on REF preparation, prepared by the REF Officer, will be provided. Initially these will be incorporated into the VP-Research bulletin, but once preparations progress it is proposed that the a termly REF Status bulletin is issued to update staff on progress and improve clarity and communication.

#### Appendix 1: Summary of feedback from Schools and Institutes

**Staff non-inclusion decisions:** This was a key challenge in the REF process last time and the plans made took steps to reduce the burden on individual staff. However, the issue was raised that having School/Institute-led external assessment processes may lead to conflicts, especially if the outcome of this differs significantly from Faculty-led exercises. There were comments about which evidence would take precedence, and where the ultimate decision would be made on non-inclusion. It was also argued that three dry runs may cause an undue burden on academic staff, as well as the fact that the final dry run would appear too late for submission in November that year, as external assessors may have 'REF fatigue'.

**Support for impact:** Most responses indicated the urgent need for an enhanced level of support for the impact agenda: this contributed negatively to several School/Institute scores in REF2014 and we appear to be falling behind competitors in terms of support in this area. It was noted that writing support seemed to have been useful in the closing stages of case study preparation, and this was not accounted for in the REF plans.

**Equality and Diversity:** One School identified that there is very little mention of this area in the proposal and suggested that this is a key concern for some UoAs. During preparation for REF2014, insight was given by a PhD project looking at equality in the REF, but this student finished in 2015, so although insight from this completed process will be of value there will be no ongoing assessment for REF2021.

**Modelling and assessment of potential outcomes:** It was noted that there was a greater need for professional support in modelling outcomes – for example what the outcomes would be if certain staff were/were not submitted or if UoAs were combined. This was often done by REF steering group members at short notice, and additional capacity would be of value here.

**Research management system for REF2021:** One response raised the issue that the IT systems used for REF2014 were not fit for purpose, and that these pose a major risk to our submission. It was noted that the system also meant that staff had to repeat the process if errors were found, and that it would have been less of a burden on staff if they could have submitted data directly into the HEFCE REF application.

**Reliability of data available for REF2014:** Several responses noted that data was often inaccurate and unreliable in REF 2014 and were pleased to see the implementation of a data group, although they felt that more could be done.

**Academic leadership:** It was suggested by many respondents to the consultation that the academic lead was appointed too late. The need for an academic impact lead at institutional level was questioned: it was felt that the differing types of impact in different faculties may necessitate a more targeted approach. Furthermore, it was suggested that an environment lead brought in at the close of the process is unlikely to be able to influence the environment and is more likely to be responsible for collecting data and overseeing the writing up of templates.

It was noted that the Outputs lead should be responsible for ensuring that we adhere to Open Access targets.

#### **Appendix 2: Indicative REF Officer responsibilities**

- Organise REF dry runs and provide Schools and Institutes with data and analysis for the annual REF dry run meetings.
- Be responsible for the organisation of a range of meetings associated with the REF process, including preparation of papers and recording of minutes
- Lead in the analysis of the best submission profile for QMUL, including where staff should be returned
- Undertake research and analysis, as directed by the Vice-Principal for Research and the REF academic Lead regarding changes to the REF process, best practice and competitor activity
- Organise and analyse consultation processes around which staff should be submitted to REF2021
- In coordination with other staff supporting impact, work with Schools/Institutes in identifying and refining individual REF impact case studies, including identifying potential sources of
  evidence and suggesting routes to enhance the impact achieved
- Collate, prepare and return QMUL responses to external consultations on the REF process
- Communicate REF processes to colleagues in Schools and Institutes, ensuring a coherent and transparent management process
- Work with Schools and Institutes to identify and support those staff who may not be submitted to REF2021 without support
- Work with the Equality and Diversity lead in HR to identify any issues with equality and diversity in QMUL submissions and work with Schools and Institutes to address these.
- Track metrics which may be used in the environment section and work with Schools and Institutes to address any issues identified
- Work with Planning to collate and submit the QMUL REF submission
- Work with the writing/editing support to effect improved impact case studies and environment templates

#### Appendix 3: Membership and Organogram of oversight groups

#### Membership:

The groups will meet regularly, with increasing frequency as 2021 approaches.

