

The Mercer Review

A report on key considerations for all stakeholders involved in patent attorney education, training and assessment.

The Mercer Review

Foreword: The Mercer Review is report on a consultation undertaken by the Chartered Institute of Patent Attorneys (CIPA) on the education, training and assessment arrangements for entry onto the UK Register of Patent Attorneys (the Register) maintained by IPReg as a Registered Patent Attorney (RPA) and for election as a Fellow and Chartered Patent Attorney (CPA) of CIPA. The review was commissioned by CIPA Council in March 2019 and commenced with a call for evidence with a closing date of 14 February 2020. Whilst commissioned by CIPA Council, Council was clear that the review should be independent of the governance of CIPA and that Council saw itself as a stakeholder in the process alongside its external partner organisations involved in the organisation of the education, training and assessment of patent attorneys.

The Mercer Review raises a number of key considerations for all stakeholders involved in patent attorney education, training and assessment. The report includes a number of recommendations from those engaged in the analysis and synthesis of the evidence submitted

by respondents. Where recommendations are made, these are the views of the Mercer Review group and should not be read as the views of CIPA Council. The recommendations are intended to facilitate further discussion and debate between the key stakeholders that will lead to improvements in the systems, mechanisms and processes in place for patent attorney education, training and assessment.

CIPA Council thanks all those who submitted evidence and the members of the Mercer Review group for considering the submissions and developing the report and recommendations. CIPA Council welcomes comments from all stakeholders on the report of the Mercer Review and asks that written responses are sent to CIPA's Chief Executive, Lee Davies, by **31 December 2021**. CIPA Council is happy to meet with interested parties to discuss the content of the Mercer Review where respondents would find this helpful in making their submissions. Responses should be sent to the Executive Assistant to the Chief Executive, Charlotte Russell at charlotte@cipa.org.uk and should include 'Mercer Review' in the email header.

On Wednesday 6 March 2019, CIPA's Council decided that there should be a review of training and assessment leading to qualification as a registered patent attorney and the continued professional development of registered patent attorneys.¹ It therefore set up a group² to carry out such a review. This review was given the title 'The Mercer Review'.

The group included patent attorneys with a wide spread of experience working in private practice and in industry and patent attorneys working in different sized organisations and organisations performing different types of client work. As such, the recommendations presented in this document take into account that the work performed by patent attorneys may vary depending on where they work.

As a first stage in the review, CIPA issued a call for evidence.³ We were very

pleased to receive a large number of replies to this call for evidence, which were very detailed and well thought-out, and we thank every one of the respondents for their contributions. The responses gave us a large amount to work on, especially as some of the views were contradictory. In total, there were 48 questionnaire responses and 68 emails to review. Twenty-six of the responses represented whole firms and organisations, with the rest representing the views of individuals.

We also studied in detail all the many

1. A list of abbreviations and their meanings is given in Annex 1 to this Report, page 4.

2. The members of the group are listed in Annex 2 to this Report, page 5.

3. The Call for Evidence is included as Annex 3 to this Report, see page 28.

documents⁴ available on the subject, in particular IPReg's documents relating to training and assessment, IPReg's review of the FD4 examination carried out by Middlesex University [see page 28] and the PEB's syllabi.

The review group was split into four subgroups, addressing, broadly, skills and knowledge, learning, assessment and governance. This report is divided into Chapters which address these topics but is intended to be a coherent whole which has been reviewed by all the members of the review group.

I would like to thank all the members of the review group for their very hard work and dedication to the task. They have made my task in compiling this report very much easier.

CIPA will now be working with IPReg and the PEB on the recommendations in the report.

Executive Summary

Given the comprehensive nature of the consultation responses and this report, this summary can only highlight some of the key themes that emerged from the exercise. It is important therefore that this summary should be read in the context of the full analysis and recommendations contained in the report. Thus, key points include:

- Ensuring that any changes to the training and examination systems increase accessibility, encourage diversity and lead to a fully inclusive profession.
- Creating a level playing field for foundation level qualifications, whilst retaining a diversity of routes to this qualification and improving access for all prospective candidates.
- Ensuring that the syllabi and examinations at both Foundation and Finals adequately reflect the skills and knowledge required by a competent patent attorney at registration, but also test a basic knowledge of areas

which may not be encountered by all attorneys in day-to-day practice.

- Bringing focus to the examinations to ensure there is no unnecessary overlap of subject matter between exams.
- Providing prospective trainees with better and more accessible information on training and career progression offered by different categories of employers.
- Increasing provision, methods and accessibility of training, but ensuring the outcome is directed to a common standard.
- Providing opportunities for qualified attorneys to expand their areas of expertise in more specialised areas of IP, e.g. via voluntary non-examined study modules.
- Continuing to provide Foundation and Finals examinations in electronic format and keeping the length of exams to a reasonable limit.
- Encouraging use of the modular exam system.
- Ensuring the timing of UK exams does not clash with the EQEs.

Introduction

The present review has attempted to go back to basics and look at the whole process of training and pre- and post-qualification assessment. The aim was to set out what knowledge and skills a person should have at entry onto the register and also what knowledge and skills a person on the register could acquire to further develop their individual practice.

Thus, Chapter 1 looks at all the skills and knowledge that a practising attorney could have and then divides them on the basis of the stages in development of an attorney's career. They were also divided on the basis of whether an attorney should be assessed to see if the attorney possesses them and, if so, what form, broadly, the assessment should take.

Chapter 2 looks at the present training environment and the needs of a training attorney. Again this chapter looks at the different stages in development of an attorney's career, including post-

qualification. The chapter summarises the opinions in the responses received and from this, recommends changes that could be made to the training process of a patent attorney.

Chapter 3 looks at assessment and whether the current examinations are suitable for assessing the skills and knowledge a practising attorney should have, in terms of content, format and timing. It also recommends changes that could be made to these assessments.

Chapter 4 looks at governance, in particular the relationship between CIPA, the PEB and IPReg, and whether any aspects of this relationship could be amended.

For the purposes of this report, we noted that the final assessment before application for registration as a patent attorney is via the PEB Final Diploma examinations. In order to be eligible to sit the Final Diploma examinations, a candidate must either pass the FC exams or have successfully completed one of the Postgraduate Intellectual Property Certificates accredited by IPReg. References to 'exemption' at Foundation level should be read in this context. There are further 'exemptions' from certain FD papers, by means of passing requisite EQE exams.

In addressing all the aspects of the review, there was a particular emphasis on access to the profession. We assessed whether any aspect of the present training and assessment environment leads to reduced opportunities for some candidates to enter and progress in the profession and whether any of the suggested courses of action we considered would have a positive or negative effect on access to the profession. We intend that our recommendations should lead to greater access to the profession.

The Mercer Review group wishes to emphasise that that these are the group's recommendations only and it is up to CIPA, IPReg, the PEB and other stakeholders to decide how to act on these recommendations.

4. For a list of the documents studies see Annex 4 to this Report, page 8.

CHAPTER 1 – SKILLS AND KNOWLEDGE

1. Introduction

1.1. The Mercer Review Call for Evidence asked a number of questions regarding the areas of knowledge, understanding or practice in the syllabi for the current examinations, the Litigation Skills Certificate (LSC) and CPD:

Q2b) *Are there any additional areas of knowledge, understanding or practice that should be covered by the Foundation Certificate examinations?*

Q2c) *Are there any areas of knowledge, understanding or practice that should be removed from the Foundation Certificate examinations*

Q2e) *Do you have any comments about the use of university qualifications, such as those provided by Queen Mary University of London, Bournemouth University and Brunel University, as an alternative to the Foundation Certificate*

Q3b) *Are there any additional areas of knowledge, understanding or practice that should be covered by the Final Diploma examinations?*

Q3c) *Are there any areas of knowledge, understanding or practice that should be removed from the Final Diploma examinations*

Q5a) *Do you have any comments about the current knowledge, understanding and practice covered by the EQE?*

Q6a) *Do you have any comments about the requirement for newly qualified patent attorneys to obtain a qualification in Litigation Skills within three years of entry onto the Register?*

Q7a) *Are there any other areas of knowledge, understanding or practice for which CPD should be mandatory following admission to the Register?*

1.2. This sub-group was tasked with reviewing the responses to these questions. More generally, we considered

whether the current examination system to qualify as a patent attorney in the UK generates registered patent attorneys with the skills and knowledge that enable them to practise as an attorney.

2. Methodology

2.1. We considered the responses to the above-mentioned questions in the Call for Evidence. This may be considered a ‘bottom-up approach’ to determining whether the current assessment arrangements are suitable, as the Call for Evidence asked about potential problems within the current assessment system. A summary of the responses can be found below.

2.2. The more general task above used a ‘top-down approach’, by first generating a list of all the skills and knowledge that it believed a patent attorney *should* have.

2.3. We then considered when each skill or knowledge item should be acquired. It was recognised that there is a difference between being eligible to become a qualified, registered patent attorney and being ‘fit to practise’ as an independent, highly-skilled and knowledgeable patent attorney. An ‘eligible’ person should be able to work generally unsupervised in a patent attorney firm or patent department but should know that further development is needed. A person may become ‘fit to practise’ after years of experience working as a patent attorney. These two levels can be compared to learning to drive and passing a driving test and becoming a very competent driver who is more confident on the road.

2.4. We then compared the list to what is currently examined, via the PEB examinations and the EQEs. We also compared the list to IPReg’s Competency Framework for patent attorneys.

2.5. Finally, we considered whether any items in the list should be tested via examination, should not be tested via

Annex 1 – Glossary of abbreviations and terms

Abbreviations

CIPA	The Chartered Institute of Patent Attorneys
CITMA	The Chartered Institute of Trade Mark Attorneys
CPD	Continued professional development
EPO	European Patent Office
EQE	European Qualifying Examination
FC	Foundation Certificate
FD	Finals Diploma
IPO	UK Intellectual Property Office
IPReg	The Intellectual Property Regulation Board
LSC	Litigation Skills Certificate
PEB	Patent Examination Board
PDWG	Professional Development Working Group
QM-UL	Queen Mary University of London
UKPA	UK patent attorney

Terms

Black-letter law	Basic standard elements or principles
-------------------------	---------------------------------------

examination, are tested via more than one examination or could be the subject of post-qualification courses. The results of this approach can be found in Annex 3 [page 26].

3. Responses to the Call for Evidence ('Bottom-Up Approach')

3.1. A summary of the responses to the questions mentioned above is provided below.

3.1.1. Some of the topics below are discussed again in subsequent chapters. For example, foundation routes and final examinations are discussed in Chapter 2.

3.2. *Foundation Routes*

3.2.1. A significant number of respondents found it useful to have a variety of routes to obtaining a foundation qualification. To briefly summarise, the routes are the IPReg-accredited Foundation Certificate (FC), and the (IPReg accredited) courses run by Queen Mary University of London (QM-UL), Bournemouth University and Brunel University. The university courses were felt to be a useful means of providing training in the fundamentals of IP in a concentrated space of time and to provide a breadth of subject matter, which was particularly useful for small firms and industrial departments which may not deal with all aspects of IP and hence not have the necessary in-house expertise to train candidates in those areas. The difference in standards between the various university courses was noted; in general the QM-UL course was considered by a number of the respondents to be

of a higher standard than those offered by Brunel University and Bournemouth University. A number of respondents noted that the current university courses are all located in the south of England and are therefore not particularly accessible to all. It was acknowledged that the PEB FC examinations are of a high standard and may prepare candidates better for sitting Finals.

3.2.2. This sentiment is supported by the reports analysing statistics on PEB examinations written by Julia Gwilt and published in the CIPA journal in July 2018 and December 2019. The July 2018 report indicated that the candidates who had passed FC1 in the PEB FC examinations were more successful than other candidates in both FD1 or FD4 in 2016 and 2017. The December 2019 report reported similar results.

3.2.3. Suggestions to improve the content and appropriateness of university foundation courses included requiring all trainees, regardless of the training route taken, to sit the FC examinations, thereby encouraging academic institutions to tailor courses towards the PEB FC examinations.

3.2.4. There was a feeling that a focus on drafting at the foundation level, both in terms of within the training for the examinations, the courses provided by academic institutions and the FC examinations, would better prepare trainees for the Final Diploma (FD) examinations. Reflecting the view that the patent attorney profession is changing and evolving, a number of respondents expressed the view that some of the content in the FC examinations was

less important and over-examined, possibly to the detriment of core areas. In particular, the relevance of the trade mark paper and its ability to prove competence was challenged.

3.2.5. Some respondents expressed the view that the focus on English law was too broad and contained too much detail. However, others felt it was important to examine ethics, the code of conduct and client management at either Foundation or Finals level. The potential overlap between FC2 and litigation skills training was also raised. Similar questions were raised about international law (FC3), in particular whether there were too many jurisdictions referred to in the syllabus, especially in the context of a closed book examination. There were a significant number of suggestions to focus on key countries and international agreements, e.g. US, JP, CN, EP and PCT. A single syllabus and examination on all relevant law was suggested.

3.2.6. There was some support for trade marks, designs and copyright being combined into a single foundation level examination, with advanced modules after qualification for those wanting to specialise.

3.2.7. Some respondents commented that some topics of the FC examinations, in particular, trade marks and copyright/design rights, did not seem overly relevant for a trainee patent attorney depending on their particular firm. There was one suggestion that these topics could be combined with a 'general IP and law' examination to replace FC2/FC5.

3.2.8. Several respondents suggested that the content of the international patent law FC examination should be reduced in scope to key jurisdictions as it is currently unfeasible; alternatively, it could be made open book. Similarly, international trade mark law subject matter should be removed from the trade mark FC examination. In addition,

Annex 2 – The Members of the Review Group

Joel David Briscoe; John Brown; Roger Burt; Lee Davies; Julia Florence; Andrea Hadfield; Jacqueline Holmes; Martin Hyden; Parminder Lally; Beth Marshall; Chris Mercer; Lindsay Pike; Vicki Salmon; Emma Spurrs.

the national phase entry requirements for the international patent law examination should be based solely on one source, such as the PCT application's guide, as other sources are inconsistent.

3.2.9. There were a few comments suggesting a basic understanding of business, accounting and management would be useful at trainee level, and that this could be covered by the FC and/or university courses. In addition, there were suggestions that drafting at an appropriate level and invention spotting should be incorporated into foundation level teaching/assessment.

3.2.10. Some respondents suggested FC5 could be open book to better test understanding rather than just the ability to memorise information. Some thought that Design and Copyright should be considered higher status and moved to FD rather than foundation level. A very small number of individuals thought that competition law should be re-introduced to the foundation level routes.

3.2.11. Several respondents mentioned that parts or questions of the FC examinations often referred to areas that might only be used or seen once in a person's career, and that the examinations ought to be made more relevant to the day-to-day job of being a patent attorney.

3.2.12. In general, many of those who commented on the FC examinations thought the syllabus was too broad for the examinations being set and either

the syllabus should be reduced or the question scope should be revised.

3.3. *Final Diploma*

3.3.1. There was a lot of confusion over the role of IPReg in accrediting the FD examinations, with a number of respondents asking why IPReg accredits the FC examinations but not FD examinations.

3.3.2. For the avoidance of confusion, we clarify that both the FC and FD examinations are accredited by IPReg. However, there has never been any process or criteria for the FD examinations. When IPReg introduced its Accreditation Handbook in 2016, this was based on the process in place for the university courses and only covered the FC examinations. Thus, whilst the PEB is required to assess its performance for both FC and FD, there are currently no accreditation standards for the FD examinations. We understand that IPReg may be in the process of revising the Accreditation Handbook to include the FD examinations.

3.3.3. On FD1, some respondents queried the need to retain design and copyright in this paper. There were also suggestions to include the key core basics of litigation in FD1. Some respondents felt that FD1 should not be a 'memory test' but should rather reflect the real world situation of providing advice to clients. It was noted that the questions tend to focus on 'small clients' and may

not therefore test the type of issues that arises with larger corporations.

3.3.4. Some respondents asked if there was the scope to have options on mechanical and chemical papers for FD2 and FD3. Questions were raised about potential duplication with parts of FD4 also being examined in FD1 and the LSC.

3.3.5. On FD4, many respondents identified time pressure, content and candidate expectation as the leading factors in the perceived low pass rate. Respondents suggested that the examined technology should be kept simple, so as not to misdirect or 'trip up' candidates, the number of claims should be reduced and the amount to read should be standardised. Some respondents felt that the paper does not reflect real-life I&V situations and relies more on examination technique.

3.3.6. Notwithstanding comments on scope of the FD1 syllabus and issues with FD4, there was an overall consensus that the FD examinations are the appropriate way of obtaining qualification as a UK patent attorney. In view of the considerable practice element required, there was no support for the FD examinations to be provided by an academic body.

3.4. *Litigation Skills Certificate*

3.4.1. Many respondents referred to the LSC, but there was no consensus as to whether this should be compulsory for entry on the register or a subject for a further qualification.

3.5. *The EQE*

3.5.1. The European examinations were generally regarded as more straightforward/simpler than the Final Diploma examinations – some respondents felt this was the appropriate level for fitness to practise, others that the EQE's alone did not properly prepare for practice before the IPO.

Annex 4 – List of Documents Reviewed

- IPReg Middlesex Review of FD4 (Reproduced in Annex 5 – page 28)
- PEB syllabi (current versions available at <https://www.cipa.org.uk/patent-examination-board/support/syllabi-for-2021/>)
- Statistics on PEB Examinations by Julia Gwilt, December [2019] *CIPA* 41-43
- Statistics on PEB Examinations by Julia Gwilt, July-August [2018] *CIPA* 7-9

3.6. General Remarks

3.6.1. Some respondents also questioned whether there should be an element relating to professional ethics in the examination system. It was questioned whether candidates would benefit from having to follow a stripped-down version of the IPAC course, with an examination at the end. It was also questioned whether IP commercialisation should be examined.

