Witness Statement of Dr Jochen Schroeder

1. My name is Jochen Schroeder. My work address is RMIT University, Swanston Street, Melbourne. I am employed full-time as a Senior Lecturer in the School of Engineering at RMIT University in Melbourne.

2. I completed my undergraduate studies in Germany and gained my Diploma in Physics (Masters equivalent) at the University of Munster (Westfälische Wilhelms Universität Münster) in 2004. I was awarded a PhD at the University of Auckland (defended in 2009, graduated in 2010), in which my area of study was also physics. During my time studying at the University of Auckland I was also employed from time to time as a Laboratory Demonstrator and Tutor on an hourly paid basis.

3. From 2009 to 2011 I was employed as a post-doctoral fellow, Research Associate (Level A) at The University of Sydney. This employment was supported by an Australian Research Council (ARC) linkage grant. This was laboratory-based experimental research work in optical communications. I worked as part of a research team in the School of Physics, which was associated with an ARC-funded Centre of Excellence, known as CUDOS (Centre for Ultrahigh Bandwidth Devices for Optical Systems).

4. In January 2011 I was promoted to Research Fellow (Level B).

5. For approximately 10 months in 2011 and 2012 I was then employed by that Centre out of its own funds. Then in 2012 I won an ARC Discovery Early Career Researcher Award, under which I stayed at the School of Physics working within the same research group, as a Research Fellow (Level B).

6. Before 2012, I was working as part of a research team where the work was largely directed by the relevant research leader, whereas by 2012 I had more direct control over the direction and quantity of my research work. Although employed to do research, in 2012, I was told that because the external funding which supported my position was insufficient to pay for my position, I was required to also do teaching work, teaching half a unit per year, corresponding to a "teaching load" of 48 (the average teaching load for regular Teaching and Research staff in the department in 2012 was 228).

7. During my time at The University of Sydney, I was working on a so-called *Flagship Project* within CUDOS. Flagship Projects are major collaborative projects directed towards end-user-inspired applications.

8. As part of the Flagship Project there were regular Flagship Project team meetings involving staff working on the project. These meetings were the closest thing I had to any work allocation process. The team would discuss experiments and results, the work of other research teams, and what other papers had been published in our research area. The work priorities and activity fairly naturally flowed from those discussions. In all my time as a researcher at The University of Sydney, there was neither any requirement for the recording of my actual or required hours of work nor was I made aware of any system or procedures to account for workload or working time or to ensure that either of these was reasonable.

9. During my time at CUDOS I volunteered for two positions within the centre. In 2011 and 2012 I was the Centre's Director for Training and Education. In that role I organised training and education for Early Career Researchers and Postgraduate Students with a particular emphasis on entrepreneurship education. My duties (in addition to my regular research) in that role were set by the Centre Executive, who I reported to. In 2013 to 2014 I was the Project Leader for one of the Centre's Flagship projects. In that position I was responsible for setting and tracking of milestones within the project.

10. In addition to that, the actual content of my working time consisted primarily of:
    a. Conducting experiments and collecting the relevant data and information necessary for new theoretical understandings or practical applications;
    b. The preparation, submission and revision of articles for publication in academic journals;
    c. The supervision and guidance of the work of more junior post-doctoral fellows; and
    d. Academic supervision of PhD students.

11. My supervisor at CUDOS was the Centre Director, who was a professor at the School of Physics. While from 2012 onwards the official supervisor was the Head of School, he delegated the role to the CUDOS Centre Director, who therefore remained my direct supervisor.

12. Work performance standards were assessed in yearly performance review meetings with the supervisor. The primary performance standard was the output and quality of publications.

13. I was promoted from Level A to Level B in 2011 and then from Level B to Level C in 2014, through the regular University of Sydney promotion process. In 2013 I won the 2013 CUDOS

Innovation Prize for my work with Finisar's WaveShaper and was a finalist of the Australian Museum's Eureka Prizes as part of the Waveshaper team.

14. As a researcher, there were no obviously "typical" weeks. In some weeks there were very heavy workloads, such as when a deadline approached for the submission of a Conference Paper or abstract. I remember on one occasion I had to try to crunch some data and research findings to meet a deadline and worked from around nine on one morning until about three or four the next morning. My normal working weeks as a researcher at The University of Sydney were between 40 and 50 hours, with occasional weeks much longer, or occasionally a little shorter than that.

15. Within my experience, the power relationship within research areas means that most power rests with the senior, professorial, and mostly continuing staff. This is largely a function of the fact that more junior, and indeed the great majority of positions in research overwhelmingly lack job security because they are fixed term, as were my appointments at The University of Sydney.

16. This had implications for my workload. While I do not consider that my workload or working hours were unusually excessive during my time at that University, the fact that I was employed in fixed term jobs influenced my decision to take on extra work over and above what was already allocated to me. This was especially the case in circumstances where there were no workload standards or procedures for research staff.

17. In August 2014 I moved to RMIT University's City campus in Melbourne to be a Senior Lecturer in Electronics/Computer in the School of Engineering. This was a change for me, in that I became a standard Teaching-and-Research Academic with significant responsibilities across the range of teaching, research and administration.