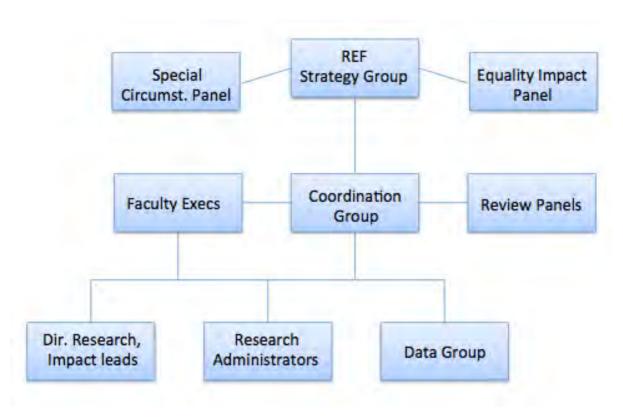
**REF Strategy Group:** President and Principal (Chair), rest of QMSE plus Academic Lead and REF Officer.

**REF Coordination Group**: Academic Lead (Chair 2018-2020), VP Research (Chair 2016-17), Faculty Deans for Research, (Deputy) Deans for Research Impact, REF Officer, Data Lead, Administration Officer.

**REF Data Group**: Chaired by Data Lead. To include representatives from Planning, HR, JRMO, RDO, Finance, Library, ITS.

**Other groups**: Membership of the Special Circumstances, Equality Impact and Review Panels to be agreed by the REF Strategy Group.

# Organogram:



Appendix 4: Possible dates and assessment periods for REF 2021

Assuming that the timetable and structure of submission for REF2021 follow that for REF2014, the expected dates and assessment periods are as follows:

REF2: Outputs January 1<sup>st</sup> 2014 to December 31<sup>st</sup> 2020

REF3a,b: Impact August 1<sup>st</sup> 2014 to July 31<sup>st</sup> 2020

REF4a,b,c: PGR, income August 1<sup>st</sup> 2014 to July 31<sup>st</sup> 2020

REF5: Environment August 1<sup>st</sup> 2013 to July 31<sup>st</sup> 2020\*

\* (REF2014 used the period 1/1/08 to 31/7/13 for Environment measures)

REF Census date (staff) October 31<sup>st</sup> 2020

REF submission date November 29<sup>th</sup> 2020 (Friday)

Research underlying the impact January 1<sup>st</sup> 1999 to 31<sup>st</sup> December 2020