4. Results of 'Top-Down Approach'

4.1. The detailed results of the analysis are provided in Annex 6. In summary, it can be seen that most of the skills and knowledge items which we identified as being important are either already examined by the PEB examinations (and, in some cases, by the EQE) and/or are mentioned by IPReg in the Competency Framework. It is noted that the Competency Framework is very general and is not intended to be a 'must do' list of topics and IPReg acknowledges that different types of work are undertaken in different working environments and within different businesses.

4.2. The Annex also includes a number of skills which are obtained by experience of working practices and are not examinable as such, e.g. time management.

5. Conclusions and Recommendations

5.1. We have noted the responses regarding the scope of the syllabuses for the PEB FC examinations. We **recommend** that:

- The FC examinations should focus on the core knowledge and skills required by a patent attorney. This will include some basic knowledge of trade mark, design and copyright law, but this should be commensurate with what a patent attorney is likely to face in day-

to-day practice⁵. However, the syllabus should include all the 'black-letter' law (basic standard elements or principles) which is relevant for the LSC, so that this law does not need to be duplicated by the LSC.

- The scope of the International Law syllabus be revised to focus on core areas (EP, PCT, US, JP, CN) and instances where there are significant/important differences in patent law (e.g. 30 vs 31-month national phase entry, allowability of method of treatment or second medical use claims, allowability of computer programs as such). Questions should be structured to give sufficient choice for candidates working in different sectors, where the relative importance of countries may differ. We also questioned to what extent it is necessary to examine international law relating to trade marks, designs and copyright.
- All candidates should have a good knowledge of professional ethics prior to registration, and before undertaking the LSC.
- All candidates should have a good knowledge of evidence for the UK court system as it applies to patents and before undertaking the LSC.

5.2. We considered whether the Foundation Certificate should include any elements of drafting or invention spotting, but concluded that:

- candidates were unlikely to have obtained much practical experience by the time of sitting the examinations;
- it would increase the amount of subject matter examined at this stage; and
- it can be adequately examined at Finals/EQE level.

5.3. On the basis of the responses, we concluded that the FD examinations

5. However, for attorneys wishing to develop further knowledge in these areas, additional training should be provided by way of non-examined courses, e.g. e-learning modules or in-person training courses.

generally cover the relevant areas and are set at an appropriate level, but that they have become overcomplicated and too long, in particular FD4. Thus, we **recommend** that:

- FD2 should be limited to drafting a patent application, relating to generally-accessible technology, suitable for filing at the IPO in a form where the claims are clear, novel and arguably inventive over the prior art presented in the question and where the description is sufficient;
- FD3 should be limited to answering an official letter from the IPO which raises novelty and inventive step objections and providing a set of claims which deals with the objections and which does not add matter or lack clarity;
- FD4 should be limited to requiring the candidates to demonstrate that they can construe a set of claims according to the case law in the UK, evaluate prior art, determine whether the claims as construed are novel and inventive over that prior art and determine whether the activities of a potential infringer are infringing acts under UK law and should not require detailed advice on points not relevant to the main topics;
- FD1 should not cover any of the areas covered by the other examinations but should include at least one question about a situation which could arise in litigation of a patent in the UK courts, involving application of the black-letter law on litigation which should be part of the FC syllabus (see above); and
- Similarly, FD2, FD3 and FD4 should not require advice on points which are examined in FD1; there should be less overlap between the content of the syllabi and examinations.

5.4. Any changes to the syllabi for the Foundation and Final examinations should be reviewed to ensure that, as far as possible, they encourage an increase of diversity and inclusion in the profession.

CHAPTER 2 – TRAINING

1. Introduction

1.1. The Mercer Review Call for Evidence asked a number of questions regarding training as a UK patent attorney:

Q2a) *Do you have any comments about the current knowledge, understanding and practice covered by the Foundation Certificate examinations?*

Q2b) *Are there any additional areas of knowledge, understanding or practice that should be covered by the Foundation Certificate examinations?*

Q2c) *Are there any areas of knowledge, understanding or practice that should be removed from the Foundation Certificate examinations?*

Q2d) *Do you have any other comments about the Foundation Certificate examinations, for example in terms of language, timing, subject matter or training period?*

Q2e) *Do you have any comments about the use of university qualifications, such as those provided by Queen Mary University of London, Bournemouth University and Brunel University, as an alternative to the Foundation Certificate?*

Q3a) *Do you have any comments about the current knowledge, understanding and practice covered by the Final Diploma examinations?*

Q3b) *Are there any additional areas of knowledge, understanding or practice that should be covered by the Final Diploma examinations?*

Q3c) *Are there any areas of knowledge, understanding or practice that should be removed from the Final Diploma examinations?*

Q3d) *Do you have any other comments*

about the Final Diploma examinations, for example in terms of language, timing, subject matter or training period?

Q6a) *Do you have any comments about the requirement for newly qualified patent attorneys to obtain a qualification in Litigation Skills within three years of entry onto the Register?*

Q7a) *re there any other areas of knowledge, understanding or practice for which CPD should be mandatory following admission to the Register?*

Q8a) *Do you have any comments about the professional education and training of trainee patent attorneys in preparation for qualification?*

Q8b) *Should there be greater guidance on the knowledge, understanding and practice required for trainee patent attorneys to undertake the PEB examinations?*

Q8c) *Should there be a mandatory training requirement before a trainee patent attorney is eligible for entry to the PEB examinations? If so, how could this be applied uniformly, given the vast range in size of patent attorney firms and in-house departments?*

Q8d) *Do you have any comments about the support provided for trainee patent attorneys by the Informals?*

Q8e) *Do you have any comments about the general support available for trainee patent attorneys?*

Q9a) *Do you have any other comments or observations about the education, training and assessment of patent attorneys?*

2. Methodology

2.1. This sub-group was tasked with reviewing the responses to these questions. More generally, we considered whether current training measures are adequately training candidates to be qualified and successful patent attorneys.

2.2. The responses to the Call for Evidence gave rise to a good deal of consideration as to what learning and training is required. In this chapter, we summarise the responses received in relation to different topics. We also summarise some of the activity which is already taking place.

3. Existing training

3.1. In this section, we summarise some of the activity which is already taking place.

3.2. Pre-joining information

3.2.1. From a review of the responses, it is clear that more information should be given to those who are entering the profession so that they understand what they are getting into. Some information is available via the following websites (not all of which are easy to navigate):

- CIPA website;
- Yellow Sheet website;
- Informals social media pages (such as a LinkedIn group and Twitter)
- IPReg;
- PEB;
- IP Careers;
- Careers in Ideas; and
- Firms' websites.

3.2.2. There are many routes to qualifying as a patent attorney and different employers will provide different experiences. When looking for an initial job, trainees are likely to take what is available and may not understand the upsides and downsides of the different routes. They will never be the same: employers have different resources, different opportunities, different workflows and different ways of training. Sometimes, trainees will have to move jobs in order to get a type of training which suits them.

3.2.3. The core set of standards which are required to be a patent attorney have been discussed in Chapter 1. A trainee needs to be able to meet these

standards, regardless of whether one ends up practising in a small corner of the profession or in a broad-based practice. That may require trainees to learn topics which are not germane to their current job, but may be required by a different employer.

3.2.4. The Informals is already reviewing information on some of those websites and seeking to provide entry-level guidance. This is also likely to include what to look out for in employment contracts and what to ask about training.

3.3. *New Entrants*

3.3.1. CIPA runs a training course for new entrants. This used to be a single day at CIPA but, in 2020, was delivered over Zoom over a number of different days. That will make it more accessible to those who cannot come to London for the day course but is less effective for networking.

3.3.2. The Informals have been putting a buddy scheme in place, to help new trainees find their feet, with support from those in other firms.

3.3.3. The Informals have also established a new committee role, the Welfare Officer. The Welfare Office is a focal point for information relating to mental health and wellbeing. The Informals have also established a Welfare and Wellbeing section of the Yellow Sheet blog that provides a repository of information and resources. The Informals now also has a number of Mental Health First Aiders (MHFA) and manage a MHFA email to support trainees. Finally, the Welfare Officer provides the link between the Informals committee and the mental health charities such as Jonathan's Voice.

3.4. *Support for trainers*

3.4.1. CIPA has been providing 'Train the Trainer' seminars. Only a few of these were put on before Lockdown. They do not work so well remotely and will be revived once the pandemic is over.

3.4.2. CIPA's Education Committee is planning a trainer network to enable firms to discuss best practice and support each other with issues relating to trainees and training.

3.5. *Foundation training*

3.5.1. CIPA has new foundation training manuals in hand. The Patent training manual is the most advanced. Work is also underway on Trade Mark and Design training manuals.

3.5.2. The members of the Informals are provided with a free copy of Paul Cole's book on drafting. At least one commenter suggested that the patent training manual replaces Paul Cole's book.

3.5.3. The Informals are in the process of delivering a revamped set of foundation lectures. They intend to take advantage of the new CIPA website and its ability to store and make content accessible. These lectures may not then need updating from year to year.

3.5.4. There are commercial organisations which organise courses to prepare candidates for the FC examinations.

3.5.5. There are three IPReg accredited university-based courses which provide exemption from the FC examinations.

3.6. *Finals training*

3.6.1. This is the area where there is least support. There is difficulty in knowing what is needed, given the different routes to foundation-level qualification, the different amounts of in-house training that different firms can provide, and whether a trainee is in private practice or in industry. However, IP Inclusive mentioned a number of statistics in their response, one of which was that 18.1% of student respondents to their 2019 survey stated that insufficient support through training was a leading cause of stress.

3.6.2. A common theme is that any training opportunities, e.g., meetings, seminars, and webinars, tend to be heavily London-centric, such as the Informals' lecture series. There is no doubt that in recent times the shift to online webinars, seminars and meetings has helped with the geographical issues. However, care must be taken to ensure that things don't regress.

3.6.3. The Informals are planning an advanced lecture series. The bandwidth freed up by the foundation lectures moving to a video-on-demand service will enable the Informals Lecture Officer to focus on providing more advanced lectures to support finals standard training, tailored towards the PEB final diploma examinations. However, a number of responses made the case that the Informals should not be a body that provides primary training. In particular, some questioned if the responsibility should lie with the students of the profession to organise such events, as opposed to the Institute as a whole and the employers who belong to it.

3.6.4. There were a number of comments that CIPA should be taking the lead on the professional education and training and trainee patent attorneys in preparation for qualification. Many responses indicated that CIPA should work to reduce the variability in training across the profession. Currently, CIPA organises tutorials to help those with what is required in the examinations and provides webinars on the FD examinations. In particular, a number of responses highlights that the ability of qualified attorneys to provide guidance on exam-specific technique is limited, particularly as the nature of the exams appears to evolve over time. Therefore, firms rely on external partners and providers to provide the exam specific technique. One response in particular proposed consultations between PEB and organisations offering training, so that the training accurately reflects what the PEB is looking for. Training

for the EQEs demonstrates that such consultations can take place without comprising the examination process.

3.6.5. The Informals also provide a mentoring programme for repeat resitters of FD1 and FD4 (specifically two or more attempts). The mentoring programme connects the resitters with mentors within the profession with experience in tutoring for FD1, FD4, or both.

3.6.6. There are commercial organisations which organise courses to prepare candidates for the Final Diploma examinations. The quality of these courses is variable not only by provider, but also by tutors who work for those providers. Some come highly recommended, others less so. It is noted that the providers offer techniques to pass the PEB examinations, potentially highlighting that the PEB exams rely on technique as much as knowledge.

3.6.7. For the last few years, CIPA has run webinars on what is expected in some of the PEB examinations. CIPA is hoping to arrange further communication between the PEB examiners and those who are training those preparing to sit the examinations.

3.6.8. Part of what is currently tested are skills, rather than simply knowledge. Skills take time to build up. This requires the trainees to spend time trying to accumulate those skills either by being given real world experience on client work, by being set test exercises by trainers or by working through old examination papers (which are based on real world problems). Some of this can only be learned by the trainees putting in the time, over a period of years, to learn the relevant skills.

3.6.9. There is a limit to what CIPA can provide by way of training. There is a balance between what CIPA training is free to members and what needs further payment. Although their partners and many members of staff are likely to be

members of CIPA, the individual private practices are in competition with each other – and that competition extends to competing for the best students and the best qualified staff. It is not to be expected that those firms (or industrial departments) who offer the least training can have their trainees trained by those firms who offer the most training. However, CIPA aim to increase some of the Advanced level training by seeking input from across the profession.

3.6.10. A few responses have called upon the PEB to provide the training that CIPA, the informals, or the profession cannot. Suggestions include providing online courses or recorded seminars that are freely accessible to all, regardless of the size of firm or in-house department.

3.6.11. Greater support for trainees' mental health and wellbeing has been discussed, in particular from the individual responses. As discussed above, the Informals recently established a new role, the Welfare Officer, A new Welfare and Wellbeing section of the Yellow Sheet blog has also been created to further signpost the support available for trainees, such as LawCare, Jonathan's Voice, Samaritans, IP Inclusive, as well as the Informals' own Mental Health First Aid email line.

3.7. *Post-Qualification training*

3.7.1. CIPA provides a series of webinars which are run by the Professional Development Working Group (PDWG, a CIPA sub-committee). Input for those webinars is constantly sought. These are now free to CIPA members as part of the membership fee. Some special webinars require an additional fee.

3.7.2. CIPA provides a number of conferences each year including the Life Sciences Conference and CIPA Congress, which both provide CPD.

3.7.3. CIPA runs an EPO Oral Proceedings training course.

3.7.4. CIPA runs the IPEC training course.

3.7.5. CIPA has stopped running the Basic Litigation Skills course as there was insufficient demand from the profession and there was competition from CPD Training and Nottingham Law School (but there are comments to rethink this or fold some of the training into other parts of the curriculum).

3.7.6. Both CIPA and IPInclusive provide a number of soft skills training courses.

3.7.7. There are some thoughts about providing further certificates for training in specialised areas, which may not need to be examined – but could be directed to certain post qualification specialisations – such as SPCs or licensing.

4. Foundation Routes

4.1. *Availability of different routes (accessibility)*

4.1.1. Overall, there was considerable support for maintaining both the Foundation Certificate and university exemption course routes as options for learning foundation-level content (though as discussed in the previous chapter, the university course examinations may require some modifications). This flexibility is a key strength of the UK system; reducing options would harm access to the profession and diversity within the profession.

4.1.2. Several respondents commented that the Foundation Certificate provides accessibility to trainees who cannot attend the university courses, for various reasons. Reasons for not being able or not wanting to attend (or send trainees to) university courses included: in-house or small firm employers unable to lose their employees for months at a time; high cost of courses; location; disruption

to work/training; hard to attend if a trainee has caring responsibilities. These comments came from trainees and employers.

4.1.3. In contrast, some in-house trainees considered the exemption courses essential as it was hard to prepare for the FC examinations whilst working in-house.

4.1.4. There appears to be a number of firms who exclusively use one or the other. For example, some firms exclusively send their trainees to QM-UL, whereas others exclusively have their trainees sit the FC examinations.

4.1.5. There were no comments that demonstrated support for removing the FC examinations and many comments actively against this. Some respondents were against this since it would permit loss of control over training candidates and possibly be a conflict of interest, as well as the reduction in accessibility. On the other hand, there were some comments that indicated their support for abolishing the exemptions provided by the three university courses. Reasons for this included that the taught courses would not ensure candidates possess the necessary skills at a viable training cost and that the content was less useful for day-to-day skills or the FD examinations.

4.1.6. Some respondents expressed a concern that the FC papers can take a very long time to pass, which is unfair to those trainees taking the FC rather than an exempting course. Others expressed concerns that the content/amount of work required for the different courses and the FC can differ vastly. Similarly, there was some concern over the difference in pass rates between the university courses and the FC examinations and those expressing this concerned also indicated this gap ought to be addressed and closed.

4.1.7. There were several comments indicating they would prefer the

university courses to be standardised with each other and with the FC. In that sense, the university courses could teach to the FC examinations, so that all trainees sit the same examinations and have the same overall grounding for the Final Diploma. Others suggested the FC could be made more similar to university courses (in particular QM-UL). These comments came from trainees and employers; from these respondents, there was generally a view that more standardised foundation routes would be fairer, would promote consistency in training/standard of trainees and would better prepare trainees for the FD.

4.1.8. However, other respondents mentioned that the difference between courses and the FC was irrelevant since everyone would have to sit the same FD, and that would sufficiently standardise candidates.

4.2. *Regional Considerations*

4.2.1. There were several comments regarding the geographical basis of foundation training routes, particularly of university courses that provide exemptions from the Foundation Certificate. Brunel University, Bournemouth University and QM-UL are all based in the south/south-east of England. This makes it more difficult for trainees in other areas to attend these courses. Several respondents commented there should be more options available in other areas e.g. the north of England. These comments came from trainees and employers.

4.2.2. In addition, and possibly in light of the Covid-19 pandemic, there were comments expressing that a stronger reliance on technology by the universities would support more extensive distance learning.

4.2.3. We note that at least the Bournemouth University course is partly a distance learning course; and due to the Covid-19 pandemic, the 2020-2021 QM-

UL course was entirely distance learning.

4.2.4. We further note that a course ran by the University of Manchester used to exist until relatively recently. However, this course was discontinued because it could not get enough participants to be viable to run, despite being well supported by both industry and private practice.

4.3. *The Different University Options*

4.3.1. Some respondents commented that, of the university options, they did not rate the Bournemouth University and/or Brunel University courses as highly as the QM-UL course. In particular, there were multiple comments expressing concern that the Bournemouth course only has a single examination and that English law is unexamined in that examination. Other respondents did highly rate Bournemouth and commented that it had excellent, high quality teaching materials. One firm mentioned that they stopped using the Brunel University course due to the lack of relevant teaching and little rigour in the examinations.

4.3.2. In general, from several respondents it seems that the university courses, particularly QM-UL and Bournemouth, offer a good coverage of the fundamental knowledge that trainees need – and that possibly is not gained by the FC.

