

Quality Assurance / Quality Improvement
Internal Quality Review Programme
2010-2016



Quality Improvement Plan

**National Centre for Plasma Science and
Technology (NCPST)**

18 November 2013

Contents

1. Introduction
2. Response To Recommendations in the Peer Review Group Report
3. Summary of One-Year Plan
4. Summary of Three-Year Plan
5. Appendices
 1. Area Quality Committee (for the Self-Assessment Report)
 2. Peer Review Group
 3. Area Quality Committee (for the Quality Improvement Plan)
 4. Prioritised Resource Requirements

1. INTRODUCTION

Having read and considered the Peer Review Group (PRG) Report, a Quality Improvement Plan (QuIP) Working Group has been charged with developing a QuIP for the National Centre for Plasma Science & Technology. The Working Group consists of the Director, NCPST – Professor Miles Turner, NCPST Interim Centre Manager – Ms Sue O’Neill and members of the NCPST Core Team – Sheila Boughton, Sarah Hayes, Fiona Farrell, NCPST Education & Outreach Officer – Dr Jim Conway and representatives from NCPST postdocs – Dr Niall O’Connor and NCPST postgraduate students – Mr Thomas Kelly. The final QuIP presented here represents the deliberations of the Working Group.

2. RESPONSE TO RECOMMENDATIONS IN THE PEER REVIEW GROUP REPORT

The NCPST are very happy with the outcome of the PRG Report and concur with the recommendations outlined. The Centre found the process of developing the SAR very helpful in relation to both gathering the information required, as well as providing the opportunity to undertake an overall view of the strengths and weaknesses of the NCPST and identify opportunities for improvement.

The NCPST feels that the PRG has broadly identified similar strengths and weaknesses of the Centre as reflected in the SWOC analysis produced in the SAR. The NCPST identified key strengths such as excellent access to resources, a dedicated and experienced team, an excellent research environment both in fundamental and applied science and good academic/industry collaboration. Key weaknesses identified were: poor communication, uncertainty regarding contract renewals related to the issue of on-going funding availability and no centralised offices. The findings outlined in the PRG Report are broadly in line with these issues. Recommendations based on these findings included the identification of career development for researchers as an important area to be addressed by the QuIP Working Group. The group have responded here with actions to address the various recommendations provided in the PRG report.

In respect of actions relating to improvements in communication and career development, it is proposed to address these issues on a continuous basis through a forum of Business Briefings which will be open to all members of the Centre to contribute with invitations to input to the agenda on a quarterly basis. The table below details the NCPST response to each recommendation in the PRG report.

Recommendations for Improvements in NCPST

The following notation is used in the recommendations for improvement.

P1: A recommendation that is important *and* requires urgent action.

P2: A recommendation that is important, but can (or perhaps must) be addressed on a more extended time scale.

P3: A recommendation which merits serious consideration but which is not considered to be critical to the quality of the ongoing activities in the Area.

Additionally, the PRG indicate the level(s) of the University where action is required:

A: Area under review

U: University Senior Management

University note: Proposals are currently being developed in the University regarding the appropriate levels of internal funding for national research centres and the potential for sharing support services, in particular in the administrative and technical areas. These developments may have an impact on some of the actions arising out of the NCPST Quality Improvement Plan as outlined in the following sections.

Recommendation Number	Addressee	Priority	PRG Recommendation (Provided in PRG Report)	NCPST Response	University Response
			Communications		
1	A	P1	Ensure that there are regular, scheduled, at least 6 monthly, meetings of PIs chaired by the NCPST Director	Actions on this recommendation have already begun. The first of six planned monthly meetings took place in June 2013.	

Recommendation Number	Addressee	Priority	PRG Recommendation (Provided in PRG Report)	NCPST Response	University Response
3	A	P1	Improve the website to include publications, invited conferences. Also update personal pages, including photos of staff and students to improve visibility and encourage communications and contact between NCPST members	<p>We fully agree with this recommendation and to address it, an Editorial Board has been set up to oversee the NCPST website. The Board has five members who are representative of all NCPST areas of activity.</p> <p>The plan is to complete all required improvements to the website by October 2014.</p>	
4	A	P1	Improve internal online access to documents relating to management issues e.g. agenda, minutes and budgetary decisions.	We agree with this recommendation and propose to set-up a Dropbox to provide online access to minutes of NCPST Management Committee & Principal Investigator 6 monthly meetings. This should be completed by the end of 2013.	
6	A	P3	Develop the use of DCU facilities such as DORAS to improve international visibility.	We recognise the importance of DORAS and agree to promote the use of DORAS on an ongoing basis amongst NCPST members.	
			Skills and Career Development		
2	A	P2	Provide more mentoring and information for postgraduate students and postdoctoral researchers in relation to international and industrial employment opportunities	The NCPST is aware of the need to provide mentoring and information for postgraduate students and postdoctoral researchers. Bi-Monthly Business Briefing sessions will be established by the end of 2013 to which all NCPST members will be invited. These sessions will be a forum for members to discuss new ideas, receive updates on employment opportunities and funding calls. Guest speakers will be invited to attend for short presentations. NCPST will also engage with the DCU Careers Service in addressing this recommendation.	