#### Faculty & Professional Services - Impact & Innovation

Faculty/PS	Risk Descriptor	Impact	Likelihood	Initial Risk Score	Direction of Travel	Controls	Impact	Likelihood	Residual Risk Score	Direction of Travel	Further Actions and Notes	Owner	Lead Officer	Strategic Objective	Term
College	• Enterprise and entrepreneurship • Evidencing impact	3	4	12	-	Implementation of Research Strategy and Faculty plans (B) QMI Business Plan (B) Public Engagement strategy (A) - for student enterprise (A) Intellectual property policies (A) Membership of National Centre for Universities and Business (NCUB) (B) Membership of London Higher (A) Tier 1 visa process (A)	3	3	9	Up	Internal and External  *Further Actions  *Coordination of impact work across QMUL  Notes  *IP Policy has now been formally approved by senate  *Improved promotion and engagement of QMI with internal and external researchers and partners  *Financial model for QMI generated income in development  *Bid made to Tower Hamlets in support of the Neuron Pod development  *Additional resource provided to support IP commercialisation  *QMI Business Plan agreed with QMSE August 2015  *New IP Policy in place; on-going work with QMI on guidance documents and Faculty implementation  *NCUB Membership approved  *Continuation of London Higher membership	• VP (Res) (Acting Dir LSI) • VP (PE & SE) • Faculty VPs	• HoSs • VP (PE & SE) • Director of QMI	2.4, 5.4	Medium
HSS	• Enabling and evidencing the impact of research	4	4	16	New	QMUL level impact post (B)     Close working with Business Development team (A)     Development of School level Impact Leads (B)     Development of Faculty Impact related activities (B)	4	3	12	New	Internal and External  More prominent factor in next REF	• VP Research	• Dean for Research	2.2, 2.4	Medium
S&E	Increase Faculty exploitation and protection of technology transfer and increase Faculty consultancy income.	3	4	12	-	Faculty engagement with the enterprise and innovation function. (A) Develop research institutes and centres in key areas to promote and consolidate third stream activity. (A) Embed working practices of BDM team (and their expertise) within institutes and centres. (B) Implement QMUL consultancy and IP policies. (C) Optimise returns on industry links and network effectively e.g. CRM to provide holistic view. (B)	3	3	9	-	Internal and External  Build upon S&E Research & Industrial Showcase event held in autumn 2014	• VP • DfR	• HoSs • QMI	1.3, 2.1, 2.4, 4.1, 6.2	Long
SMD Professional								No risks reco			,				
Services							l	No risks reco	orded for In	novation &	Impact				

#### HSS - Impact & Innovation

School	Risk Descriptor	Impact	Likelihood	Initial Risk Score	Direction of Travel	Controls	Impact	Likelihood	Residual Risk Score	Direction of Travel	Further Actions and Notes	Owner	Lead Officer	Strategic Objective	Term
College	Enterprise and entrepreneurship     Evidencing impact	3	4	12	-	Implementation of Research Strategy and Faculty plans (B)  QMI Business Plan (B)  Public Engagement strategy (A) - for student enterprise (A)  Intellectual property policies (A)  Membership of National Centre for Universities and Business (NCUB) (B)  Membership of London Higher (A)  Tier 1 visa process (A)	3	3	9	Un	Internal and External  *Further Actions  * Coordination of impact work across QMUL  Notes  * IP Policy has now been formally approved by senate  * Improved promotion and engagement of QMI with internal and external researchers and partners  * Financial model for QMI generated income in development  * Bid made to Tower Hamlets in support of the Neuron Pod development  * Additional resource provided to support IP commercialisation  * QMI Business Plan agreed with QMSE August 2015  * New IP Policy in place; on-going work with QMI on guidance documents and Faculty implementation  * NCUB Membership approved  * Continuation of London Higher membership	VP (Res) (Acting Dir LSI) VP (PE & SE) Faculty VPs	• HoSs • VP (PE & SE) • Director of QMI	2.4, 5.4	Medium
CCLS								No risks	recorded for In	novation & Imp	pact		•		
Law								No risks	recorded for In	novation & Imp	pact				
Business & Management								No risks	recorded for In	novation & Imp	pact				
Economics & Finance	Failure to achieve visible research impact	3.5	3	10.5	Up	Implement an impact strategy based on identification of research conducive to impact.  Improved liaisons with HSS PR manager to maximise visibility and outreach. (C)	3	2	6	Up	Internal and External	• HoS	HoS/Director of Research	2.4, 5.1	Long
English & Drama			1		•	` '		No risks	recorded for In	novation & Imp	pact	l.			
Geography									recorded for In						
History															
SLLF	No risks recorded for Innovation & Impact  No risks recorded for Innovation & Impact														
Politics	İ								recorded for In						