4.3.3. There were also comments expressing concern over the quality of teaching at QM-UL. One anecdote recounted a lecture being repeated several weeks after it had already been given and was continued despite the lecturer being reminded by attendees they had already had this lecture. Other commenters also thought the standards of QM-UL might be falling and/or that the QM-UL course was teaching to pass examinations rather than to be a patent attorney.

4.3.4. Several respondents commented that the university courses may need reviewing/auditing more frequently than present to ensure they are still of sufficient quality and covering suitable content to adequately teach trainee patent attorneys what they need to know.

4.3.5. We note that at present, the university courses do not feature the same exams as the Foundation Certificate, but it is possible that they could, in the future, teach to the same FC examinations to help unite the foundation level training routes.

4.4. Other Considerations

4.4.1. Several commenters noted that the timing of any changes, implemented as a result of the Mercer Review, must be considered to prevent any negative impacts on trainees. For instance, it was noted by several commenters that some trainees who work in-house do not have a supervisor who is qualified, and thus heavily rely upon the Informals and CIPA to provide not just training webinars and seminars, but also network opportunities. Any alterations to the training required to become fully qualified may disproportionately disadvantage in-house and small firm trainees who already have a non-conventional route to qualification, and the information may take some time to transmit across the entire profession.

4.4.2. The online European Qualifying Examinations (eEQEs) are a part of the EPO's overall digital strategy for modernising the examinations. In a discussion paper published by *epi*, an exemplary timescale of 3 years (at least two whole examination cycles) for implementing changes to the examination process is given, with provisions for trainees on the legacy examinations. Early feedback appears to agree this is a reasonable approach to any changes made to an examination structure in the profession.

4.4.3. There were several comments expressing a desire for the number of study days/amount of study leave available for preparing for examinations to be increased. Reasons for this desire included: to sufficiently complete the large amount of examination preparation indicated necessary; and, on the basis that the qualification is essential to the job, so more time in working hours should be available to dedicate to training. This would especially help/improve accessibility to those with caring responsibilities.

4.4.4. There were also a few comments indicating that the Informals foundation lectures are not reliable for first teaching and need to be improved.

4.4.5. It was also suggested that, outside the profession, it was unclear which courses are or are not accredited and that more clear guidance on this would help those wishing to enter the profession, amongst others.

4.4.6. One person commented that pay rises/promotions could be allocated per examination passed, rather than once passing all the examinations (either FC or FD), to promote a more even rise in salary/fairness between trainees at different employers.

4.4.7. IP Inclusive and the Informals have suggested that a template training contract be provided, by which employers commit to supporting their trainees through the qualification system, and which clarify the arrangements for study leave; payment of exam entrance fees and tuition fees; provision of resources such as text books; in-house tuition and supervisor availability; pastoral support and the resolution of problems; whether and how these arrangements differ for exam resits; and outline example claw-back clauses.

5. Training Periods

5.1. There were several responses which raised the issue of whether there should be a compulsory training period before a candidate could be allowed to attempt the FC examinations. Such a training period would be in line with the current EQE system that requires candidates to be in the profession for two years before they can sit the EQE pre-examination (pre-EQE). Of the responses, some were in favour of a compulsory training period and considered this could take the form of minimum time in office (examples given included 1 or 2.5 years) or minimum number of tutorials attended before being able to sit FD examinations. Others suggested a minimum number of past examination papers should be attempted (and possibly marked/reviewed by a qualified attorney) before the finals could be taken.

5.2. Others in favour suggested a minimum of e.g. three years in the profession before being able to register as a registered attorney – this would prevent candidates registering before this time even if they had passed all examinations, ensuring sufficient development of 'soft' skills.

5.3. Of those in support of a minimum training period, some expressed concern of a possible overlap with the EQEs and that they thought this should be avoided.

5.4. Some specifically mentioned a minimum period, such as one year, before being able to sit foundation examinations (either FC or the appropriate university course exams).

5.5. On the other hand, many respondents were against a minimum training period. Some considered that no minimum training period was necessary, especially considering IPReg's requirement of two years under supervision or four years without supervision before entry to the register.

5.6. Of those against such a minimum training period, many were of the opinion that time makes no difference to passing some of the FD examinations. For example, some candidates pass e.g. FD4 on their first attempt while others take it multiple times before passing. There appears to be no correlation (i.e. there is no trend that the more years' training one has, the more likely one is to pass the FD exams). Introducing such a time limit would therefore make it even harder to qualify. On this note, however, we refer again to the December 2019 CIPA Journal article by Julia Gwilt reporting statistics on PEB examinations, which shows that completing a longer training period before sitting the examination for the first time appears to be beneficial.

5.7. Similarly, some commented that, because trainees might not be exposed to some types of work at their particular employer (e.g. drafting), a minimum training period of two or three years would make limited difference to their (drafting) ability.

5.8. Others mentioned that the mandatory training period for the EQEs does not appear to have a bearing on the EQE pass rate either and so might not help improve pass rates. Others commented that such a minimum period would harm the flexibility that is provided by the current system and that makes allowances for individual circumstances. For example, someone may enter the profession having already worked in the IP world for many years and may be more likely to pass examinations more quickly than someone entering the profession with limited experience.

5.9. Some respondents were of the opinion that the examinations should be sufficient, so long as they are designed correctly.

5.10. Others commented that introducing a minimum training period would be a heavy-handed approach and a softer approach, such as improving

training opportunities, accessibility, materials, tools etc. would be a better way to ensure candidates are of the expected standard. Other suggestions included the requirement that candidates be signed off by a qualified UK patent attorney before they can sit the final examinations.

5.11. Overall, there was no consensus opinion on minimum training periods that came through in the responses. One respondent comment stated it would be impossible to ensure all trainees will have the same form of training and that, if the review was trying to achieve this, it will disadvantage profession overall due to the risk of reducing standards.

6. Post-Qualification Training

6.1. *Litigation Skills Certificate*

6.1.1. The call for evidence specifically invited comments on the LSC qualification which newly qualified attorneys have to obtain within three years of entry onto the Register. Of the 47 respondents who made comments, more than half (27) supported getting a litigation skills qualification in some form, with 20 supporting its current format as a compulsory 'post-registration' qualification. 12 did not support the qualification being compulsory, with many of those suggesting that the qualification was unnecessary to the practice of most attorneys and anyway did not provide the necessary skills to be able to take on cases without the assistance of someone more experienced, such as a solicitor. A number of respondents suggested alternative skills training which might be more appropriate to all attorneys or which could be non-compulsory additions, described in the section 'Areas for development after qualification' below. It was also noted that, since the LSC is a compulsory element, its provision should be assessed to ensure that it does not create a barrier to entering the profession.

6.1.2. History of the Litigation Skills Certificate

6.1.2.1. A number of the respondents mentioned that the LSC was introduced in 2012 as a *quid pro quo* for the profession retaining its rights to litigate and rights of audience before the IPEC and on appeal from the IPO, and its abandonment therefore could not be taken lightly. It was further mentioned that its requirement could provide evidence of higher skills than the European model for qualification, justifying grandfathering in of CPA attorneys to rights for representation in the UPC courts. It was also suggested that it might be possible to rationalise litigation skills qualifications and argue for higher advocacy rights for patent attorneys on the basis of the LSC and the Higher Advocacy Certificate alone (i.e. without needing the Higher Courts Litigation Certificate as well as the Higher Courts Advocacy Certificate), moving towards putting patent attorneys on a similar footing to solicitors.

6.1.3. Pre- or Post-Finals

6.1.3.1. A significant number of the respondents who commented on the LSC expressed the view that the subject area should be examined before qualification if it is sufficiently important to be compulsory after qualification, for example by incorporating the subject matter into FD1 and/or FD4. A number of respondents identified overlap between the Foundation Certificate paper FC2 and the subject matter of the LSC and suggested that the balance of what is examined where should be considered. Others opined that the practical element of the qualification is invaluable, and cannot be replaced by a written examination, with some suggesting that the academic aspects should be incorporated into the existing qualifying examinations, and the practical aspects could be replaced by broader based advocacy training which would be of value not only in the UK patent court, but in other oral proceedings, for example at the EPO.

6.2. Post-Qualification Training

6.2.1. One of the questions asked in the call for evidence was whether there are any other areas of knowledge, understanding or practice for which CPD should be mandatory following admission to the Register. The vast majority of the responses supported the current level of mandatory CPD (20 out of 24). Respondents commonly argued that CPD should not become over-prescriptive because of the great divergence in career paths for individual attorneys and that it is appropriate for individuals to choose which areas within their profession to develop. A small number called for additional compulsory elements, such as compulsory attendance at a webinar (presumably put on by CIPA) to accompany a major change in circumstances, with BREXIT being provided as an example.

6.2.2. One respondent noted that it can be difficult to find clear guidance about how to approach CPD and it would be helpful if all newly qualified attorneys had some training during the first year post-qualification in what CPD is all about, such as attending a lecture at CIPA. It was also suggested that a 'Guide to best practice of CPD' could be issued and attorneys could use the guide to monitor their CPD on a self-certification basis. It was also suggested that the current rules are confusing, for example around the difference between a live event and a recording. A review of the rules in light of the recent change in practice might be appropriate. Other suggestions included having a compulsory webinar each year on all core changes in law in the UK and EPC with IPReg producing a list of key cases each year that attorneys are all expected to have read.

6.2.3. A number of alternative approaches to the current system for CPD reporting were suggested, mainly based on CPD practice for other professionals. A couple of respondents suggested monitoring CPD solely on a declaration/self certification

basis, not monitoring hours spent performing particular activities, in line with what it was reported solicitors have to do. Another respondent suggested a system similar to that for Chartered Engineers who maintain a portfolio and have to plan their own CPD activities, and also reflect on them and evaluate them against the objective for their learning, but do not have to spend a minimum amount of time on CPD each year. Finally, another suggestion was the use of an online multiple-choice self-test to be performed every year to confirm that an individual is up to date with current law and practice. We do, however, acknowledge that such additional examinations, especially with this frequency, are unlikely to be a popular introduction, and would be difficult to administrate.

6.3. Areas for development after qualification

6.3.1. A number of areas were discussed in the responses in which attorneys should continue to develop post-qualification (though not necessarily added to a list of compulsory CPD activities). 'Training for mentoring'/'training for the trainers' was commonly mentioned as being very useful/desirable, both for the aspiring trainer and also for the benefit of their trainees, since newly qualified attorneys who have recently taken the professional examinations commonly then take on the mantle for training the next generation (5 responses). Training for business accounting and management was mentioned as being particularly appropriate post-qualification, along with advocacy skills, IP management and strategy, IP commercialisation and business development skills. In order to recognise an attorney's increased competence in these additional areas, it was suggested that it might be desirable to introduce 'certificates' as add-ons to strengthen the response of qualified attorneys to unregulated providers of these services, rather than make any of them compulsory, so that an attorney's

developing skills can be tailored to their particular career trajectory.

7. Support wanted from CIPA

7.1. A number of respondents suggested that CIPA could provide training in the form of free of charge video-on-demand series of lectures for foundation and advanced topics, with the videos being shorter than the current lectures. It was suggested that this could be in the form of a set of e-learning modules. CIPA is already working on providing a video-on-demand service, in addition, most webinars are now included in the membership fee. In particular, CIPA aims to provide access to all previous webinars as a video-on-demand server.

7.2. In addition, there were some suggestions that CIPA should have greater control or oversight over tutorials and advanced lectures, supervised in-part by the Informals, rather than the current system. It was suggested that CIPA should aim to provide support for candidates training for both the UK and European examinations.

7.3. Additionally, there was a suggestion of the provision of webinars providing a summary of all of the core changes to the law for both the UK law and the EPC.

7.4. One respondent suggested that CIPA provide a course or a guidebook which gives new entrants to the profession tuition relating to the very basics of the contents of applications, the various IPOs, and basic types of objections one might receive therefrom. Another suggested that CIPA should run JDD-style courses to give finals candidates further guidance on the requirements to pass the exams.

7.5. Finally, it was suggested that CIPA could define a common training framework or guideline for firms to sign up to which provides a set of minimum standards when it comes to the training provisions provided to trainees.

8. Conclusions and recommendations

8.1. The issues raised by the responses were discussed to see if a consensus position could be found.

8.2. We consider that more information should be given to those who are entering the profession so that they understand what they are getting into. In this respect, we **recommend** that:

- CIPA should provide better information on its website about what is required to enter the profession and to progress in the profession and keep such information under review;
- CIPA should provide such information to careers services;
- the PEB should make its website easier to navigate;
- IPReg should support registrants in making available to any possible recruit details of the training scheme which the recruit will follow, preferably in the form of a training contract; and
- The Informals should continue, with the support of CIPA, its efforts to assist possible recruits in understanding such information.

8.3. We considered that candidates should have available as many ways of being trained as possible, so as to enable recruits from any background to be trained, but that all ways of being trained should lead to the candidate being able to meet the standard set out in Chapter 1 at each level of qualification. In order for the same standard to be reached by all candidates, we **recommend** that:

- that a common examination should be passed by all candidates at each stage.

This avoids any problems which may arise from any differences between the examinations presently available to test the candidates for fitness to move onto the FD examinations. This should allow any provider to provide training, in

whatever format the provider wishes to offer. The cost of providing the training should be able to be reduced as the requirement for setting and marking examinations would be removed from the training providers. There would be no need to accredit the providers as market forces would operate to eliminate unsatisfactory providers.

8.4. It is envisaged that providers could use any of the formats currently in use but that it would be possible for other providers to come into the market with different formats. The digital revolution would allow providers to use face-to-face and/or digital teaching and different training schedules. The providers should be able to adapt the teaching to the circumstances of each candidate and his or her employer.

8.5. We also **recommend** that:

- CIPA should continue to provide train the trainer and other support for those providing training;
- IPReg should accredit the syllabi for the FC and FD examinations and the PEB for setting the FC and FD examinations;
- IPReg should require all candidates to take the PEB FC and FD examinations;
- Any provider should be allowed to provide training for the FC and FD examinations without requiring any accreditation; and
- CIPA and the Informals should cooperate to determine what formats of training are lacking and encourage providers to provide such training.

8.6. On the matter of a minimum training period, we were of the opinion that there was no need to impose such a period. It was felt that the requirement of IPReg for two years' service under a registrant or four years' service otherwise, as well as having passed the FD examinations, was sufficient. The candidates in most cases also have a minimum training period imposed on them by the EQE and so another, possibly

different, training period, would be confusing.

8.7. However, it was considered that there is too much pressure on candidates to take the examinations too early to improve career prospects and increase salary. This can be counterproductive as it can induce candidates to take examinations for which they are not properly prepared and then fail. It has been shown that the chances of passing a failed paper, especially FD4, tend to go down. It was felt that not enough candidates use the modular nature of the FD examinations to their advantage. We therefore **recommend** that:

- CIPA and IPReg should encourage its members and registrants to adopt career progression systems which are not solely linked to examination success and training systems which encourage candidates to make use of the modular system so that they take any particular examination only when they appear to be ready to take that examination.

8.8. On the LSC, we saw that there are advantages in any candidate having the skills taught by the course, not only for UK litigation but also for opposition proceedings before the EPO and litigation in other jurisdictions. However, it was considered that much of the ground covered in the LSC is black-letter law, which should be covered in the FC syllabus and examination, and advising on litigation situations, which should be covered by the FD1 syllabus and examination. Thus, we **recommend** that:

- the LSC course should be cut down to the practical matters of advocacy and the preparation for advocacy; and
- the black-letter law content of the LSC should be transferred to the FC syllabus and examination, the application of the black-letter law in giving written advice to a client should be transferred to the FD1 syllabus and examination and the

practical aspects of the course should be retained in a reduced assessed LSC.

Such practical matters, in our view, cannot be examined in a written examination.

8.9. We consider that there should be a CPD requirement for all registrants and it should be compulsory to report on meeting the CPD requirement to IPReg. We consider that the onus for carrying out CPD should be on each registrant individually and that each registrant should be prepared to provide details of her or his CPD to IPReg on a random basis.

8.10. We also consider that there should be opportunities for registrants to expand their areas of expertise but these should generally be voluntary. We welcome CIPA's decision to make all its webinars more widely available and to expand the scope of the webinars. IPReg and CIPA should also encourage other providers to offer training in non-examined areas.

8.11. There are three areas, trade marks, practical litigation skills and higher court advocacy, where it was questioned whether there should be assessed training.

8.12. As regards trade marks, it used to be possible to become a dual-qualified attorney by an on-the-job examination route. However, at present, it is only

possible to become a registered trade mark attorney by following a university course. It is felt that this reduces access to the trade mark profession. Since entry on the trade mark register is the responsibility of IPReg, it is considered that any training for entry onto the register should be assessed by examination. We therefore **recommend** that:

- IPReg, CIPA and CITMA should investigate whether there should be a route to registration as a trade mark attorney other than via a university course, for instance by an advanced examination at the same level of the FD examinations or by following an assessed training course.

8.13. As regards practical litigation skills, it is considered that it should be compulsory for all registered patent attorneys to complete an assessed course on this subject. However, this course should be limited to the practical aspects of litigation skills and that the other parts of the present course should be incorporated into the FC and FD syllabi and examinations (see above).

8.14. As regards higher court advocacy, we consider that the training for this subject should remain as it is, with a requirement to follow an assessed training course before the grant of a certificate.

