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**Patent Cooperation Treaty (PCT)**

**Working Group**

**Ninth Session**

**Geneva, May 17 to 20, 2016**

Training of Examiners

*Document prepared by the International Bureau*

# Summary

1. This document presents the evaluation of a survey regarding the training of substantive patent examiners and proposes follow-up recommendations.

# Introduction

1. At its eighth session, the Working Group discussed a proposal (see document PCT/WG/8/7) for better coordination of patent examiner training between Offices. The discussions are summarized in paragraphs 42 to 46 of document PCT/WG/8/25, with a full record of the discussions set out in paragraphs 89 to 108 of document PCT/WG/8/26.
2. The Working Group expressed strong support for the International Bureau to increase its role in coordinating patent examiner training between Offices, and agreed on the follow‑up below (see paragraph 46 of document PCT/WG/8/25):

“46. The Working Group requested the International Bureau to issue, as a first step, a Circular requesting information from Offices on examiner training activities carried out by Offices for the benefit of other Offices, notably from developing countries. This would better inform the next phase of discussions on how the International Bureau could act as a coordinating body to most useful effect.”

1. The International Bureau issued a Circular (Circular C. PCT 1464, dated January 6, 2016) addressed to Offices which have provided training in substantive patent examination for examiners from other Offices or contributed to such training activities (for example, by making available experts or other resources) where such activity was organized by another organization (“donor Offices”). The Circular was also addressed to Offices whose examiners have received training in substantive patent examination from other organizations (“beneficiary Offices”).
2. A Questionnaire annexed to the Circular requested information on all relevant training activities carried out in the period between 2013 and 2015. It further requested information regarding the management and delivery of substantive examiner training within each Office, such as the use of competency models, learning management systems or assessment tools, or the availability of self-study training materials or other media. A copy of the Circular (including the Questionnaire) is available on the WIPO website at <http://www.wipo.int/export/sites/www/pct/en/circulars/2016/1464.pdf>.
3. The Questionnaire distinguished between four different categories of training activities:

* medium to long-term comprehensive training programs;
* on-the-job training;
* classroom-type training events conducted face to face; and
* e-Learning, including online seminars and distance learning courses.

Offices were invited to cover all relevant training activities between 2013 and 2015 for these four categories. Beneficiary Offices were further invited to explain the importance of external training support, and all Offices were asked for observations and suggestions in respect of the International Bureau’s potential future role in examiner training.

1. As of April 5, 2016, the International Bureau has received 44 replies to the Circular: 34 from beneficiary Offices (18 of which were also donor Offices), five from Offices which had only acted as donor Offices, and five from Offices which had not participated in any training activity. The replies are discussed in paragraphs 8 to 42.

# THE RELEVANCE OF EXTERNAL TRAINING SUPPORT

1. Replies from beneficiary Offices emphasized the importance of training support by other Offices for training both newly recruited and experienced examiners for reasons such as lack of in-house training capacities and experience in examination. For example, several Offices of smaller member States of the European Patent Convention underlined the importance of training support delivered by the European Patent Office in view of the said limitations of training capacities.
2. For small Offices of developing countries with very few examiners, external training support is essential and recurrent since most lack in-house training capacities and may not be able to develop and maintain such capacities.
3. Many Offices of developing countries stated a lack of experience of their examiners in comparison to Offices with a longer track record in substantive patent examination. These Offices attributed great importance to acquiring best practices from experienced examiners, not only with respect to standard examination tasks but also in order to stay abreast with new tools, etc.. Even with some in-house training capacity, Offices generally welcomed external assistance as an important complement.
4. Many Offices with a long track record in substantive patent examination stated that training of patent examiners, in particular new recruits, was mainly organized in-house without external assistance. Nevertheless, those Offices attributed great importance to the exchange of experienced examiners in order to share best practices and enhance the mutual confidence in work products from other Offices through a better understanding of examination practices of other Offices.
5. Offices in developing countries with few examiners indicated that examiners often engaged in activities other than substantive examination, such as IP promotion, outreach activities or advisory services for applicants. These Offices expressed additional training needs for their examiners in respect of such other activities.