#### S&E - Impact & Innovation

School	Risk Descriptor	Impact	Likelihood	Initial Risk Score	Direction of Travel	Controls	Impact	Likelihood	Residual Risk Score	Direction of Travel	Further Actions and Notes	Owner	Lead Officer	Strategic Objective	Term
College	Enterprise and entrepreneurship     Evidencing impact	3	4	12		Implementation of Research Strategy and Faculty plans (B)  OMI Business Plan (B)  Public Engagement strategy (A) - for student enterprise (A)  Intellectual property policies (A)  Membership of National Centre for Universities and Business (NCUB) (B)  Membership of London Higher (A)  Tier 1 visa process (A)	3	3	9		Internal and External  *Further Actions	VP (Res) (Acting Dir LSI) VP (PE & SE) Faculty VPs	• HoSs • VP (PE & SE) • Director of QMI	2.4, 5.4	Medium
SBCS	Failure to optimise income potential with industry	3	2	6	-	Work with College to identify industry partners, new appointment made of DII (A)	3	1	3	-	Internal	• HoS, Exec	• DoR	6.2	Long
EECS SMS											d for Innovation & Impact d for Innovation & Impact				
Maths	• Failure to develop a strategy for ensuring impact from research.	4	4	16	-	Identification of 'Impact Champion' to lead the development of our strategy. (B) Post-REF dissemination, explanation and evaluation of our impact cases to raise awareness throughout the School. (B) Creation of incentivisation scheme for staff who perform well in the area. (C) Review of other Russell Group university maths departments to enable identification of where their impact and enterprise activities are generated from. (B) Engagement with College strategies for developing impact. (C)	3	3	9		Internal and External  It is not yet clear to us how the College intends to progress the impact agenda at a higher level. The School is particularly concerned at the lack of support in this area. It is understood that the College is to employ ONE Impact Officer in Professional Services which is simply not enough; the majority of other Russell Group universities have had several such posts in place before REF2014. We are way behind the curve on this.  A new Impact Champion will be in place in the School from January 2016.	Head of School	Director of Research	2.4	Medium-Long
Maths	School does not develop relationships and opportunities with industrial collaborators.	3	4	12	-	Raise awareness of the benefits of enterprise to academic staff. (B) Work towards holding a showcase of our research to relevant industries. (B) Develop website to include successful case studies of collaboration. (B) Raise awareness of the School of Mathematical Sciences' expertise and potential contribution to projects, both internally and externally. (B)	2	3	6	Down	Internal and External  Raising our profile internally and externally in terms of what services Maths can offer is underway.	• Head of School	Director of Research	2.4	Medium-Long

#### SMD - Impact & Innovation

Institute	Risk Descriptor	Impact	Likelihood	Initial Risk Score	Direction of Travel	Controls	Impact	Likelihood	Residual Risk Score	Direction of Travel	Further Actions and Notes	Owner	Lead Officer	Strategic Objective	Term
College	Enterprise and entrepreneurship Evidencing impact	3	4	12		Implementation of Research Strategy and Faculty plans (B) QMI Business Plan (B) Public Engagement strategy (A) - for student enterprise (A) Intellectual property policies (A) Membership of National Centre for Universities and Business (NCUB) (B) Membership of London Higher (A) Tier 1 visa process (A)	3	3	9	Up	Internal and External  Further Actions Coordination of impact work across QMUL  Notes IP Policy has now been formally approved by senate Improved promotion and engagement of QMI with internal and external researchers and partners Financial model for QMI generated income in development Bid made to Tower Hamlets in support of the Neuron Pod development Additional resource provided to support IP commercialisation QMI Business Plan agreed with QMSE August 2015 New IP Policy in place; on-going work with QMI on guidance documents and Faculty implementation NCUB Membership approved Continuation of London Higher membership	• VP (Res) (Acting Dir LSI) • VP (PE & SE) • Faculty VPs	• HoSs • VP (PE & SE) • Director of QMI	2.4, 5.4	Medium
Barts Cancer Blizard									orded for Inno						
Dentistry	Rigid financial controls, greater financial stringency and moving budgets may limit opportunities to pursue, or hinder progress of, new academic initiatives/high profile appointments and stifle entrepreneurial spirit. Results in low motivation to grasp and drive forward new opportunities which may bring financial and other academic benefits in the longer term.	3	4	12	-	Continue to promote SMD/QMUL strategy through linking objectives to strategy and encourage viable opportunities through support for business plan development and implementation. (B)	3	3.5	10.5	-	Internal	• Doi/SMD	• Dol		Short-Medium
IHSE									rded for Inno						
William Harvey								No risks reco	orded for Inno	vation & Impa	ct				
Wolfson	General (antenatal screening service) Should the requirement for the service cease or national policy change to a genetic test that we cannot provide, several staff dedicated solely to screening would be made redundant together with others who provide core support (IT, administration) to the CEPM and Institute.	5	3	15	-	Set up a new DNA laboratory to keep abreast of developments in screening, both at research and policy level, and exert influence where possible. (C)	4	2	8	-	Internal and External  Needs to be kept under annual review. 15-year plan has been submitted requiring refurbished laboratory space for both clinical service and research elsewhere in the Institute, to be financed from Institutes funds. Redundancy provision within EDA reviewed in 2013-14 and increased. Loss of this activity will reduce annual surplus in Institute by £0.5m pa.  [Very uncertain future and must plan for the worst. A 3-5 year plan has been requested for the screening activity. Need to review the redundancy provision held within the EDA.]	• cı.	• ID	6.1	Medium