CHAPTER 3 – ASSESSMENT

1. Introduction

1.1. The Mercer Review Call for Evidence asked a number of questions regarding the assessment of a UK patent attorney:

Q1b) *Do you have any comments about the administration of the PEB examinations?*

Q2a) *Do you have any comments about the current knowledge, understanding and practice covered by the Foundation Certificate examinations?*

Q2b) *Are there any additional areas of knowledge, understanding or practice that should be covered by the Foundation Certificate examinations?*

Q2c) *Are there any areas of knowledge, understanding or practice that should be removed from the Foundation Certificate examinations?*

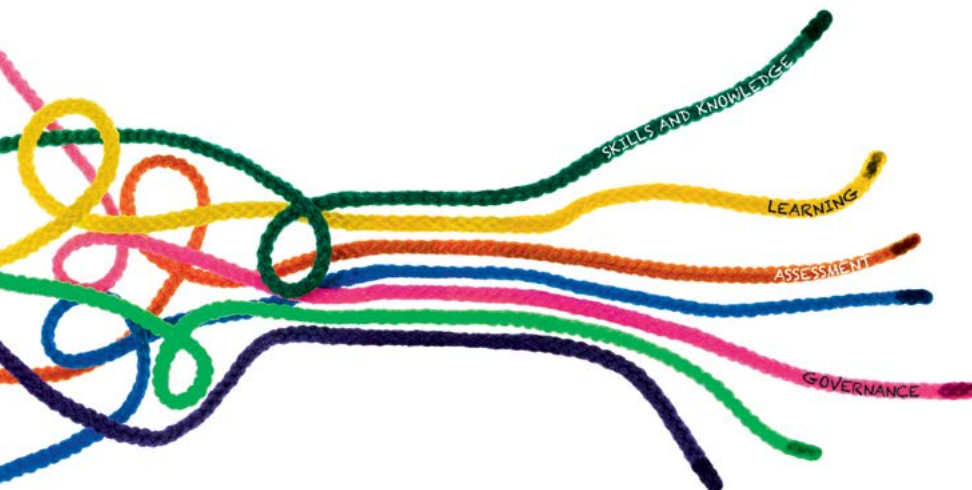
Q2d) *Do you have any other comments about the Foundation Certificate examinations, for example in terms of language, timing, subject matter or training period?*

Q2e) *Do you have any comments about the use of university qualifications, such as those provided by Queen Mary University of London, Bournemouth University and Brunel University, as an alternative to the Foundation Certificate?*

Q3a) *Do you have any comments about the current knowledge, understanding and practice covered by the Final Diploma examinations?*

Q3b) *Are there any additional areas of knowledge, understanding or practice that should be covered by the Final Diploma examinations?*

Q3c) *Are there any areas of knowledge, understanding or practice that should*



be removed from the Final Diploma examinations?

Q3d) Do you have any other comments about the Final Diploma examinations, for example in terms of language, timing, subject matter or training period?

Q4a) Do you have any comments about the use of closed-book examinations for the Foundation Certificate and Final Diploma examinations?

Q4b) Are there any other approaches to assessing knowledge, understanding and practice that should be considered in addition to, or as an alternative to, closed-book examinations?

Q4c) Do you have any comments about the qualifications listed in Schedule 3 of the IPReg Rules for the Examination and Admission of Individuals to the Registers of Patent and Trade Mark Attorneys leading to part or full exemption from the Foundation Certificate examinations?

Q6a) Do you have any comments about the requirement for newly qualified patent attorneys to obtain a qualification in Litigation Skills within three years of entry onto the Register?

2. Methodology

2.1. This sub-group was tasked with reviewing the responses to these questions. More generally, we considered whether the examinations that a UK patent attorney will sit are suitable for assessing the skills and knowledge a UK patent attorney ought to have.

3. Overview

3.1. In the previous chapter, we suggest several recommendations and reasons for changing the PEB syllabus. In this chapter, we further reviewed the assessment of patent attorneys.

3.2. For example, we recognised that the content of the examinations should

be adjusted so that any ‘creep’ towards more complication and more content is reversed.

3.3. It is also important to look at the way in which the examinations are taken and assessed. In particular, the effect of the change to electronic examinations in light of the Covid-19 pandemic for both the PEB examinations and the EQE and the proposals for changing the format of the EQE led us to consider the format for the PEB examinations.

3.4. A further point to consider is the timing of the examinations. Candidates and their employers are placed under pressure by having to juggle the EQE qualification route with the PEB qualification route. It therefore needs to be considered whether there are ways to organise the examinations to reduce this pressure.

3.5. We also recognised that, in looking at the examinations, there were also implications for training and the way in which the examinations are set.

3.6. One aspect of training which led to considerations relating to the examinations was the fact that the ways to qualify to take the FD examinations does not consistently lead to candidates learning in all the areas covered by the FD examinations and the LSC. It was considered that a way to ensure that all candidates have learnt in the relevant areas would be to make it compulsory for all candidates to pass the PEB FC examinations (see above).

3.7. It was considered that the PEB FC examinations are generally appropriate but could be improved by ensuring that the syllabus covers all the reserved legal activities covered by the Legal Services Act and all the ‘black letter’ learning about the UK litigation system which is at present part of the LSC. The law on evidence (as opposed to the drafting of evidence) was highlighted as an important point. It was also considered that the FC examination syllabus should cover ethics.

4. Foundation Certificate

4.1. It was noted that candidates for the EQE are required to register with the EQE Secretariat as soon as they join the profession. It is considered that it could be advantageous to require any person intending to take the FC and FD examinations to register with the PEB as soon as they decide to take the examinations. This would allow the PEB to direct the candidates to sources of training. It could also be required that, for entry to the FC examinations, the PEB could require each candidate to provide evidence that they have either been under the supervision of a registered patent attorney for at least one year or followed a suitable training course and had two years of experience in an IP environment.

4.2. We recognise that students do not all have the same training opportunities and resources at their place of work; the variation in size and nature of the firm or department makes this inevitable (see above). We also recognise that employers value the availability of different training routes, to suit their different circumstances. It is clear, however, that the current system leads to the situation where trainees can qualify to take the FD examinations with differing levels of knowledge and experience. Furthermore, these differences may impact on how prepared the candidates are to sit the Final Diploma and therefore their performance in those examinations.

4.3. The proposal that the PEB FC examinations should be compulsory led to further considerations. It would need to be ensured that the PEB Foundation examinations are of high quality and cover an appropriate syllabus. It was envisaged that IPReg would need to be involved in setting the syllabus and ensuring the quality of the examinations. This could lead to a simplification of the system for setting the examinations and therefore for there to be more transparency.

4.4. There was a concern that making the PEB FC examinations compulsory could have an adverse effect of access to the profession. It was thought that this could be dealt with by making the FC examinations open to anyone who has taken a suitable course or has been working for a registered UKPA for at least one year. Thus, a candidate not employed by a UKPA would be able to take a course, such as the ones offered by QM-UL, Bournemouth University and Brunel University, and then take the FC examinations without needing to be in employment.

4.5. There may be an advantage to IPReg in this proposal as it would support IPReg in the accreditation of courses, whether academic or commercial. All IPReg would need to do is to inform any course provider of the syllabus for the Foundation examinations and to receive in return a commitment to teach to the syllabus. It would then be up to the provider to ensure that the teaching followed the syllabus. If the provider did not teach to the syllabus, this would be reflected in the results obtained by the candidates who took that course. Market forces would work either to eliminate inadequate courses or to incentivise inadequate courses to improve. It may also enable other course providers to enter the market.

4.6. This could also be an advantage for course providers as they would need only to provide teaching and not to provide examination. This should reduce the cost of the courses and so not add to the financial burden of candidates or their employers.

4.7. The question of training arose from these considerations. As noted in Chapter 2 above, it was recognised that, even for candidates who are employed, there is a great variety in training. Some firms have in-house training schemes which prepare the candidates for the examinations but others have almost no in-house training and rely on outside providers or expect

the candidates to train themselves. It was felt that information on what sort of training is required, how it may be acquired and what to look out for when applying for a job should be available to students and others thinking of entering. We noted that the Informals is active in this area and we need to co-ordinate the work being done by the Informals and the Training Group within CIPA, hence the recommendations given in Chapter 2.

5. Final Diploma

5.1. As to the FD examinations, it was considered that these are generally on the right lines. However, it was felt that examination creep had taken place and so the examinations in recent years have become over-complicated and too long. It was considered that each examination should be limited to its core area. Thus, FD2 should be limited to drafting a patent application suitable for filing at the IPO in a form where the claims are clear, novel and arguably inventive over the prior art presented in the question and where the description is sufficient. FD3 should be limited to answering an official letter from the IPO which raises novelty and inventive step objections and providing a set of claims which deals with the objections and which does not add matter or lack clarity. FD4 should be limited to requiring the candidates to demonstrate that they can construe a set of claims, evaluate prior art, determine whether the claims as construed are novel and inventive over that prior art and determine whether the activities of a potential infringer are infringing acts, all according to the case law in the UK. FD1 should not cover any of the areas covered by the other examinations but should require candidates to show that they have the knowledge of UK law and can apply that knowledge in a commercially relevant situation. FD1 should also include at least one question about a situation which could arise in litigation of a patent in the UK courts.

5.2. There have also recently been

increases in the time available for the FD examinations. For example, FD4 increased from four hours to five hours in 2010, and this extension in time seems to have led to an increase in content. More recently, due to the Covid-19 pandemic and the nature of online exams and requirements for screen breaks, the time available for FD4, was extended to nearly six hours (without including any extra time for those with reasonable adjustments). We consider that the ‘inflation’ of papers should be reversed. It was noticeable that the FD4 paper for 2020 was shorter than previous papers and the pass rate was significantly higher. This is a trend which should be maintained.

5.3. There was a discussion of whether the availability of marking schedules for the FD examinations was appropriate. It was considered that this may detract from providing a holistic answer. For instance, in FD4, it was considered that giving a mark for telling the examiner what ‘comprising’ means or for explaining the meaning of a word which makes no difference to the answer means that some candidates spend too much time on mark accumulation and not enough time on working out a holistic answer to the whole question. It was therefore questioned whether marking schemes are useful for candidates. It was, on the other hand, pointed out that marking schemes are better than nothing and so, if they were not to be published, it would be necessary for the examiners to provide more specific feedback on what they were expecting, how candidates did well and how candidates did badly. As discussed above, this could be achieved by a training-the-trainers session on each examination as soon as the results come out.

6. Open vs Closed Book Exams

6.1. The question of open- vs closed-book examinations was discussed in the responses to the call for evidence. There was a fairly even split between those

favouring closed book examinations, in particular at FC level, and those who felt open book examinations were more reflective of the real world. On the one hand, closed book examinations were seen as helpful for embedding information; on the other, it was felt that the FC syllabus is so broad that it is simply a memory test, resulting in candidates cramming the material rather than seeking to understand it. Closed book examinations were seen as less appropriate at the FD level.

6.2. The discussion is also influenced by the change, which may well become permanent, from paper to electronic examinations. Taking the examinations electronically is closer to real life, in that almost all candidates at work use a PC or laptop and therefore have many resources available on-line. It was considered that, as electronic examinations are closer to real life than paper examinations, it would be sensible to allow some access to sources electronically. However, unfettered access to sources would not enable a proper test of candidates to be carried out. It was suggested that the candidates should be able to access the Patents Act (perhaps in the form of the Black Book), the EPC, the PCT and the associated rules.

6.3. If the examinations were to revert to paper examinations, then the PEB should make available these aforementioned open book sources as clean paper copies. If the examinations remain as electronic examinations, the PEB should make the open book sources available in read-only format as part of the electronic examination system to prevent copy and paste of source material.

7. Electronic vs Paper Exams

7.1. It appears that the switch from paper to electronic examinations was met with approval, although there are areas where development is needed. At the same time, the EQE was also switched to electronic format and it appears that the EQE

Supervisory Board, with the assistance of the EPO and *epi*, is intending to continue with the electronic from now on. In 2022 and 2023, the EQE will retain substantially the present format but, in 2024, it seems there will be a complete change in format. It is considered that the system used for the EQE in 2021 was reasonably effective, in particular in terms of invigilation. It therefore seems appropriate for the FC and FD examinations to remain in electronic format. As the system used for the EQE provided audio and visual invigilation and otherwise appears to be adaptable to the FC and FD examinations, it would seem to be appropriate to use that system for those examinations. Thus, candidates would only need to get used to a single system.

7.2. A problem with an electronic format for examinations is that of general and screen fatigue. It is not recommended that candidates spend up to six continuous hours working on a single screen – this typically does not occur in a working day and so the exams should not require this either. It is therefore considered that the maximum time for any of the examinations should be four working hours. There could be compulsory break times during the examinations and the system should automatically upload the candidates work at a fixed time with no requirement for the candidate to do the uploading. It is suggested that, for a four-hour examination, there would be a compulsory break of fifteen minutes, during which time the screen would go blank so that candidates cannot add to their answers during this time. Similar arrangements should be made for shorter examinations.

7.3. An alternative is to divide the examinations into discrete sections, as occurred with the 2020 EQEs. This would avoid candidates having to take an enforced break potentially in the middle of a question and then having to return to the same question to finish it. For

example, FD1 sections A and B could be separated so that the candidates can take a more natural break between the two parts.

7.4. In order to keep the examinations to a maximum length of four hours, it would be necessary to ensure that the papers are short enough for a candidate to have a reasonable possibility of finishing the examination in the available time. The examinations should also be designed such that there is no requirement for providing in the answers comments on points which are irrelevant to the overall answer.

7.5. It was recognised that putting the examinations in electronic format has its drawbacks as well as its advantages. Care would have to be taken to ensure that no candidate is disadvantaged by the use of an electronic system. It therefore may be necessary to enable candidates who would otherwise be disadvantaged to take the examinations in paper form or to take the examinations at a special site.

7.6. The responses to the call for evidence generally did not see a need to change from the present examination system to a university-based examination system or a continuous assessment system, although there were a few responses in this direction. We considered that an examination system is appropriate for assessing whether a candidate meets the standard for registration and that the other assessment systems were not appropriate as they would not lead to a uniform assessment process or would be too expensive or time-consuming.^[P. 58]

7.7. If the examinations were to revert to paper examinations, it is considered that the present format is suitable but the same points as regards the syllabi, content of the examinations, time for each examination and marking for the examinations made above also apply. In this case, however, the venues for the examinations should be improved,

whilst maintaining good accessibility. For example, the Crypt has been described as small, noisy, and dark, which may not provide ideal examination conditions.

8. The Litigation Skills Certificate

8.1. It was considered that, as long as each candidate takes the FC examinations and they and FD1 cover the 'black letter' and tactical aspects of litigation, as presently covered by the LSC, there may be no need for the LSC to be a compulsory part of the qualification for entry onto the Register. However, it was considered that the 'advocacy' part of the LSC should be made an available optional post-registration training for those wishing to specialise in oral proceedings before the EPO or conducting litigation before IPEC or, if further qualified, before the High Court and above.

9. Other Examinations

9.1. It was questioned whether there was a need for examination beyond registration. It was generally thought that this was not necessary. This would not necessarily apply for the Higher Court Litigation Certificate or the Higher Courts Advocacy Certificate. The only other question was whether there should be an examination route to entry on the trade mark register for UKPAs. It was also questioned whether UKPAs with suitable experience should be allowed onto the trade mark register without examination.

9.2. It was considered that, if a registered UKPA wishes to specialise in a particular area or areas, such as becoming a design attorney or specialising in Supplementary Protection Certificates, for example, there should be no requirement for examination. However, there should be provision of training in specialised areas which should be acknowledged, for instance by way of a certificate.

10. The Timing of The Exams

10.1. There are issues with the timing of the examinations. Most candidates enter the profession in the autumn of year 0. They are unlikely to attempt the FC examinations in the same year and so most candidates will take the FC examinations in autumn/winter of year 1, after about one year in the profession. If our recommendation is accepted, this might require any training providers to adapt their training schedules to an autumn/winter examination.

10.2. If a candidate passes the FC examinations in year 1, they are entitled to attempt the FD examinations in November of year 2, after about two years in the profession. It is considered that, for many candidates, this may be too early to take all the FD examinations as they may not have received full training or gained enough experience for all the FD examinations in those two years. Also, in the February/March of year 3, they will usually attempt the pre-EQE examination.

10.3. If a candidate does not attempt the FD examinations in November of year 2, they may attempt them in November of Year 3. However, assuming that the candidate passed the pre-EQE, they will likely be attempting the full EQE in February/March of year 4.

10.4. Thus, each candidate has a few very full years of preparation for and taking examinations. This can lead to examination overload and can also lead to confusion between UK law and EPC law, especially as regards inventive step.

10.5. It seems unlikely that any changes to the schedule for the UK examinations and EQE can be made in the near future. It may be that, in the future, the whole format of the EQE will change, which may relieve the examination overload. For the present, we note that both the UK examinations and the EQE are modular. Effective use of the modular system can lead to less examination pressure.

10.6. It was questioned whether the examinations could be set twice a year. This was attempted previously but the pressure on resources and the limited number of candidates meant that the attempt did not succeed. It may be possible, if the UK examinations remain electronic and modular, for there to be two sittings a year. However, the pressure on resources could again be a problem. This may be limited to some extent if one of the sittings was limited to re-sitters. However, that may not give resitters time to prepare for the resit, even if the results were available within three months of the first sitting.

11. Exemptions

11.1. As noted above, there are proposals for changing in a radical way the format and timings for the EQE. In the responses to the call for evidence, questions were raised about the fact that a candidate does not need to take FD2 and FD3 if the candidate has passed the EQE. It was pointed out that it is possible to pass the EQE while not passing Papers A and B. A candidate could obtain 45 marks each for Papers A and B (thus failing papers A and B) but obtain 55 marks (or more) for each of Papers C and D, thus accumulating at least 200 marks and obtaining an overall pass. No such 'compensable fail' system is used in the FD examinations and so it was questioned whether it was appropriate for an exemption from FD2 and FD3 to be granted for candidates who only achieved a compensable fail for Paper A or Paper B. It was also indicated that the view was that Papers A and B of the EQE are less stringent than FD2 and FD3.

11.2. The situation will be complicated by changes to the EQE which may be implemented by 2024. It may be that the stringency of examination of the subjects of FD2 and FD3 in the EQE will be further reduced and so the exemptions may not be justified. In addition, there may no longer be a direct comparison of papers.