# VIEWS REGARDING WIPO's POTENTIAL ROLE

1. Most Offices expressed support for a more active role for WIPO in coordinating and facilitating patent examiner training. Many Offices expressed the need for increased transparency of training demand and supply, in particular, an increased visibility of the needs of smaller Offices.
2. Given the similarity in training content between provider Offices, many responses suggested that the International Bureau should facilitate more efficient collaboration between donors. This would avoid duplication of training, ensure efficient use of training opportunities, and better match training needs with offers, particularly for advanced training.
3. Several Offices solicited an increase in funding of examiner training activities and saw an important role for the International Bureau in organizing such funding, for example, through the Funds-in-Trust arrangements.
4. One donor Office stated that it expected an increased demand for its training services if coordinated by the International Bureau. However, two other donor Offices expressed concerns regarding too much interference by the International Bureau in ongoing training activities, noting that many of those activities were guided by internal priorities and depended on the availability of resources, and were often based on *ad hoc* requests by beneficiary Offices arranged on a bilateral basis.
5. Several Offices stated that the International Bureau should also share best practices for managing the training of examiners, as well as for the development of in-house training capacities and policies.

# MEDIUM OR LONG TERM COMPREHENSIVE TRAINING PROGRAMS

1. Medium to long-termcomprehensivetraining programs consist of distinct training units intended to transfer knowledge and develop skills required for a patent examiner over an extended time period (from a few months up to two years or more). Such programs typically consist of distinct training units including, for example, traditional face-to-face classroom-type training, distance learning modules, webinars, virtual lectures, study visits or on-the-job training. This training approach is frequently termed “blended learning”.
2. The Regional Patent Examiner Training (RPET) program of the ASEAN-Australia-New Zealand Free Trade Area, which was presented at the seventh session of the Working Group, is one example of a medium to long-termcomprehensive training program. It is based on a patent examiner competency model, under which the participants are expected to attain all relevant competencies. Such programs are therefore similar to the in‑house training organized by many patent Offices for newly recruited examiners.
3. According to the evaluation of activities recorded by Offices in the Questionnaire, only three Offices provided thistype of training. IP Australia has organized three rounds of the RPET program for 38 examiners from Offices in Asia and Africa; the European Patent Office has organized training for examiners of some of its member States; and the Japan Patent Office has organized three 10-week programs for 17 examiners from three different Offices in Asia and Latin America.

# ON THE JOB TRAINING

1. On-the-job training programs are characterized by examiners performing job‑related tasks under the supervision of an experienced examiner (one-to-one mentoring).
2. The replies received identified two different categories of on-the-job training. First, training for the benefit of Offices in developing countries, usually provided in the context of development projects and specific bilateral cooperation agreements, which equip examiners with best practices. Second, training through exchange of experienced examiners, often as a regular part of cooperation activities among Offices with a longer track record in substantive patent examination.
3. Ten donor Offices organized on-the-job training for nine other beneficiary Offices. Each training activity averaged between one and two weeks and involved between two and 15 trainees.
4. In Offices with many examiners or a long track record in substantive examination, the training of new recruits is usually conducted by experienced examiners mentoring junior examiners while working on pending applications. Consequently, many Offices of developing countries considered on the job training of their examiners in such Offices as the most efficient way for acquiring best practices and wished that WIPO could fund and organize more temporary placements of examiners at such Offices.

# CLASSROOM-TYPE TRAINING EVENTS

1. Classroom type training events are conducted face-to-face and require the physical presence of trainers and trainees, such as workshops or seminars on patent classification, patent drafting, search strategies, foundations of the IP system, etc. From the perspective of beneficiary Offices, the Questionnaire distinguished between two sub-categories: training events organized in other countries and training events organized on the premises of a beneficiary Office where more examiners could participate.
2. Most training activities from 2013 to 2015 were classroom type training events: 19 donor Offices reported to have organized or contributed to 81 such training activities for almost 1,100 participants. From beneficiary Offices, 29 Offices sent an average of two examiners to overseas workshops or seminars, and for 13 of the beneficiary Offices, seminars or workshops were delivered by donor Offices in the premises of the beneficiary Office.
3. Beneficiary Offices stated the need for more training courses of an advanced level, in particular search and examination in specific technical fields.
4. Inviting guest trainees to classroom‑type training organized primarily for examiners of the donor Office would appear to be an effective training method for examiners from other Offices. However, only five donor Offices had invited foreign examiners to such in-house training events.