#### **Professional Services - Impact & Innovation**

Faculty/PS	Risk Descriptor	Impact	Likelihood	Initial Risk Score	Direction of Travel	Controls	Impact	Likelihood	Residual Risk Score	Direction of Travel	Further Actions and Notes	Owner	Lead Officer	Strategic Objective	
College	Enterprise and entrepreneurship     Evidencing impact	3	4	12	-	Implementation of Research Strategy and Faculty plans (B) QMI Business Plan (B) Public Engagement strategy (A) - for student enterprise (A) Intellectual property policies (A) Membership of National Centre for Universities and Business (NCUB) (B) Membership of London Higher (A) Tier 1 visa process (A)	3	3	9	Up	Internal and External  'Further Actions  - Coordination of impact work across QMUL  Notes  - IP Policy has now been formally approved by senate - Improved promotion and engagement of QMI with internal and external researchers and partners - Financial model for QMI generated income in development - Bid made to Tower Hamlets in support of the Neuron Pod development - Additional resource provided to support IP commercialisation - QMI Business Plan agreed with QMSE August 2015 - New IP Policy in place; on-going work with QMI on guidance documents and Faculty implementation - NCUB Membership approved - Continuation of London Higher membership	VP (Res) (Acting Dir LSI) VP (PE & SE) Faculty VPs	• HoSs • VP (PE & SE) • Director of QMI	2.4, 5.4	Medium
ARCS								No	risks record	ded for Inno	vation & Impact				
CAPD						·		No	risks record	ded for Inno	vation & Impact				
Development								No	risks record	ded for Inno	vation & Impact				
Estates & Facilities		-			-						vation & Impact				
Finance											vation & Impact				
HR								No	risks record	ded for Inno	vation & Impact				
IT				-				No	risks record	ded for Inno	vation & Impact				
Marketing & Communications		No risks recorded for Innovation & Impact													
Health & Safety		No risks recorded for Innovation & Impact													
Research Services	No risks recorded for Innovation & Impact														
SPO		No risks recorded for Innovation & Impact													
Student Services								No	risks record	ded for Inno	vation & Impact				