12. Conclusions and recommendations

12.1. In light of the above, we therefore **recommend** that:

- IPReg, CIPA and the PEB investigate whether early registration of candidates should be implemented.

12.2. We also **recommend** that:

- qualification for the Foundation Certificate should be via the PEB FC examinations, with all course providers teaching to the same syllabus.

12.3. We also **recommend** that:

- the PEB has as a continuing task of ensuring that the content of each FD examination remains limited to its core area; and
- the PEB has a continuing task of ensuring that the length of all the FD examinations is maintained in a defined size range from year to year.

12.4. We also **recommend** that:

- the PEB does not make available marking schedules (as occurs with the EQEs) to candidates but provides more detailed examination reports and provides train-the-trainer sessions immediately after release of the results

for any FD paper; and

- the PEB should make it clear that, for each of papers FD2, FD3 and FD4 and for each questions in paper FD1, the examiners are looking to see whether the answer as a whole merits a passing mark so that candidates do not concentrate on ‘mark gathering’.

12.5. We also **recommend** that:

- when taking the FC and FD examinations, candidates should have read-only access to a limited selection of sources to be determined by the PEB.

12.6. We also **recommend** that:

- the FC and FD examinations should continue to be held online and, if appropriate, should use the same system as is used for the EQE.

12.7. We also **recommend** that:

- the PEB, together with IPReg and CIPA, should investigate the use of the electronic examination system used for the EQE to see whether it can be adapted to meet the requirements of the FC and FD examinations and allow read-only access to selected sources;
- the PEB should adapt the examinations and marking schedules as necessary so that the maximum working time for any examination

can be limited to four working hours, excluding any additional time that is required for e.g. students with reasonable adjustments, breaks, or uploading/downloading time; and

- the PEB and IPReg should consider whether the invigilation system used by the system is sufficient.

12.8. We also **recommend** that:

- the PEB, IPReg and CIPA should encourage employers to support their candidates in effective use of the modular examination systems without affecting career progression; and
- the PEB, IPReg and CIPA should look at the scheduling of the UK examinations once more is known about how the proposed changes to the EQEs will be implemented in 2024 and beyond, so as to avoid potential clashes.

12.9. We also **recommend** that:

- the PEB, IPReg and CIPA should investigate whether having two sittings a year is a practical proposition.

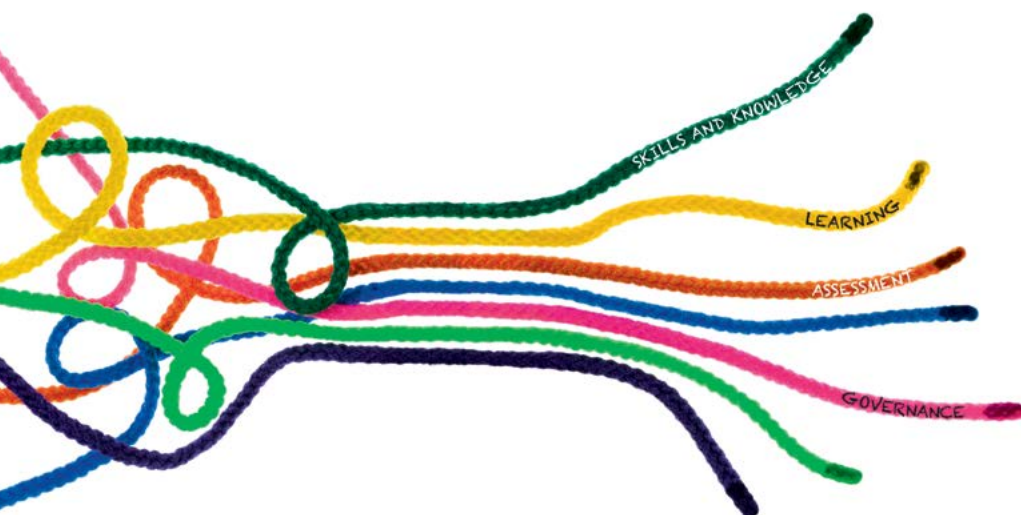
12.10. If, as expected, the UK examination system remains in electronic format, we **recommend** that:

- the examinations should be spread over two weeks so that there is a gap of a day between each FD paper and there is only one FC paper per day.

12.11. We also **recommend** that:

- IPReg, with the assistance of the PEB and CIPA, should investigate whether the exemptions from FD2 and FD3 in light of a full pass of the EQE are appropriate.

12.12. As noted at the end of chapter 3, any changes should be reviewed to ensure that, as far as possible, they encourage an increase of diversity and inclusion in the profession.



CHAPTER 4 – GOVERNANCE

1. Introduction

1.1. The Mercer Review Call for Evidence asked a number of questions regarding the administration of training and assessing UK patent attorneys:

Q1a) Is the relationship between CIPA, IPReg and the PEB appropriate for the administration of professional examinations?

Q1b) Do you have any comments about the administration of the PEB examinations?

2. Methodology

2.1. This sub-group was tasked with reviewing the responses to these questions. More generally, we considered the roles of CIPA, IPReg and the PEB and whether any changes should be made.

3. The relationship between CIPA, the PEB and IPReg

3.1. There was evidence that the roles of CIPA, IPReg and the PEB are not fully understood. Respondents were generally not aware that the PEB operates independently of CIPA. Whilst the PEB was established as a Committee of CIPA, IPReg required the PEB to have independent governance and financial control. The PEB operates from the CIPA office and its staff are employed by CIPA. The recent move to electronic examinations as a result of the pandemic has reinforced this, with the profession generally viewing the PEB and CIPA as one and the same.

3.2. Where the relationship is understood, this is mainly because the respondents were more closely involved in the work of the PEB or CIPA. Although the independence of the PEB from CIPA was understood, respondents questioned why this separation was

necessary. This was amplified by questions about the extent to which the PEB is truly independent of CIPA and observations about the extent to which CIPA underwrites the financial stability of the PEB. Questions were also raised about the potential additional costs for candidates of the governance structure of the PEB.

3.3. Observations were made about other legal professional examinations, most notably the examinations taken by legal executives, who fall within the scope of the Legal Services Act (LSA). It was noted that the Chartered Institute of Legal Executives (CILEx), the professional body for legal executives and the Approved Regulator under the LSA, sets and administers examinations directly. Respondents questioned why the PEB needed to demonstrate independence from CIPA if that was not the case for CILEx.

3.4. A number of respondents questioned the structure of the PEB and the need for a mixture of lay and professional members on the PEB. Whilst there was no consensus on how the PEB should be structured, respondents with a closer knowledge of the PEB suggested that the complexity of the PEB's Governance Board and governance arrangements are a factor of the requirement for the PEB to demonstrate independence from CIPA.

3.5. On the subject of lay representation on the PEB, there was a consensus that bringing in examination and assessment expertise from outside the profession was a good thing. Some respondents questioned if the use of lay members in the independent governance of the PEB was the most effective use of time, as the PEB also employed other external consultants to deliver operational activities and CIPA employs a specialist Head of Qualifications to support the working of the PEB.

3.6. Observations were made about

the openness and transparency of the PEB, particularly in relation to the marking of examination scripts and appeals. Respondents questioned the PEB's approach to dealing with complaints and controversies and the PEB's ability to communicate with candidates and employers. Some respondents suggested that the PEB's issues with communication stem from the separation from CIPA.

3.7. The governance and financial separation of the PEB from CIPA comes from a time when independence was a constant feature of discussions between CIPA and IPReg, to ensure that CIPA did not carry out any regulatory activities in its role as a representative body. Perhaps the key question here is the extent to which the administration of professional examinations is a regulatory activity. The accreditation and supervision of an examining body clearly is a regulatory activity but, as is demonstrated in the CILEx model, professional examinations can be delivered by a representative body under the supervision of the regulatory body.

4. Conclusions and recommendations

4.1. In light of the above, we **recommend** that:

- IPReg should review, with CIPA, the requirement for the PEB to be independent of CIPA in terms of its governance and financial control.

The review should include the extent to which the requirement for the PEB to be independent contributes to the financial viability of the UK patent attorney qualifying examinations and perceptions of a lack of transparency or openness. The review should evaluate other models, such as the professional examinations for legal executives, when considering what, if any, improvement could be made.

4.2. We also **recommend** that:

- IPReg should create a set of occupational standards for patent attorneys.

The occupational standards will provide the framework for the establishment of the syllabus for trainee patent attorneys, identifying what knowledge and skills need to be acquired and assessed. The occupational standards can form the basis for the accreditation of examining bodies and the guidance of training providers such as universities. This should be more developed and detailed than the existing IPReg Competency Framework.

4.3. With the establishment of a set of occupational standards, and for the reasons given above, IPReg should consider requiring all trainees to pass a common set of examinations, regardless of the training route undertaken. Where trainees undertake university courses, as is often the case at foundation level, the trainees should sit the relevant examination papers to ensure that the occupational standards have been met. Occupational standards will open up the market to other training providers, who may provide courses or other types of learning such as remote learning, to prepare trainees for examination.

4.4. We also **recommend** that:

- IPReg should test the agility of the existing examination system, to ensure that it can be responsive to a rapid change in the skills and knowledge required by the patent attorney profession.

For example, the pandemic has significantly accelerated to move towards videoconferencing for proceedings before the EPO and other bodies. Patent attorneys are addressing this through CPD and future patent attorneys will need to have this incorporated into initial training and assessment.

CHAPTER 5 – SUMMARY OF RECOMMENDATIONS

1. Recommendations from Chapter 1

1. The Foundation Certificate examinations should focus on the core knowledge and skills required by a patent attorney. This will include some basic knowledge of trade mark, design and copyright law, but this should be commensurate with what a patent attorney is likely to face in day-to-day practice⁶. However, the syllabus should include all the ‘black-letter’ law (basic standard elements or principles) which is relevant for the LSC, so that this law does not need to be duplicated by the LSC;

2. The scope of the International Law syllabus be revised to focus on core areas (EP, PCT, US, JP, CN) and instances where there are significant/important differences in patent law (e.g. 30 vs 31 month national phase entry, allowability of method of treatment or second medical use claims, allowability of computer programs as such). Questions should be structured to give sufficient choice for candidates working in different sectors, where the relative importance of countries may differ. We also questioned to what extent it is necessary to examine international law relating to trade marks, designs and copyright;

3. All candidates should have a good knowledge of professional ethics prior to registration, and before undertaking the LSC; and

4. All candidates should have a good knowledge of evidence for the UK court system as it applies to patents and before undertaking the LSC.

5. FD2 should be limited to drafting a

⁶ However, for attorneys wishing to develop further knowledge in these areas, additional training should be provided by way of non-examined courses, e.g. e-learning modules or in-person training courses.

patent application, relating to generally-accessible technology, suitable for filing at the IPO in a form where the claims are clear, novel and arguably inventive over the prior art presented in the question and where the description is sufficient;

6. FD3 should be limited to answering an official letter from the IPO which raises novelty and inventive step objections and providing a set of claims which deals with the objections and which does not add matter or lack clarity;

7. FD4 should be limited to requiring the candidates to demonstrate that they can construe a set of claims according to the case law in the UK, evaluate prior art, determine whether the claims as construed are novel and inventive over that prior art and determine whether the activities of a potential infringer are infringing acts under UK law and should not require detailed advice on points not relevant to the main topics;

8. FD1 should not cover any of the areas covered by the other examinations but should include at least one question about a situation which could arise in litigation of a patent in the UK courts, involving application of the black-letter law on litigation which should be part of the FC syllabus (see above); and

9. Similarly, FD2, FD3 and FD4 should not require advice on points which are examined in FD1.

10. Any changes to the syllabi for the Foundation and Final examinations should be reviewed to ensure that, as far as possible, they encourage an increase of diversity and inclusion in the profession.

2. Recommendations from Chapter 2

1. CIPA should provide better information on its website about what is required to enter the profession and to

progress in the profession and keep such information under review;

2. CIPA should provide such information to careers services;

3. The PEB should make its website easier to navigate;

4. IPReg should require registrants to make available to any possible recruit details of the training scheme which the recruit will follow, preferably in the form of a training contract; and

5. The Informals should continue, with the support of CIPA, its efforts to assist possible recruits in understanding such information.

6. A common examination should be passed by all candidates at each stage.

7. IPReg should accredit the syllabi for the FC and FD examinations and the PEB for setting the FC and FD examinations;

8. IPReg should require all candidates to take the PEB FC and FD examinations;

9. Any provider should be allowed to

provide training for the FC and FD examinations without requiring any accreditation; and

10. CIPA and the Informals should co-operate to determine what formats of training are lacking and encourage providers to provide such training.

11. CIPA and IPReg should encourage its members and registrants to adopt career progression systems which are not solely linked to examination success and training systems which encourage candidates to make use of the modular system so that they take any particular examination only when they appear to be ready to take that examination.

12. The LSC course should be cut down to the practical matters of advocacy and the preparation for advocacy; and

13. The black-letter law content of the LSC should be transferred to the FC syllabus and examination, the application of the black-letter law in giving written advice to a client should be transferred to the FD1 syllabus and examination and the practical aspects of the course should be retained in a reduced assessed LSC.

14. There should be a CPD requirement for all registrants and it should be compulsory to report on meeting the CPD requirement to IPReg. We consider that the onus for carrying out CPD should be on each registrant individually and that each registrant should be prepared to provide details of her or his CPD to IPReg on a random basis.

15. There should be opportunities for registrants to expand their areas of expertise but these should generally be voluntary. We welcome CIPA's decision to make all its webinars more widely available and to expand the scope of the webinars. IPReg and CIPA should also encourage other providers to offer training in non-examined areas.

16. IPReg, CIPA and CITMA should investigate whether there should be a route to registration as a trade mark attorney other than via a university course, for instance by an advanced examination at the same level of the FD examinations or by following an assessed training course.

17. As regards practical litigation skills, it is considered that it should be compulsory for all registered patent

CIPA Council welcomes comments from all stakeholders on the report of the Mercer Review and asks that written responses are sent to CIPA's Chief Executive, Lee Davies, by **31 December 2021**. CIPA Council is happy to meet with interested parties to discuss the content of the Mercer Review where respondents would find this helpful in making their submissions. Responses should be sent to the Executive Assistant to the Chief Executive, Charlotte Russell at charlotte@cipa.org.uk and should include 'Mercer Review' in the email header.

attorneys to complete an assessed course on this subject. However, this course should be limited to the practical aspects of litigation skills and that the other parts of the present course should be incorporated into the FC and FD syllabi and examinations (see above).

18. As regards higher court advocacy, we consider that the training for this subject should remain as it is, with a requirement to follow an assessed training course before the grant of a certificate.

3. Recommendations from Chapter 3

1. IPReg, CIPA and the PEB investigate whether early registration of candidates should be implemented.

2. Qualification for the Foundation Certificate should be via the PEB FC examinations, with all course providers teaching to the same syllabus.

3. The PEB has as a continuing task of ensuring that the content of each FD examination remains limited to its core area; and

4. The PEB has a continuing task of ensuring that the length of all the FD examinations is maintained in a defined size range from year to year.

5. The PEB does not make available marking schedules (as occurs with the EQEs) to candidates but provides more detailed examination reports and provides train-the-trainer sessions immediately after release of the results for any FD paper; and

6. The PEB should make it clear that, for each of papers FD2, FD3 and FD4 and for each questions in paper FD1, the examiners are looking to see whether the answer as a whole merits a passing mark so that candidates do not concentrate on 'mark gathering'.

7. When taking the FC and FD examinations, candidates should have

read-only access to a limited selection of sources to be determined by the PEB.

8. The FC and FD examinations should continue to be provided in electronic format and should use the same system as is used for the EQE.

9. The PEB, together with IPReg and CIPA, should investigate the use of the electronic examination system used for the EQE to see whether it can be adapted to meet the requirements of the FC and FD examinations and allow read-only access to selected sources;

10. The PEB should adapt the examinations and marking schedules as necessary so that the maximum working time for any examination can be limited to four working hours, excluding any additional time that is required for e.g. students with reasonable adjustments, breaks, or uploading/downloading time; and

11. The PEB and IPReg should consider whether the invigilation system used by the system is sufficient.

12. The PEB, IPReg and CIPA should encourage employers to support their candidates in effective use of the modular examination systems without affecting career progression; and

13. The PEB, IPReg and CIPA should look at the scheduling of the UK examinations once more is known about how the proposed changes to the EQEs will be

implemented in 2024 and beyond, so as to avoid potential clashes.

14. The PEB, IPReg and CIPA should investigate whether having two sittings a year is a practical proposition.

15. The examinations should be spread over two weeks so that there is a gap of a day between each FD paper and there is only one FC paper per day.

16. IPReg, with the assistance of the PEB and CIPA, should investigate whether the exemptions from FD2 and FD3 in light of a full pass of the EQE are appropriate.

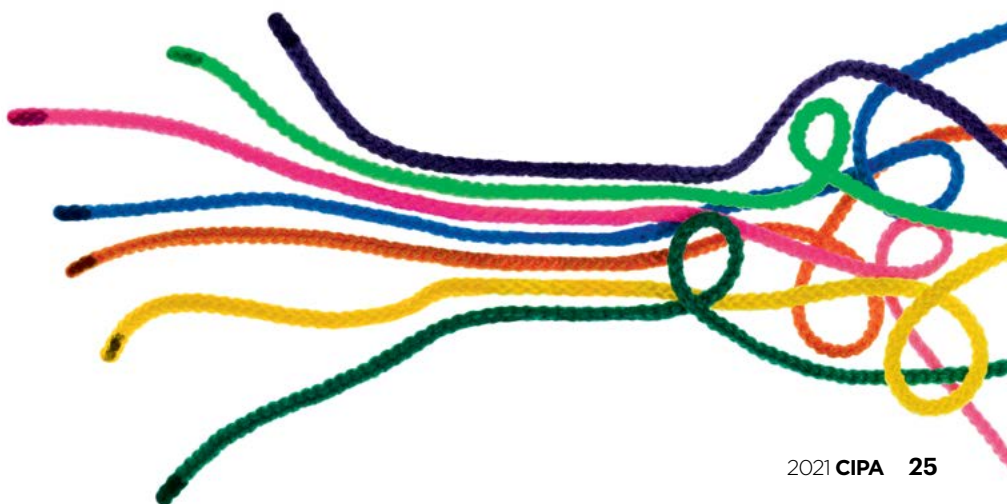
17. Any changes should be reviewed to ensure that, as far as possible, they encourage an increase of diversity and inclusion in the profession

4. Recommendations from Chapter 4

1. IPReg should review, with CIPA, the requirement for the PEB to be independent of CIPA in terms of its governance and financial control.