Recommendation Number	Addressee	Priority	PRG Recommendation (Provided in PRG Report)	NCPST Response	University Response
8	U	P2	Implement fully the DCU Research Career Framework across the Centre and include for engagement with industry.	The NCPST supports this recommendation and will work with the HR Department and relevant faculties to implement this recommendation.	The DCU Research Career Framework has been successfully implemented in one of the University's Faculties with the full support of the Human Resources (HR) Department. The Faculty of Science and Health is currently embracing the Framework and the NCPST will be included in the process and will benefit from both experience gained within DCU and the support of HR.
9	A	P3	Provide proposal writing training for researchers.	NCPST supports this recommendation and will investigate what options are available within the Research & Innovation Support Office and DCU's Training and Development department. We will also investigate customised training where possible.	
			Outreach and Development		
5	A	P1	Exploit the diversity of scientific interests to explore/create new research themes and commercial activities.	<p>The NCPST fully endorses this recommendation and has already started the process of hosting a conference in March 2014 with a focus on – <i>Plasmas as a Platform</i>. This will be an opportunity for the NCPST to showcase its expertise in targeted sectors and invited industry in order to explore potential collaboration. A poster session/technology showcase is also proposed.</p> <p>Ongoing activities to address this recommendation will also be considered.</p>	

Recommendation Number	Addressee	Priority	PRG Recommendation (Provided in PRG Report)	NCPST Response	University Response
12	A	P2	Extend the DCU Business School initiative (encouraging spin outs and start up from DCU Community) across the Centre so that all members of NCPST are trained in thinking about how businesses can be developed.	The NCPST supports this recommendation and It proposes to establish Bi-Monthly Business Briefing sessions to which all NCPST members will be invited. Initial suggested speakers include those from: DCU Business School, <i>Invent</i> (DCU's business incubation centre), Enterprise Ireland on commercialisation and other speakers on business start-ups and related issues.	
7	A	P1	Identify ongoing knowledge transferred to industry and the value, financial and otherwise, placed on it.	The NCPST agrees with the recommendation and the establishment of Bi-Monthly Business Briefing sessions as outlined above will be undertaken to address it. Guest speakers including NCPST Alumni and representatives from industry partners will be invited to attend for short presentations. As most of the knowledge transfer from NCPST currently focuses on patents, spin-outs and licences, this forum will demonstrate knowledge transfer beyond formal metrics using case studies and other means and will aim to redefine knowledge transfer.	
10	A	P1	Engage with EI to identify opportunities to support the important work of the business development manager.	The NCPST agrees with this recommendation. The Business Development Manager will set up regular meetings with Enterprise Ireland and other funding agencies as well as regular meetings with <i>Invent</i> .	
11	A	PI	Map strong platform technologies from across the Centre onto industry in Ireland in order to inform activities of the business development manager.	The NCPST supports this recommendation and proposes to develop case studies for research areas and topics that are targeted to industry. These will be promoted externally via video presentations, and social media including LinkedIn and blogs.	

Recommendation Number	Addressee	Priority	PRG Recommendation (Provided in PRG Report)	NCPST Response	University Response
			Human Resources & Facilities		
13	U	P2	Appoint a Scientific Director for a defined term along with a Senior Administrator.	We agree with this recommendation and will work with the University to review the situation.	The University agrees with the recommendation concerning the Scientific Director, provided that the efficient management of the Centre is ensured at all times, and the Director has the appropriate relevant skills and expertise. In the case of the Senior Administrator, refer to the University note at the start of this table.
14	U	P2	Allocate increased space for labs/machinery	This recommendation addressed to the University is supported by NCPST.	<p>Space is managed in the first instance by the Faculty. Additional space requirements that cannot be met within the existing Faculty space envelope can be requested by a formal submission to the University Space Management Committee. In the context of the Campus Development Plan, planned new infrastructure will cater for the growing research and education needs of the DCU Community.</p> <p>Finally, the new Nano-Bioanalytical Research Facility will be completed in 2014 which will allow for some reconfiguring of major research infrastructure and labs in the Nanotechnology area, which encompass some aspects of the NCPST.</p>

Recommendation Number	Addressee	Priority	PRG Recommendation (Provided in PRG Report)	NCPST Response	University Response
15	A/ C	P3	Improve physical environment to encourage closer informal contacts and communications among staff and students.	The physical space in the University is at a premium and this would be difficult. However the NCPST regularly reviews its physical environment and will continue to do so. Further opportunities for informal interactions will also be considered and arranged where possible.	As outlined above, space requirements and needs are managed in the first instance by the Faculty. Where additional space may be required that cannot be found within the existing Faculty space envelope, a formal submission to the University Space Management Committee can be made.