#### Cross-Cutting and Strategically Significant Projects - Impact & Innovation

Cross-Cutting or Strategically Significant Project	Risk Descriptor	Impact	Likelihood	Initial Risk Score	Direction of Travel	Controls	Impact	Likelihood	Residual Risk Score	Direction of Travel	Further Actions and Notes Internal and External	Owner	Lead Officer	Strategic Objective	Term
College	• Enterprise and entrepreneurship • Evidencing impact	3	4	12		Implementation of Research Strategy and Faculty plans (B)  OMI Business Plan (B)  Public Engagement strategy (A) - for student enterprise (A)  Intellectual property policies (A)  Membership of National Centre for Universities and Business (NCUB) (B)  Membership of London Higher (A)  Tier 1 visa process (A)	3	3	9	Up	*Further Actions  * Coordination of impact work across QMUL  Notes  * IP Policy has now been formally approved by senate  * Improved promotion and engagement of QMI with internal and external researchers and partners  * Financial model for QMI generated income in development  * Bid made to Tower Hamlets in support of the Neuron Pod development  * Additional resource provided to support IP commercialisation  * QMI Business Plan agreed with QMSE August 2015  * New IP Policy in place; on-going work with QMI on guidance documents and Faculty implementation  * NCUB Membership approved  * Continuation of London Higher membership	VP (Res) (Acting Dir LSI) VP (PE & SE) Faculty VPs	HoSs     VP (PE & SE)     Director of QMI	2.4, 5.4	Medium
International							No	risks recorde	d for Innov	ation & Imp	pact				
Life Sciences	Industry strategy formation and associated action plan / implementation activities	4	3	12	New	Failure to produce a robust industry strategy will impact upon life sciences ability to attract increased income and key partners to help achieve the ambitions for life sciences research and its associated innovation application / impact (C)	3	3	9	New	Internal	VP Research     Director Research and Business Development	Bill Spence     Sally Burtles	• 2.1, 4.1, 6.2, 6.4	Short-Medium
Public Engagement	- Failure to include and integrate engagement activity into the impact agenda. Poorly evidenced RFF impact case studies for PE projects, limited projects for submission in 2020, and loss of wider societal impact	3	3	9		• CPE liaison with colleagues in other support departments (A)     • CPE external networking and speaking to funders (A)     • CPE staff included in college Impact groups (A)	2	2	4		Internal and External	VP-PESE Director of CPE	• CPE Manager	2.1, 5.1, 5.2	Medium
Research	Income from industry, spinouts or licencing below target	3	4	12		Implementation of Research Strategy and Faculty plans (B) OMI Business Plan (B) Intellectual property policies (B) Enterprise Development Group (A)	3	2	6	-	Internal and External  IP Policy approved and implementation strategy being developed  Improved promotion and engagement of QMI with internal  and external researchers and partners  Financial model for QMI generated income  Research Strategy approved and being launched April 15	• VP (Res) • Faculty VPs	HoSs Faculty Deans for Research Director of QMI	2.4	Short-Long
Research	Lack of full engagement with business via support through consultancy, advice and internships programmes	3	4	12		Implementation of Research Strategy and Faculty plans (B) OMI Business Plan (B) Implement business development strategy (C) Public Engagement strategy - for student enterprise (A) Interprise Development Group (A)	3	3	9	-	Internal and External  Improved promotion and engagement of QMI with internal and external researchers and partners  Financial model for QMI generated income  Research Strategy approved and being launched April 15  Review of Business Development Unit support	• VP (Res) • VP (PE & SE) • Faculty VPs	• HoSs • Faculty VPs	2.4, 5.4	Short-Long
Research	Sustainable financial model for OMI not implemented	3	4	12	-	Implementation of Research Strategy (B)     QMI Business Plan (B)	3	3	9		Internal and External  Improved promotion and engagement of QMI with internal and external researchers and partners  Financial model for QMI generated income  Research Strategy approved and being launched April 15	• VP (Res)	Faculty VPs     Director of QMI	2.4	Short-Long
Research SETLA	Lack of coordination, support and enhancement of impact work across QMUL	4	4	16	-	Research Strategy (B) Impact Group (A)	3	3 risks recorde	9	-	Internal  Research Strategy approved and being launched April 15	• VP (Res)	Faculty VPs     Director of QMI	2.4	Medium-Long