2. IPReg should create a set of occupational standards for patent attorneys.

3. IPReg should test the agility of the existing examination system, to ensure that it can be responsive to a rapid change in the skills and knowledge required by the patent attorney profession.



Annex 3 – The Call for Evidence, January 2020

The Mercer Review of the education, training and assessment of UK Chartered Patent Attorneys

The Chartered Institute of Patent Attorneys (CIPA) is the professional body for patent attorneys in the UK. CIPA is the Approved Regulator for the UK patent attorney profession, as defined in the Legal Services Act 2007 (LSA). CIPA delegates its regulatory responsibilities under the LSA and the Copyright, Designs and Patents Act 1988 to the Intellectual Property Regulation Board (IPReg).

CIPA is undertaking a review of the education, training and assessment of UK Chartered Patent Attorneys in its capacity as the representative body for patent attorneys in the UK. The steering group for the review is chaired by Chris Mercer and so the review has been called “the Mercer Review”. The Mercer Review is a comprehensive consultation on the education, training and assessment arrangements for entry onto the UK Register of Patent Attorneys (the Register) maintained by IPReg as a Registered Patent Attorney (RPA) and for election as a Fellow of CIPA so that the Fellow can use the reserved title “Chartered Patent Attorney” (CPA).

The Mercer Review is deliberately broad in scope. CIPA wishes to receive evidence from stakeholders on any aspect of the current arrangements for the education, training and assessment of trainee patent attorneys and how these arrangements could evolve to meet the future needs of the profession and users of the IP system. Whilst this Call for Evidence sets out a number of key

questions, respondents should not feel limited to making observations on only these questions and should feel free to raise additional questions. Respondents should feel free to respond in as much depth as they feel appropriate.

The Call for Evidence closes at 5pm on Friday 14 February, 2020. Please send responses to MercerReview@cipa.org.uk.

Background

The Patent Examination Board (PEB) is a committee of CIPA but has an independent governance structure and is responsible for its own financial affairs, including the setting of examination fees. The PEB is governed by a board comprising lay members with expertise in education and examination and members drawn from the patent attorney profession. The PEB is set up to be independent to be in compliance with the requirements of the LSA.

The PEB is accredited by IPReg to set the professional examinations for qualification as a patent attorney and entry to the Register.

The PEB does not oversee the education and training of trainee patent attorneys. Professional education and training is supervised by employers and is a mix of formal and informal education and training leading to the PEB examinations. Employers are free to design training plans based on the needs of individual trainees. Whilst there are no overarching requirements for professional education and training, IPReg has published a competency framework

setting out the general and technical skill sets a trainee patent attorney is expected to cover.

The assessment system has two levels of examination set by the PEB: Foundation Certificate and Final Diploma. The Foundation Certificate examinations cover UK Patent Law (FC1); English Law (FC2); International Patent Law (FC3); Design and Copyright Law (FC4); and Trade Mark Law (FC5). The Final Diploma examinations cover Advanced IP Law and Practice (FD1); Drafting of Specifications (FD2); Amendment of Specifications (FD3); and Infringement and Validity (FD4).

Successful completion of the PEB examination series enables entry onto the Register and election as a Fellow of CIPA. There is a CPD requirement for newly qualified patent attorneys to obtain a qualification in Litigation Skills within three years of entry onto the Register.

A candidate holding one of the law qualifications listed in Schedule 3 of the IPReg Rules for the Examination and Admission of Individuals to the Registers of Patent and Trade Mark Attorneys 2011 may apply to be exempted from one or more of the Foundation Certificate examinations. These include qualifications provided by Queen Mary University of London, Bournemouth University and Brunel University. The PEB does not grant exemptions from the Final Diploma examinations. IPReg recognises success in the European Qualifying Examinations (EQE) as equivalent to passing FD2 and FD3.

There are no formal education and training or service requirements to be met before undertaking PEB examinations. Trainees will experience different approaches to professional education and training, depending on the size and location of firms and in-house departments, the availability of local supervision and access to courses offered by universities and other course providers.

The Informals is the student body of CIPA. Trainee patent attorneys automatically become members of the Informals on joining CIPA as a Student member and then have access to the seminars and other activities and events organised by the Informals Committee.

Key Questions

The following questions are provided to offer some structure to the consultation but are not exhaustive. Please feel free to make observations or raise questions on issues or topics not covered below.

1. Administration

- a. Is the relationship between CIPA, IPReg and the PEB appropriate for the administration of professional examinations?
- b. Do you have any comments about the administration of the PEB examinations?

2. Foundation Certificate

- a. Do you have any comments about the current knowledge, understanding and practice covered by the Foundation Certificate examinations?
- b. Are there any additional areas of knowledge, understanding or practice that should be covered by the Foundation Certificate examinations?
- c. Are there any areas of knowledge, understanding or practice that should be removed from the Foundation Certificate examinations?
- d. Do you have any other comments about the Foundation Certificate examinations, for example in terms of language, timing, subject matter or training period?

- e. Do you have any comments about the use of university qualifications, such as those provided by Queen Mary University of London, Bournemouth University and Brunel University, as an alternative to the Foundation Certificate?

3. Final Diploma

- a. Do you have any comments about the current knowledge, understanding and practice covered by the Final Diploma examinations?
- b. Are there any additional areas of knowledge, understanding or practice that should be covered by the Final Diploma examinations?
- c. Are there any areas of knowledge, understanding or practice that should be removed from the Final Diploma examinations?
- d. Do you have any other comments about the Final Diploma examinations, for example in terms of language, timing, subject matter or training period?

4. Assessment Methodology

- a. Do you have any comments about the use of closed-book examinations for the Foundation Certificate and Final Diploma examinations?
- b. Are there any other approaches to assessing knowledge, understanding and practice that should be considered in addition to, or as an alternative to, closed-book examinations?
- c. Do you have any comments about the qualifications listed in Schedule 3 of the IPReg Rules for the Examination and Admission of Individuals to the Registers of Patent and Trade Mark Attorneys leading to part or full exemption from the Foundation Certificate examinations?

5. European Qualifying Examinations

- a. Do you have any comments about the current knowledge, understanding and practice covered by the EQE?
- b. Do you have any comments about the administration of the EQE?

- c. Do you have any comments about IPReg recognising success in the EQE as equivalent to passing FD2 and FD3?

6. Litigation Skills

- a. Do you have any comments about the requirement for newly qualified patent attorneys to obtain a qualification in Litigation Skills within three years of entry onto the Register?

7. CPD

- a. Are there any other areas of knowledge, understanding or practice for which CPD should be mandatory following admission to the Register?

8. Education and Training

- a. Do you have any comments about the professional education and training of trainee patent attorneys in preparation for qualification?
- b. Should there be greater guidance on the knowledge, understanding and practice required for trainee patent attorneys to undertake the PEB examinations?
- c. Should there be a mandatory training requirement before a trainee patent attorney is eligible for entry to the PEB examinations? If so, how could this be applied uniformly, given the vast range in size of patent attorney firms and in-house departments?
- d. Do you have any comments about the support provided for trainee patent attorneys by the Informals?
- e. Do you have any comments about the general support available for trainee patent attorneys?

9. Any Other Comments

- a. Do you have any other comments or observations about the education, training and assessment of patent attorneys?

The Call for Evidence was first published at January [2020] CIPA 8-9.

Annex 5 – IPReg Middlesex Review of FD4, 6 March 2017

FD4/P6 Exam Review

Abstract

The main focus of the current research project was to investigate issues prompted by the low and variable pass rate for trainee Patent Attorneys taking the FD4/P6 examination paper. The specific aims of the research were to review: the adequacy of the preparation of candidates for the FD4 examination; the appropriateness of the current assessment methodology; the extent to which the current teaching, learning and assessment arrangements are in line with leading pedagogical practice in the area, and the appropriateness of the technical content of the assessment, given the different technical backgrounds of the candidates.

The research project adopted a mixed methods approach, employing both qualitative and quantitative research tools to gauge the breadth and depth of candidate preparedness in training to qualify as a Registered Patent Attorney and to examine the effects of the design of the examination on how candidates prepare. Initially, an online candidates survey was conducted among the 2014 and 2015 cohorts. The next phase of the research involved conducting in-depth telephone interviews with key stakeholders of the FD4/P6 exam, in this case, examiners, tutors and mentors, and employers. The semi-structured interviews with key stakeholders of the FD4/P6 exam provided an opportunity to validate (or not) the concerns and issues arising in the candidates survey.

The findings revealed that there were mixed views regarding the perceived 'fairness' of the FD4/P6 exam in terms of the technical content. Candidates in the survey

and the majority of employers felt that the FD4/P6 exam tended to favour trainees from a mechanical engineering background and disadvantage those from a chemistry, life sciences or electronics background. However, the majority of examiners, tutors and mentors indicated that the technical subject matter of the FD4/P6 exam paper was not technically demanding, since it was based on everyday mechanical devices. Nor did the outcome of the exam support this perceived technical bias. In terms of tutor support, one concern identified by some of the candidates in the survey was that tutors who had passed the FD4/P6 exam a long time ago would be employing out-of-date techniques in their training. This view was not shared by many tutors who indicated that they kept abreast of the requirements of or changes to the FD4/P6 exam through their trainees or, more importantly, by doing the paper themselves.

There were mixed views on the important issue concerning whether the FD4/P6 exam appropriately tests knowledge and skills in infringement and validity. The majority of employers thought that the exam was well aligned with real life practice. Some, however, noted that the 'artificiality' of the exam precluded the testing of commercial reality and client care skills. A notable finding was the level of uncertainty expressed by some examiners when asked about how effectively the learning outcomes were met by the assessment process, commenting that the FD4/P6 exam was not an academic exercise but rather a test of practical skills. In addition, some of the examiners and employers were concerned

about the 'strict marking schedule' for the FD4 exam, such that marks appeared to be given away for trivial points which did not reflect real life patent practice nor test the overall competence of candidates in advising their client. There was consensus amongst all stakeholders about calls for greater transparency of the FD4/P6 exam paper in terms of how the examiners write the questions and what they are looking for in the allocation of marks, in order to bridge the gap in understanding between examiners' expectations and what is required of candidates to pass the FD4 exam.

Practising past papers was the main pedagogic approach by examiners, employers, tutors and mentors in preparing candidates for the FD4/P6 exam. Other effective techniques put forward by key stakeholders included: attempt all parts of the paper; be consistent in the analysis; and think about the paper as a whole.

Overall, candidates attributed failure of the exam to inadequacy in the transparency of the exam requirements and lack of training/support, rather than their own lack of preparation. Candidates who passed thought that they were greatly assisted by training, guidance and feedback opportunities, employing strategies for passing and exam preparedness.

Practical suggestions to tackle the issue of the low and variable pass rate of the FD4 exam have been generated from the findings in this report and include: 'training the trainers'; the opportunity for trainees to shadow a real life validity and infringement opinion; reviewing the appropriateness of the exam format in terms of implementing computer-based examinations and enhancing the focus of the FD4 exam to one that is developmental and has a practice requirement, such as doing coursework, undertaking a viva or a case study; reviewing the FD4 exam mark scheme for upcoming

Middlesex University Research Team: Professor Carol Costley (Project Lead); Professor David Boud (Assessment Expert); Dr Nico Pizzolato (IWBL Senior Researcher); Susan Scott-Hunt (School of Law Senior Researcher); Dr Lisa Clarke (Research Fellow)

exams; and aligning the learning outcomes to the assessment criteria.

Background to the project

The Intellectual Property Regulation Board (IPReg) had commissioned research by Middlesex University into a review of a specific part of the examinations necessary to qualify as a patent attorney, based on the Quality Assurance Agency's (QAA) report (2015)¹ about the apparently low and variable pass rates of the FD4/P6 exam. The FD4/P6 exam paper tests the knowledge and skills expected of a registered patent attorney in advising on UK patent infringement and validity issues.

Using PEB data for all candidates, the FD4/P6 exam pass rates have fluctuated over the years, but it still has the lowest average pass rate of all the Final Diploma papers in the last five years, reaching as low as 36.45% in 2012, rising to 41.62% in 2014 but then dropping to 38.81% in 2015.

Following the QAA recommendation to investigate carefully the reasons why the FD4/P6 exam paper should have had such a poor candidate success rate over an extended period, the Patent Examination Board (PEB) in collaboration with IPReg, agreed on IPReg's proposal to fund independent research to investigate this issue. As a result, IPReg established a Steering Group to commission and manage this external research project.

IPReg commissioned the expertise and experience of a research team based in the Institute for Work Based Learning (IWBL) and the School of Law at Middlesex University, to undertake independent research in reviewing the preparedness of trainee Patent Attorneys and PEB's assessment methodology for the FD4/P6 examination. The IWBL has a strong track record in practice-based research, pedagogical approaches for work-based learners and professional learning programme content and assessment.

¹ (QAA, 2015) External assurance of the patent examination board's policies, procedures and processes, Professor Steve Bristow.

Research aims

The focus of the research is to investigate issues prompted by the low and variable pass rate for trainee Patent Attorneys taking the FD4/P6 examination paper.

Based on the original Research Brief, the main aims of the research are to review:

- Adequacy of the preparation of candidates for the FD4 examination
- Appropriateness of the current assessment methodology
- Extent to which the current teaching, learning and assessment arrangements are in line with leading pedagogical practice in the area
- Appropriateness of the technical content of the assessment, given the different technical backgrounds of the candidates.

Research methods

The research project adopted a mixed methods approach, employing both qualitative and quantitative research tools (detailed below). Adopting a mixed methods approach was seen as important to gauge the breadth and depth of candidate preparedness in training to qualify as a Registered Patent Attorney and to examine the effects of the examination on how candidates prepare.

In addressing the key aims of this project, the following research tools were employed:

1. **An online candidates survey** – the initial phase of the project employed a short, online questionnaire, using specialist online survey software, Qualtrics, which is a technique that the research team has used on other projects, and where results can be quickly produced. The questionnaire was designed in collaboration with the Steering Group. It focused on the key research aims and comprised questions on the following topics:

- Preparation for the FD4/P6 examination
- Practice opportunities in the workplace
- Opportunities of support and take up to assist candidates in their training and development for the FD4/P6 exam, including extra support offered to re-sitters
- What candidates believe they need to do to be successful in the exam

- Perceived reasons why candidates felt they failed the exam
- Perceived 'fairness' of the FD4/P6 paper
- Specialist knowledge advantage/disadvantage

The survey was administered to 2014 and 2015 candidates of the FD4/P6 exam via the Chartered Institute of Patent Attorneys (CIPA) between 6 and 24 September 2016. The survey was disseminated to 340 candidates and 176 respondents completed the questionnaire, giving a response rate of almost 52%. In research, this is considered a good response rate for a survey and, presumably, reflects the importance of reviewing the FD4/P6 examination experiences among trainee patent attorneys.

2. **Semi-structured interviews** – the next phase of the research involved conducting in-depth telephone interviews with key stakeholders of the FD4/P6 exam, in this case, examiners, tutors and mentors, and employers. Seven examiners participated in the research and included the Chief Examiner of the Finals, The Principal Examiner of the FD4 exam and five marking examiners. In conducting interviews with examiners, it was important to distinguish between setters of the paper and the marking scheme and those who mark according to the mark scheme given to them. In this way, we could ask the former group particular questions on the design of the FD4/P6 examination such as, how the exam paper is constructed, and how the construction of the exam and the mark scheme is linked to the learning outcomes.

In terms of training or coaching the FD4/P6 candidates, the interview participants were either tutors or mentors or both. Eight tutors and mentors had participated in the research with diverse experiences of tutoring and/or mentoring FD4/P6 candidates.

The Head of Education at CIPA and a former member of the CIPA Informals Committee facilitated access to examiners and tutors/mentors respectively during October 2016, disseminating at the same time a one page information sheet outlining the research project and the topics for interview. Initially, there was a low response

from examiners in their ability to participate in an interview, mainly due to the timing of the research interviews leading up to the FD4 exam in October 2016. As a result, the research team was advised by IPReg to conduct the interviews with examiners at a later date in order to increase their engagement levels. Several interviews with examiners were conducted in late January 2017.

The employer interviews were conducted late November and early December 2016. IPReg facilitated access to the employers by circulating an information sheet to their main points of contact of IPReg registered firms and to the IP Federation requesting that it be disseminated to their members. In total, eight employer interviews were conducted, seven were law firms and one was an industry firm with an in-house patent department. Two of the employers were large firms (i.e. 250 or more employees), three of the employers were medium size firms (i.e. 50-249 employees) and three of the employers were small firms (less than 50 employees). There was an initial concern by the research team about the 'imbalance' of interviews with private practice and industry firms. However, this situation was more representative of IPReg's regulated community (IPReg, personal communication).

The majority of interviews lasted between 35 and 45 minutes, using a semi-structured interview guide, and permission was sought beforehand to tape record the interviews. For the examiners, tutors/mentors and employers, similar topics were covered, as outlined below:

- Design and aims of the FD4/P6 exam paper/knowledge and skills assessed (Examiners)
- Support and training opportunities
- Candidates' concerns of the FD4/P6 exam and expectations of tutor/mentor
- Candidate performance in the exam and reasons for low pass rates
- Time pressure of exam
- Technical content of FD4/P6 exam and advantage/disadvantage
- Candidate preparation for the FD4 exam and techniques for passing

The interviews with examiners, tutors and mentors, and employers provided an opportunity to validate (or not) the concerns and issues arising in the candidates survey.