3. SUMMARY OF THE ONE-YEAR PLAN

#	Action	Timeline	Lead
A-1	Set-Up 6 monthly meetings with Principal Investigators, chaired by Centre Director	June 2013	Professor Miles Turner
A-2	Set-up Bi-Monthly Business Briefing Sessions for all NCPST member	January 2014	Sue O'Neill/Sheila Boughton
A-3	Create an Editorial Board to oversee NCPST Website	September 2013	Sue O'Neill/Sheila Boughton
A-4	Improve internal online access to documents by using Dropbox	October 2013	Sue O'Neill/Sheila Boughton
A-5	Plasmas as a Platform Conference	March 2014	Professor Miles Turner/Sue O'Neill

4. SUMMARY OF THE THREE-YEAR PLAN

#	Action	Timeline	Lead
B-1	Complete overhaul of NCPST website, newsletters, publications etc.	October 2014	Sue O'Neill/Sheila Boughton
B-2	Develop academic skills/life skills/professional development skills for postgraduate and postdoctoral students	November 2015	Sue O'Neill/Sheila Boughton
B-3	Develop a strategy to exploit the diversity of scientific interests to explore/create new research themes and commercial activities	November 2014	Sue O'Neill
B-4	Carry out a review of the physical space allocated to the NCPST with a view to improving the physical environment.	January 2015	Sue O'Neill/Sheila Boughton
B-5	Carry out a review of the space allocated to labs/machinery with a view to increasing that space	November 2015	Sue O'Neill/Conor Murphy

APPENDIX 1 NCPST Quality Committee (for the Self-Assessment Report)

Professor Miles Turner, NCPST Centre Director

Dr Stephen Daniels, NCPST Executive Director

Dr Claire McKenna, Administrator (Chair of Quality Review Committee): Claire left the NCPST on 30 January 2013 to take up a new post with the Biomedical Diagnostics Institute, DCU

Ms Samantha Fahy, NCPST Centre Manager (Chair) – Review Coordinator after January 2013

Ms Sheila Boughton, NCPST Administrator

Dr Anne Louise Holloway, Research Coordinator (until January 2013). Anne Louise left the NCPST at the end of January 2013 to take up a new post with the Research and Innovation Support Office, DCU

Dr Dermot Brabazon, Academic, School of Mechanical & Manufacturing Engineering

Dr Lampros Nikolopoulos, Academic, School of Physical Sciences

Dr Niall O'Connor, Research Staff Representative

Mr Thomas Kelly, Postgraduate Student Representative

Mr Conor Murphy, NCPST Technical Officer

APPENDIX 2 Peer Review Group Members

Professor Bill Graham (Chair), Director, Centre for Plasma Physics (CPP), School of Mathematics and Physics, Queens University Belfast

Dr Pascal Chabert, Vice-Director of the Laboratoire de Physique des Plasmas, France

Mr Conor Sheehan, Operations Manager TTS12 & cTTO, Enterprise Ireland

Dr Francesco Cavatorta, (Rapporteur), DCU School of Law & Government

Dr Eithne O'Connell, DCU School of Applied Languages & Intercultural Studies

APPENDIX 3 Area Quality Committee (for the Quality Improvement Plan)

Professor Miles Turner, NCPST Centre Director

Ms Sue O'Neill, NCPST Centre Manager

Ms Sheila Boughton, NCPST Administrator

Ms Sarah Hayes, NCPST Administration

Ms Fiona Farrell, NCPST Administration

Dr Jim Conway, NCPST Education & Training Manager

Dr Niall O'Connor, Research Staff Representative

Mr Thomas Kelly, Postgraduate Student Representative

Mr Conor Murphy, NCPST Technical Officer

APPENDIX 4 Prioritised Resource Requirements

Project Title	Cost Estimate
Support for "Plasmas as a Platform Conference (November 2013)	€5,000
Purchase of Plasma TV, brackets etc. Installation in NCPST Reception area	€1,800
Video Communication Technology clips to highlight specific plasma technology applications to market sectors	€800 x6 = €4,800
Support for speakers for Bi Monthly Business Meetings	€1,500 x 3 years = €4,500
Support for integration of social media onto NCPST website and staff training	€2,000

Full proposals for these prioritised resource requirements were provided to the Director of Quality Promotion.