18. The RMIT University website describes my activities, reasonably accurately, as follows:

Teaching

- Course Coordinator for the SECE Capstone projects: Engineering Design 4A and 4B (EEET2267/EEET2268). This includes the postgraduate versions of these courses since 2016 (EEET2349/2350).

- Course Coordinator and Lecturer Optical Fibre Technology (EEET1075)

- Course Coordinator and Lecturer Communication Engineering (EEET2254)

Editorial and Reviewer positions

- Elsevier Heliyon, Editorial Board

- Reviewer: ARC DECRA, Discovery, LIEF and Future Fellowship projects

- Reviewer: Nature Communications, Optics Letters, Optics Express, Journal of Lightwave Technology, Scientific Reports, Photonics Technology Letters

19. My teaching work in 2015 included coordinating the final year projects in Engineering, and coordinating and teaching (nominally a third of the lectures, however due to the organisation of course content I actually taught half of the lectures) a unit in Optical Fibre Technology with 40 students at fourth-year level. My teaching load, excluding administration and preparation – that is to say student contact, coordination and supervision only – is supposed to be a notional 15 hours per week, as for most academics in my School. This included, in my case, lectures, and supervision of students' final year projects. There was no provision made in my case, or to the best of my knowledge in the case of other new staff, for the fact that we had not previously presented this material, and therefore the preparation, which was of course very onerous, was not counted in that 15 hours per week. In the first semester of 2015, I was regularly working a 70-hour working week, mostly just keeping up with teaching and associated duties, but also modernising the content of the unit.

20. I had research expectations as well. I was responsible for the acquisition of equipment to set up a new photonics equipment laboratory. I also have a set of performance expectations for research, to publish five articles per year.

21. In the mid-year break between first and second semester teaching periods – three weeks – I spent 80 hours just working on various administrative tasks associated with assessment collection and collation for the final year projects.

22. In second semester, I was still the coordinator for the two "capstone" (final year project) units, and also doing half the lectures (12 hours in total) and coordinator of the Unit in Communication Engineering, with 250 students. I had to engage the casual academics to be tutors and had a significant role in their supervision, but I did have some assistance from a casual Head Tutor. In second semester in 2015 I estimate my average hours of work were around, or more than, 50 hours per week. In large part, the reduction compared to the first semester was because I decided not to update and modernise the course materials in the unit Communication Engineering, and simply not

to take as much time in preparation of the teaching content. I am fairly confident that my much lower student evaluation scores in this unit – where students are asked to rate the presentation and content of the teaching – were as a result of my being unwilling to work the additional hours to do what was necessary to prepare the unit to the standard which I would have liked.

23. At the moment because of my teaching workload, my research output is fairly limited unless I am willing to work somewhat in excess of 50 hours per week. While my research outputs this year were still relatively high, due to follow-on work from my time in Sydney which was largely driven by former postdocs and PhD students, I feel that as a teaching and research academic I am unable to perform adequate research or even keep up with the developments in the field. I think I performed well at the University of Sydney with my research effort, but I am falling behind now in my discipline.

24. Although the situation has now stabilised for the reasons I have given, I think in the middle of last year I suffered something like a minor nervous breakdown, or at least nervous exhaustion.

25. There have been a number of discussions with supervisors and managers and other employees about the issues of the workload of staff in my Department.

26. The issue of high workloads has been discussed and raised in various staff meetings prior to the middle of last year, and the response from managers (Head of School and Deputy) has been to the effect that that is the way it is, and that it is the same for everyone. At a mid-year meeting of staff in the Department last year, there were many complaints about the workload of staff. The new Head of School and Deputy Head of School, who had recently replaced the previous incumbents, acknowledged that there was a problem and undertook to try to address it. I also had direct discussions with my line manager to say that my workload was far too high, and he said that I would get some assistance. I

have been provided with a casual Head Tutor for the design courses, which is of some assistance, but the undergraduate and postgraduate versions of this course have now been merged, which means that the number of students for whom I am responsible has now risen from 250 to 350 in this unit. In addition to the administrative load for coordinating the design courses, in the Communication Engineering course which is largest at the end of semester, I also have to do half of the exam marking.

27. There is no separate accounting for marking in our school's workload model under which I work, which mean I get no extra allowance as compared to an academic with only 30 students' work to assess. It is true that a unit with more than 100 students gets an additional contact hour per week allowed because of the size of the class. However, I have calculated at a minimum that marking 200 exams takes about 1500 minutes (25 hours).

28. The causes of my workload problems are in part a result a lack of resources as well as bad organisation and poor administrative support. In particular a very high student to staff ratio (between 35/1 and 45/1)

29. For completeness, I should say that in the days before finalising this statement in early March 2016, I had a meeting with the new Dean of Engineering in the context of the news that the four Schools within Engineering are being restructured. He did agree that workload issues affecting me needed to be addressed and has agreed to give me additional support.

30. I am required, simply by being an academic, to keep up with university policies and changes to them, and with changes and new theories about pedagogy in my discipline. I estimate that this work would be around 20 or thirty hours per year. Most of the discipline-specific reading I do I would consider to be part of my research. However, if I were only employed to teach I would without doubt have to read a lot more to keep up with my academic discipline.