The research project and research tools had received ethical approval from Middlesex University's Ethics Committee, ensuring the anonymity and confidentiality of the research participants.

Analysis

Data from the survey were analysed using statistical software (e.g. SPSS), to explore the data and identify patterns. Qualitative data techniques were used to analyse the semi-structured interviews, identifying themes to interpret the data, quoting freely from the interviews to illustrate the results. In presenting the findings, the research team have triangulated the different data sources, synthesising both quantitative and qualitative findings, so as to offer an integrated account of issues that impact pass/fail rates, thereby meeting the aims of the research.

Primarily, the analysis has been developed in collaboration with the Steering Group who seek to learn more about the reasons for the low pass rates of the FD4/P6 exam and identify effective strategies to address this issue. Following a presentation of the emerging survey findings to the Steering Group on 10 October 2016, it was recommended that the research team drill down further into the data to identify whether there are any significant relationships between the type of employer (e.g. private practice, industry) that candidates worked for and candidate preparedness, as well as the year that candidates passed the FD4/P6 exam and opportunities of support and take up – since the 2015 candidates were exposed to greater transparency and further support of the FD4 examination, receiving a new style syllabus with the learning outcomes clearly aligned, a mark scheme with the marks clearly allocated, an Examiner's Report that was clearly set out and sample pass scripts showing the percentage mark awarded (CIPA communication).

It should be pointed out here, that a large proportion of candidates in this survey were employed in private practice, either at the time of passing the FD4/P6 exam or, if they had not passed the exam, when they last sat the exam (demonstrated in the findings). As a result, it was not possible to undertake statistically meaningful analysis of the data that identified differences in candidate preparedness and support between those employed in private practice and those employed in industry. However, there are instances in the analysis where mention is given to observed differences between candidates employed in private practice and industry, taking into account the relatively small sample size of respondents employed in industry.

Similarly, a large proportion of candidates in the survey had passed the exam in 2015 or, if they had not passed the exam, almost all of the candidates had last sat the exam paper in 2015 (demonstrated in the findings). As a result, it was not possible to undertake statistically meaningful analysis of the data that identified differences between candidates' opportunities and take up of support in 2014 and 2015. However, there are instances in the analysis where observed differences between 2014 and 2015 candidates who had passed the FD4/P6 exam are indicated, taking into account the relatively small sample size of the 2014 candidates.

Suggestions to tackle the issue of low pass rates of the FD4 exam

The following ideas and suggestions have been generated from the findings in this report, in this case, from the candidates in the survey and the examiners, employers and tutors and mentors who participated in the semi-structured interviews. These ideas and suggestions will need to be explored further with members of the Steering Group and other interested parties.

Preparing mentors and trainers

The research shows that there is a mismatch between the preparation carried out by tutors and mentors and what is

expected of the candidates in the FD4/P6 examination. The majority of tutors and mentors have not undertaken any formal training or systematic briefing, although, they welcome the opportunity to have a clearer idea of the requirements of the exam. Only one of the tutors/mentors had attended a ‘tutoring the tutors’ programme more than five years ago organised by JEB, which was found to be very helpful since,

“[it provided] clear information about how the paper is going to be marked, which is obviously relevant to how you do the tutorial... It had guidance on how to set up the answer and how to manage your time and it had examples of typical bad reasons for failing”.

Training the trainers would be particularly beneficial for tutors who had sat the FD4/P6 exam a long time ago and, therefore, they may employ an out-of-date technique in approaching their training as indicated by examiners and candidates in this research. This form of preparation is also important because trainers act as the bridge between candidates and the examination, with the potential to inhibit or facilitate understanding of the FD4/P6 exam as identified in the present research. It is suggested that PEB should provide such courses to ‘refresh’ tutors’ and mentors’ ideas and approaches to the exam. Moreover, provision of these ‘training the trainer’ activities has been considered important in other professions, such as, the Association of Chartered Certified Accountants (ACCA),² which enables the tutors to develop their skills in training their students for professional exams.

In addition, the employers in this study would also welcome information from the examiners about how they can support and prepare their trainees for the FD4 exam as well as inform them about what approach they would need to take to help them meet the appropriate standards.

2. See ACCA new tutor excellence programme – www.accaglobal.com/ie/en/discover/news/2016/august/tutor-excellence-programme.html

Shadowing a real life infringement and validity opinion

The findings highlighted the lack of validity and infringement experiences identified by the candidates themselves, which is not surprising given the scarcity of such cases in private practice, and the lack of delegation of such high value work to trainees. As a result, one of the mentors in the research, who was previously a tutor for the FD4/P6 exam candidates, suggested that trainees be given the opportunity to shadow a colleague working on an infringement and validity opinion, evaluating this as a useful training aid: “so I have trainees, on occasion, I have asked them to shadow me when I’m doing infringement and validity... [it’s] really really helpful”. Shadowing a real-life validity and infringement opinion could be part of the employers’ checklist of experiences for each of their trainees in the 2-3 years leading up to the FD4 exam. For those without access to such an opportunity a training resource which gives an exemplar of a real case including interviews with experienced practitioners, illustrations of the preparation required, steps undertaken, timelines, etc. would be useful.

The appropriateness of handwriting for exams

A common issue raised with regard to many examinations is whether it is still necessary for them to be completed in long-hand when almost everyone in the modern workplace and at home uses a keyboard to write text. In the current research, in tackling the issue of time pressure in the exam, which is exacerbated by candidates having to write their answers by hand, the findings suggest that candidates be allowed to use a word processor in the exam since they can type their responses faster. This is the more favourable tool identified by the candidates since they feel that it would enhance their performance in the exam, and a more appropriate exam format for many of the examiners in so far as it improves the marking experience, due to the poor hand writing skills of many candidates taking the exam.

While there has been little research on the use of computer-based examinations in professional contexts, it has been explored in some studies in higher education.³ It can be concluded that there is very little difference between hand writing and word processing on the ability of students to complete responses or on the nature of the responses themselves. Some students express a preference for one mode or another, but this is often dependent on their prior experience with them. As word-processing has become more ubiquitous, even more so for office workers than for students, it can be concluded that there is no substantive reason why word processing not be permitted for examinations. The only issues of concern are practical ones. If word processing were used with an unseen examination, then it would need to be conducted in a computer laboratory or with supplied laptops with internet access disabled. A brief practice session prior to the unveiling of the paper should be permitted to enable familiarity with

3. See e.g. Melody Charman (2014). Linguistic analysis of extended examination answers: Differences between on-screen and paper-based, high- and low-scoring answers, *British Journal of Educational Technology*, 45, 5, 834–843. DOI:10.1111/bjet.12100
Sigal Eden and Yoram Eshet-Alkalai (2013). The effect of format on performance: Editing text in print versus digital formats, *British Journal of Educational Technology*, 44, 5, 846–856. DOI:10.1111/j.1467-8535.2012.01332.x
Nora Mogey, John Cowan, Jessie Paterson and Mike Purcell (2012). Students’ choices between typing and handwriting in examinations, *Active Learning in Higher Education*, 13(2) 117–128. DOI:10.1177/1469787412441297
Nora Mogey & James Hartley (2013). To write or to type? The effects of handwriting and word- processing on the written style of examination essays, *Innovations in Education and Teaching International*, 50:1, 85-93, DOI: 10.1080/14703297.2012.748334
Nora Mogey and Andrew Fluck (2015). Factors influencing student preference when comparing handwriting and typing for essay style examinations, *British Journal of Educational Technology*, 46, 4, 793–802. DOI:10.1111/bjet.12171

the machine to be gained. Allowing candidates to bring their own machine would not be appropriate in an unseen examination; it would not be practicable to disable internet access under such circumstances.

Is a conventional exam sufficient to judge the desired learning outcomes?

Another key finding of the research was a suggestion for a more practical test of students' abilities, skills and understanding in validity and infringement, in other words, including a developmental or 'professional level' activity as part of the overall exam. Suggestions given by one of the employers included coursework or a viva (and to this could be added a case study) whereby candidates would explain to an examiner how they would handle a real life infringement opinion, which would also demonstrate their 'client care' skills set. This practice requirement has been built into other professional qualifications.

Reviewing the FD4 exam marking design scheme for upcoming exams

As the research identified, candidates in the survey felt strongly that there needed to be more transparency of the marking scheme, so that they could focus their time accordingly. However, the examiners differed in their views about providing the allocation of marks on the exam paper being taken, since to do so would either impact candidates' ability to view and analyse the whole exam paper (concern of an examiner) and, at the same time, lead them to the answers (view of some of the examiners) or, conversely, facilitate candidates' ability to plan and write their answers (view of some of the examiners). These findings do suggest that further discussion is needed in reviewing whether (or not) to provide a mark scheme for the upcoming exam and how this will impact candidates' ability to respond to the paper (either favourably or unfavourably).

Another concern raised by some examiners was the rigidity of the marking schedule such that it had prevented them

from awarding marks that they would like to give as these were outside of the marking schedule. The examiners have suggested a 'fundamental review' of the marking scheme to ascertain whether it is an academic mark scheme which tries to find points or whether it seeks to be a practice paper and test the competence of candidates in giving good advice.

There was also some ambiguity amongst the examiners in terms of holistic marking versus section by section marking. For instance, some of the examiners felt strongly that doing well in one section cannot compensate for doing badly in another section of the paper since the exam is marked holistically in assessing a range of skills. One of the examiners expressed the opposite view in that candidates who give poor advice in one section can compensate in another section of the paper, although this was seen as a negative aspect of the paper. Still another marking examiner held mixed views, identifying that in some cases it is possible to compensate for performing poorly in one section while in other cases this is not possible. This would suggest that examiners revisit the holistic versus section-by-section marking of the FD4 exam paper to ensure transparency and clarity.

Aligning learning outcomes to the assessment criteria

The findings revealed a level of uncertainty among most of the examiners about how effectively the learning outcomes⁴ are met by the assessment process. Moreover, the way the exam is marked does not allow any inferences to be made about whether trainee patent attorneys have met the learning outcomes. Given the improved changes to the 2015 FD4/P6 exam syllabus, in terms of the provision of learning outcomes and examination guidance notes, it is important that examiners (and tutors/mentors) understand and actively engage

with the 'language' of learning outcomes and their understanding of how these align with the assessment process – rather than view these as 'educational jargon' – so as to meet PEB's original objective to improve transparency for candidates, making it clearer what knowledge and skills are being tested in the exam so that candidates can be better prepared as well as providing greater transparency on how marks are being awarded.

The ways in which marking was discussed by a range of participants, including examiners, led the research team to a consideration of how the exam operated to enable judgements to be made about the successful meeting of requirements. It was heartening that a key step had been undertaken through expressing requirements in terms of learning outcomes. In a standards-based framework, which is what has been adopted, it is necessary for there to be transparency about the relationship between the elements of the exam and learning outcomes. Any form of assessment must ensure that those who pass can be shown to have met the threshold standards with respect to each learning outcome. The research team found it difficult to discern that this was occurring. The meeting of threshold requirements means that doing well in one part of a test that addresses different outcomes cannot compensate for lack of sufficient attainment with respect to another. The collapsing of marks into a single 'pass mark' does not permit assurance that this has occurred. In a standards-based framework, an overall pass mark takes on lesser significance than reporting that each outcome has been attained. Our experience in other professional contexts suggests that such an approach may require adjustments to statements of learning outcomes, standards and criteria as well as to reporting processes. The disaggregation of performance by outcome provides a subsidiary benefit in that candidates and their advisers are better able to identify what they need to address when they fail to meet the requisite standard.

4. Taking the QAA definition of learning outcomes: 'What a learner is expected to know, understand and/or be able to demonstrate after completing a process of learning' (www.qaa.ac.uk/)

Annex 6 – List of Skills and Knowledge

The following table shows the list of skills and knowledge collated by the group. The table shows our views on:

- when the skill/knowledge item should be acquired,
- whether the item is something which IPReg recommends learning in their Competency Framework for patent attorneys (<https://ipreg.org.uk/pro/admission-to-register/training-and-supervision>),
- whether it is currently tested by the PEB examinations and EQEs,
- if not currently tested, whether the item could be the subject of a course, examination, webinar, or other learning or assessment option, and
- whether the item is something that could or should constitute a compulsory part of CPD post-qualification.

Generally speaking, with respect to the foundation qualification, trainee patent attorneys can currently qualify to this level via: the PEB’s Foundation Certificate examinations, the QM-UL Certificate in IP course, the Brunel University course, or the Bournemouth University course. For the sake of simplicity, we have only considered the syllabi of the PEB’s Foundation Certificate examinations to generate the list below.

It is noted that there are currently no alternatives to the PEB’s FD examinations.

The stages of progress are as follows:

- Pre-registration – this refers to knowledge and skills required to reach ‘Foundation’ level qualification.
- Registration – this refers to knowledge and skills required to reach ‘Finals’ level qualification.
- Post-registration – this refers to knowledge and skills required to become a highly-skilled patent attorney (in a particular area, specialism, practice, etc.). Not all of these items will apply to every attorney, as these will depend on the attorney’s practice, working environment and so on.
- Independent – this refers to knowledge and skills that a patent attorney may need in order to set-up their own practice.

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Pre-registration						
Detailed knowledge of UK Patents Act, including effect of PCT applications and EP patents and applications in the UK, EPC, PCT, Paris Convention.	Technical/Basic Level: ‘Basic understanding of novelty and inventive step’. ‘Basic understanding of added matter, enablement, non-patent subject matter, clarity’. ‘Understands requirements for patentability (UK, EP) and key case law’. ‘Understands patent life concepts in more detail (priority, PCT filing, national/regional phases, prosecution and grant) and ability to describe to client’. ‘Understands grant procedures and renewal process’.	FC1 – mainly UK but includes effect of PCT applications and EP patents and applications in the UK. FC3 – patent application process for EPC and PCT. FC3 – Knowledge of PC re foreign applications.	FD1 understanding and application of patent law in UK and EPC.	Detailed knowledge of EPC and PCT and knowledge of Paris Convention.	N/A	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Pre-registration – continued						
Outline knowledge of UK Court system with some detail of UK Court system as it applies to patents.	Technical/Basic Level: 'Knowledge of leading cases (Supreme Court and EP decisions) affecting UK law of patents and designs'.	FC2 – syllabus includes much more, viz: Characteristics of the English legal system; Law of court procedure; Remedies; Evidence, Laws of Contract, Tort, Property, and Trade secrets; Business structures; Professional Conduct.		N/A	N/A	Y
Outline knowledge of evidence for UK Court system as it applies to patents.	Not mentioned	FC2 – Evidence in IP-related legal proceedings.	Not covered (but is in litigation skills course). Evidence in general is covered in FC2 syllabus.	N/A	N/A	Y
Outline knowledge of professional ethics, including as it applies to UK Court procedures.	Not mentioned	FC2 – Professional conduct including the Litigators Code.	Not covered (but is in litigation skills course).	N/A	N/A	Y
Outline knowledge of UK legal system (constitutional issues and sources of law, UK tort law especially in relation to negligence, joint tortfeasorship. UK business structures.	Not mentioned	FC2 syllabus includes tort and business structures, no specific ref to corporate law or inheritance law.		N/A	N/A	
Detailed knowledge of leading UK and/or EPO case law on key patent concepts.	Technical/Basic Level: 'Awareness of key sources for case law and preparing argumentation'.	FC1 – Key UK cases on construction, novelty inventive step, defined in PEB syllabus.	No additional case law specified in FD1 syllabus nor in any of the other Finals papers.	Good knowledge of EPC case law required.	N/A	Y
Working knowledge of UK law on trade marks, designs, copyright, contract, licensing, know-how, competition, SPCs (or equivalent), trade secrets, domain names, plant varieties.	Technical/Intermediate Level: 'Understands concepts of registered design, unregistered design right and copyright protection'. 'Knowledge of leading cases (Supreme Court and EP decisions) affecting UK law of patents and designs'.	FC4 – Design/ copyright, including validity, infringement and licensing – no specific ref to knowhow or trade secrets. FC5 – TMs.	FD1 covers SPCs, know-how and confidential info, as well as designs and copyright in UK. Not much on TMs.	N/A	N/A	

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Pre-registration – continued						
Working knowledge of EU trade marks, designs, competition, plant varieties, SPCs (taking into account any changes following Brexit).	Not mentioned	FC4 – EU design rights. FC5 – TMs.			N/A	
Working knowledge of IP in key jurisdictions, such as the USA, Japan and China. It is noted that ‘key jurisdictions’ may vary for different subject matter and clients, but at least the USA is relevant to most clients.	Not mentioned	FC4 includes protection of designs in US, JP and CN. FC5 includes international protection of TMs, and Madrid Protocol with respect to i.a. US, JP and CN (also FR, DT, IE, IT, ES, EU, UK).	FD1 – patentability criteria and obtaining patents in US and JP		N/A	
Detailed knowledge of formalities involved in obtaining patent protection in UK and EPO and via the PCT.	Technical/Basic Level: ‘Appropriate awareness of PCT and EP systems’	FC1 – UK national phase entry from PCT. FC3 – EP regional phase (and national phase in foreign jurisdictions).		EQE Paper D requires knowledge of EP and PCT procedures.	N/A	Y
Working knowledge of formalities involved in obtaining patent protection in other key jurisdictions, and in particular any important differences relative to the UK/ EPO. Again, it is noted that ‘key jurisdictions’ may vary for different subject matters and clients, but at least the USA is relevant to most clients.	Not mentioned	FC3 covers obtaining patents in a number of foreign jurisdictions.	FD1 covers patentability and obtaining patents in US and JP.		N/A	
Outline knowledge of the Legal Services Act, fiduciary duties, confidentiality obligations to clients, legal professional privilege and what not to do.	Not mentioned	FC2 syllabus covers roles of RPA’s and other legal professionals under the LSA as well as right to conduct litigation and legal privilege. FD1 – Professional conduct including fiduciary duties.			N/A	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Registration/Finals Level						
Continued improvement of the knowledge and abilities gained at foundation level.	Technical/Intermediate Level: 'Demonstrate intermediate knowledge of all stages of patent life, including EP/PCT systems and deadlines and consequences of non-action.'		FD1-4		N/A	
Ability to write clear, concise, grammatical and effective English in communications to a lay client (avoiding too much legal verbiage), an IP savvy client (can include a bit more verbiage) and a patent office or court.	General/Legal: 'Use suitable language in communication.' 'Address all issues in communication.' 'Represent a client through effective use of communication and other skills.'		FD1, FD3, FD4		N/A	
Ability to read and understand a claim in a UK or EP patent.	Not mentioned		FD1, FD3, FD4	EQE Papers D,B, C	N/A	
Ability to draft a claim based on a technical disclosure provided by a client.	Technical/Basic Level: 'Ability to analyse prior art and draft a simple main claim.'		FD2	EQE Paper A	N/A	
Ability to draft a full application for filing as a UK patent application, an EP application or a PCT application on the basis of a technical disclosure provided by a client and taking into account available prior art.	Technical/Intermediate Level: 'Understands requirements for patentability (UK/EP) and key case law; awareness of differences in other countries, especially US patentability requirements.' 'Ability to prepare first draft of patent specification with only medium correction.' 'Adopts appropriate claim structure (order, dependencies, etc)'. 'Drafts robust claims with appropriate fall-back positions'. 'Ability to draft overseas claims (especially US) for EP practice compliance'. Technical/Advanced Level: 'Ability to draft a complex patent specification requiring only minor checking'.		FD2 – UK	EQE Paper A	N/A	

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Registration/Finals Level – continued						
Ability to assess the content of an Examination Report issued by the UKIPO or the EPO, analyse the objections raised and the prior art on which they are based, prepare either a response to the Examination Report for your client to consider or a response on the basis of instructions from your client and, if necessary, request further input from your client.	<p>Technical/Intermediate Level:</p> <p>‘Ability to draft a more complex response to a GB or EP official letter with medium correction.’</p> <p>‘Prepares basic draft response for any jurisdiction.’</p> <p>Technical/Advanced Level:</p> <p>‘Ability to draft a response to a GB/EP official letter with no/minimal need for supervision.’</p> <p>‘Ability to prepare a draft response for any other jurisdiction requiring only minor checking.’</p>		FD3 – UK	EQE Paper B	N/A	
Ability to assess the content of a search report and any prior art raised therein and to advise the client as the effects of the search report on the prospects of obtaining the grant of a patent on the application.	<p>Technical/Basic Level:</p> <p>‘Ability to prepare bullet points for response to GB or EP official letter.’</p> <p>‘Basic understanding of novelty and inventive step.’</p> <p>‘Basic understanding of added matter, enablement, non-patent subject matter, clarity.’</p> <p>‘Awareness of procedural stages in the life of a patent (filing, search, examination, grant).’</p> <p>‘Awareness of the basic structure of a patent application.’</p>		FD1, FD3, FD4	EQE Papers D, B C	N/A	
Ability to advise your client on the scope of claims granted by the IPO or the EPO, the possible scope of protection provided by those claims, whether a proposal of your client or a third party falls within the scope of the claims or the scope of protection, advise as to whether the claims are valid over the available prior art and provide basic advice to your client on the basis of your analysis according to UK law and practice.	<p>Technical/Basic Level:</p> <p>‘Basic understanding of validity concepts.’</p> <p>‘Basic understanding of infringement concepts.’</p>		FD1 – in relation to EP patents, FD3, FD4	Paper B, Paper D, Paper C	N/A	

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Registration/Finals Level – continued						
Ability to analyse complex legal situations relating to the provisions of the UK Patents Act, the EPC and the PCT and provide advice to your client, including advising on legal procedures which could be adopted to deal with the situation for your client.	Technical/Intermediate Level: 'Understands patent life concepts in more detail (priority, PCT filing, national/regional phases, prosecution and grant) and ability to describe to client'		FD1 FD4	EQE Paper D Paper C	N/A	
Ability to interfere with or prevent the grant of a patent, prepare an opposition to a patent granted by the EPO or defend against such an opposition.	Technical/Intermediate Level: 'Awareness of opposition, appeal (EP) and revocation procedures.' Technical/Advanced Level: 'Demonstrate in-depth knowledge of all stages of patent life including EP/PCT systems, opposition and appeal (with deadlines) and consequences of non-action.'		FD 1 covers providing advice on EP Oppositions. FD4	EQE Paper C. Paper D.	N/A	
Working knowledge of differences between UK and US legal systems with respect to patents, in particular patent term extension, infringement, wilful infringement, triple damages, estoppel, depositions and discovery / disclosure.	Technical/Intermediate Level: 'Has more detailed understanding of infringement concepts.' 'Demonstrate detailed understanding of patentability and procedures in US and other overseas jurisdictions.'		FC3 covers some aspects of US patent law but nothing on these specific topics.		Webinar	
	Technical/Advanced Level: 'Ability to give client practical and cost-effective advice on portfolio management.'	General skill, partially covered in advice-type questions at foundation and finals.	FD1	EQE Paper D		
Detailed knowledge of UK and EPO case law as it applies to your specialism.	Technical/Advanced Level: 'Demonstrate detailed knowledge of leading cases in the UK and US and how to apply them.' 'Ability to present recent case law and procedural changes coherently to office colleagues at CPD meetings or prepare an article for <i>CIPA Journal</i> on these topics.' 'Demonstrate in-depth understanding of the requirements for patentability and the impact of case law for challenges to the validity of UK/EP filings.'				Course, webinars, etc.	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Registration/Finals Level – continued						
Ability to speak clear, concise, grammatical and effective English in communications with and lay clients, IP-savvy clients and Patent Offices or Courts.	General/Legal: ‘Use suitable language in communication.’ ‘Address all issues in communication.’ ‘Represent a client through effective use of communication and other skills.’				N/A	
Stage of Progress: Skill and knowledge that should be obtained by the time of registration, generally through on-the-job training and experience, but not easily examinable						
Outline knowledge of renewals systems (own system or outsourcing).	Technical/Intermediate Level: ‘Understands grant procedures and renewal process.’	Grant and renewal process is covered in FC1.		Pre-EQE and Paper D	On-the-job training to understand own process.	
Ability to identify and manage risk.	Not mentioned.					
Ability to understand client’s core technology and to understand when to ask for assistance in understanding the technology.	General/Legal: ‘Understand the limitations of your professional skills and knowledge.’	N/A – not examinable.	N/A – not examinable.	N/A – not examinable.	N/A	
Ability to keep up-to-date in developments in a particular area of technology.	Not mentioned.	N/A – not examinable.	N/A – not examinable.	N/A – not examinable.	N/A	
	Technical/Basic Level: ‘Conduct a basic search/patent family search effectively.’	N/A – not examinable.	N/A – not examinable.	N/A – not examinable.	Webinar and/or on-the-job training.	Y
Ability to manage your workload efficiently and without delay and understand that timeliness is key.	Technical/Advanced Level: ‘Run own Diary and meet procedural deadlines in a timely way.’	N/A – not examinable.	N/A – not examinable.	N/A – not examinable.	N/A	
Ability to estimate how long each task is expected to take to ensure you can deliver on each task without delay.	General/Legal: ‘Progress matters expeditiously.’ ‘Plan your workload and deliver a good legal service to the client.’	N/A – not examinable.	N/A – not examinable.	N/A – not examinable.	N/A	
Ability to maintain files and records in good order so that someone could relatively easily cover for you when you are absent.	General/Legal: ‘Maintain files and records in accordance with procedures.’	N/A – not examinable.	N/A – not examinable.	N/A – not examinable.	N/A	

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Skill and knowledge that should be obtained by the time of registration, generally through on-the-job training and experience, but not easily examinable – continued						
Ability to take accurate instructions from clients – listen and question and confirm your understanding of the instructions is correct.	General/Legal: 'Take action to deal with instructions received.'	N/A – Not examinable	N/A – Not examinable	N/A – Not examinable	Webinar and/or on-the-job training.	
Ability to speak clear, concise, grammatical and effective English in communications with and lay clients, IP-savvy clients and patent offices or courts.	General/Legal: 'Use suitable language in communication.' 'Address all issues in communication.' 'Represent a client through effective use of communication and other skills.'	N/A – Not examinable	N/A – Not examinable	N/A – Not examinable	N/A	Y
	Technical/Advanced Level: 'Ability to liaise successfully with foreign associates handling overseas filings or contentious work and review their opinions critically/request further advice based on own knowledge of local law.'	N/A – Not examinable	N/A – Not examinable	N/A – Not examinable	Webinar and/or on-the-job training.	
Ability to establish working relationships with other legal professionals in your organisation, such as paralegals, solicitors or general counsel.	General/Legal: 'Establish effective working relationships with others involved in a legal matter.'	N/A – Not examinable	N/A – Not examinable	N/A – Not examinable	N/A	
Ability to recognise when you need support from colleagues, for instance to manage case load or stress or where the work requires expertise you do not have and to recognise when to ask for assistance in understanding the technology.	General/Legal: 'Understand the limitations of your professional skills and knowledge.'	N/A – Not examinable	N/A – Not examinable	N/A – Not examinable	N/A	Y
Awareness of diversity and equality issues.	General/Legal: 'Understand the need to avoid discrimination and promote equality and diversity.'	N/A – Not examinable	N/A – Not examinable	N/A – Not examinable	Webinar	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Post-registration						
Detailed knowledge of UK court system as it applies to patents.	Technical/Advanced Level: 'Demonstrate detailed understanding of infringement concepts, tactics and effect of bring court actions'. 'Demonstrate awareness of the effects of legal and IP privilege on infringement advice'.				Litigation Skills Certificate.	Y
Ability to make effective presentations.	Not mentioned.				Webinar and/or on the job training.	
Ability to understand the client's business, in particular the aims of the client and the client's budget, and to ask questions of and learn from the client.	Not mentioned.				N/A	
Ability to advise on the pros and cons of obtaining a third-party search prior to filing a patent application.	Not mentioned.				On the job training.	
Ability to know who your client is, who is paying the bills, which other parties may be involved.	Not mentioned.				On the job training.	
Ability to distinguish between a client and the person instructing you, between the client and the inventor(s) and any ownership issues arising.	Not mentioned.				On the job training.	
Ability to advise on patent filing strategies, including possible, national, international and regional filings, taking into account the client's finances and the timings of any actions the client may wish to take.	Technical/Advanced Level: 'Ability to give client practical and cost-effective advice on portfolio management'.				On the job training.	
Ability to advise on procedures (and tactics) available in the UK, the EPC member states and the US for revoking granted patents.	Not mentioned.				Webinar and/or on the job training	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Post-registration – continued						
Ability to advise on procedures (and tactics) available in the UK, the EPC member states and the US for enforcing a granted patent or a pending application.	Not mentioned.				Webinar and/or on the job training	Y
Ability to represent a client in a case before IPEC or support a team in representing a client before the High Court in a patent action and to understand who you need to instruct if taking a case to court and your role within the team handling the action, including the relationship between you, solicitors and barristers.	Technical/Advanced Level: '(Post-qualification) – demonstrate ability to take primary responsibility for litigation in the Patents County Court, acting in liaison with Counsel if required.'				Litigation Skills Certificate	Y
Ability to advise on the pros and cons of performing searches for competitors' patents and the possible consequences with respect to the US of not doing so.	Not mentioned.				Webinar and/or on the job training	Y
Ability to provide advice to a client on freedom to operate, including identifying risks, ways to mitigate risks and matters to watch/keep an eye on	Technical/Intermediate Level: 'Ability to draft a preliminary Freedom to Operate analysis'. Technical/Advanced Level: 'Ability to draft a Freedom to Operate analysis requiring only minor correction.'		Partly covered in FD1	Partly covered in Papers C and D	Webinar and/or on the job training	Y
Ability to provide advice to clients on the options to commercialise their innovation and make use of their IP, including the different types of licensing agreement, selling and buying IP, etc.	Not mentioned.				Webinar and/or on the job training	Y
Basic knowledge of: confidentiality agreements and when they may not work; and different types of agreements which may affect IP – not just licensing, but also joint development, assignments (difference between contract and deed) and material transfer agreements.	Not mentioned.				Webinar	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Post-registration – continued						
Ability to manage the client’s expectations – identify their needs (as a business and/or individual), objectives and priorities; identify situations in which their objectives are unrealistic; take all reasonable steps to manage their expectations and communicate efficiently so they know the steps you are taking/will take and when.	General/Legal: ‘Take accurate instructions relating to a legal matter from the client.’ ‘Provide clear legal advice to the client.’ ‘Evaluate the risks, costs and benefits or alternative courses of action relating to the client.’ ‘Take action to deal with instructions received.’ ‘Manage a client’s expectations.’				On-the-job training	
Ability to deal with clients when things go wrong or when they are unhappy.	Not mentioned.				Webinar – Currently an introduction to this is given as part of the CIPA New Student Induction event.	Y
Knowledge of your (private practice) business’ complaints procedure.	Not mentioned.				On-the-job training.	
Ability to communicate your client’s needs to all your colleagues working with you for the client (trainees, paralegals, attorneys, etc.) so that everyone is on the same page and providing the same, specific, consistent service to the client.	Not mentioned.				On-the-job training.	
Ability to help clients to manage their budget and be mindful of their financial resources when providing advice – what can you delay, what costs can be avoided, speeded up or slowed down, cull part of the portfolio, stop paying renewals, sell or license part of the portfolio, etc – and understand that different clients have different budgets and different IP needs – e.g. start-ups vs multinationals – and tailor your advice to suit; and to estimate and be able to say what is in and out of scope and how to manage that.	Not mentioned.				On-the-job training.	

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Post-registration – continued						
Ability and knowledge to manage overseas attorneys working for your clients or where they are your clients.	Not mentioned.				On-the-job training.	
Knowledge of the different parts of your own business and how they interact to keep the business running, including, for example, understanding how the accounts/finance team operates and who internally is dependent on/relies on you to be timely and efficient (e.g. your paralegal/support team) and the business and legal environment in which you work and your role within it.	General/Legal: 'Demonstrate an understanding of the business environment of a legal practice or organisation.' 'Evaluate the risks, costs and benefits of alternative courses of action to the business.'				On-the-job training.	
Knowledge of the aims and objectives of your business.	Not mentioned.				On-the-job training.	
Ability and knowledge to teach and train others, including trainee patent attorneys (for day-to-day work and/or exams) and paralegals.	Not mentioned.				Webinar and/or on-the-job training.	Y
Ability to undertake business development activities to win new work (private practice) or ensure any new R&D areas are protected (in-house).	Not mentioned.				Webinar and/or on-the-job training.	
Knowledge of: anti-money laundering provisions and your business' conflict check and credit check procedures and how they impact the process to take on a new client; the 'Chinese walls' concept and whether they are possible in your business; and when advanced payment (= client money) is required, whether you can hold client money and how that is held.	Not mentioned.				Webinar and/or on-the-job training.	Y
Understand when to grow your own team or when to outsource work to colleagues or outside counsel, in view of your own growing practice.	Not mentioned.				On-the-job training.	

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Post-registration – continued						
Basic knowledge of the Patent Box and R&D tax credits.	Not mentioned.				Webinar	Y
Detailed knowledge and ability to practice independently in an area of IP other than patents, such as trade marks, designs, copyright, IP commercialisation.	<p>Technical/Intermediate Level: ‘Awareness of filing procedures and can prepare an application for UK or Community Design registration under supervision.’</p> <p>Technical/Advanced Level: ‘Prepare UK/Community registered design filings and take through to registration with no/minimal supervision.’</p> <p>‘Recognise and be able to advise on registered design and unregistered design, design right and copyright infringement in the UK and infringement of Community registered designs.’</p>					
Stage of Progress: Independence						
Ability to identify and manage risk.	Not mentioned.					
Detailed knowledge of regulation by IPReg, LeO and regulatory positions – Head of Financial Administration, Head of Legal Practice, Data Protection Officer.	Not mentioned.				Webinar	Y
Ability to evaluate accounting, VAT, tax and banking packages and to evaluate movements in cash flow, tax, payroll, WIP and related financial matters to maintain solvency.	Not mentioned.				Webinar	Y
Ability to evaluate, buy and set up a records system.	Not mentioned.					Y
Ability to set up fee structures.	Not mentioned.					Y
Ability to evaluate requirements and buy insurance – professional indemnity, other business risks.	Not mentioned.				Webinar	Y

Suggested Skill / Knowledge	IPReg Competency Framework	Current Assessment Method			Other Learning / Assessment Method?	CPD
		PEB Foundation Certificate Examinations	PEB Final Diploma Examinations	Pre-EQE and/or Main EQEs		
Stage of Progress: Independence – continued						
Ability to evaluate, buy and set up IT and security systems.	Not mentioned.					Y
Knowledge of the requirements for data protection and ability to implement those requirements.	Not mentioned.				Webinar	Y
Knowledge of HR/ employment law obligations.	Not mentioned.				Webinar	Y
Ability to set up and operate client engagement procedures.	Not mentioned.				Webinar	Y
Ability to set up and police business policies.	Not mentioned.				Webinar	Y

Feedback welcome

CIPA Council welcomes comments from all stakeholders on the report of the Mercer Review and asks that written responses are sent to CIPA’s Chief Executive, Lee Davies, by **31 December 2021**. CIPA Council is happy to meet with interested parties to discuss the content of the Mercer Review where respondents would find this helpful in making their submissions. Responses should be sent to the Executive Assistant to the Chief Executive, Charlotte Russell at charlotte@cipa.org.uk and should include ‘Mercer Review’ in the email header.