# ONLINE SEMINARS, DISTANCE LEARNING COURSES, SELF-STUDY MATERIALS

1. Training activities establishing a virtual classroom, such as live or recorded online seminars (webinars), distance learning courses (both tutored and not), as well as materials for self-study, are a potentially effective way of delivering training since they avoid travel and, when conducted in an asynchronous manner, may be taken by trainees at their own pace.
2. Twenty‑four Offices indicated that their examiners had participated in virtual classrooms or distance learning courses. Only four of the Offices indicated that the participation in certain courses had been mandatory, for example, for newly recruited examiners. For other Offices, participation was only recommended and more of a supplementary nature.
3. Examiners from 14 Offices had utilized courses or seminars provided by the European Patent Office, in particular the European Patent Academy; examiners from 13 Offices had utilized courses or webinars provided by WIPO, mostly the distance learning courses developed by the WIPO Academy. Only four Offices had utilized courses or webinars from both organizations.
4. Three Offices also attended courses of the Fundación Centro de Educación a Distancia para el Desarrollo Económico y Tecnológico (CEDDET), an organization that provides e-learning courses in the Spanish language. One Office indicated that its examiners had attended a course offered by the Spanish Patent and Trade Mark Office; another Office indicated that its examiners had attended a course offered by the database provider Minesoft.
5. Several Offices requested the International Bureau to expand and enhance the e-learning opportunities by developing additional courses relevant to patent examination, by revisiting the content of existing courses to make them more relevant to the needs of Offices, and by providing more places for examiners.
6. Fourteen Offices (32 per cent) had developed self-study materials suitable for examiner training, but only five indicated that they had made such materials available to other Offices.
7. The wealth and advantages of e-learning opportunities in examiner training do not yet appear to be fully exploited. This may be due to limited access to existing courses, the variety and specificity of existing courses relevant to examination, and a limited awareness or confidence of beneficiary Offices to encourage and enable their examiners to attend such courses.
8. In order to promote the use and facilitate access to e-learning, some Offices suggested that the International Bureau should compile information on e-learning facilities suitable for patent examiner training and make that information available on a web platform.

# MANAGEMENT OF EXAMINER TRAINING

1. Thirty‑three Offices (75 per cent) responding to the Questionnaire track the training of their examiners by keeping individual examiner training records.
2. The same number of Offices developed an examiner training curriculum, usually consisting of a set of specific training modules (seminars, workshops, webinars, distance learning courses, materials for self-study, etc.) on topics considered to be relevant for a substantive patent examiner.
3. Seventeen Offices (39 per cent) assess of the success of learning through conducting multiple-choice tests, written or oral exams, test examination cases or on-the-job evaluation by mentors.
4. Lately, it has become best practice to base the training of professionals, learning assessment and performance measurement on competency models (CM). A CM typically consists of an inventory of knowledge and skills required for the delivery of the set of job-specific tasks. Twenty‑seven Offices (61 per cent) had developed a CM for the training of their substantive patent examiners. CMs for substantive patent examiners have also been developed in the context the RPET program and the Ideal Patent Examiner Training (IPET) initiative of ASEAN patent Offices.
5. Furthermore, it has become a best practice to organize training and monitor learning progress by means of a learning management system (LMS). An LMS is a software application that facilitates the implementation of blended learning approaches. It usually covers the preparation and delivery of instructional content, tracking and reporting of learning progress, communication between students and tutors, administration of training, and reporting.
6. Only six Offices (14 per cent) utilize an LMS, apparently due to the considerable resource requirements for development and maintenance.

# CONCLUSIONS

## trends

1. Because of their limited number, the replies received may not reflect the full pattern of international cooperation in patent examiner training and best practices in managing and delivering such training. However, certain trends emerge, as set out in the following paragraphs. In the coming months, the International Bureau will attempt to obtain further replies to complement the current picture and confirm the accuracy of those trends.

## Transparency

1. There is need to improve transparency in terms “supply” and “demand” in substantive examiner training.
2. It is thus suggested that the International Bureau should invite Offices, in particular donor Offices, to report annually to the International Bureau on any training activities carried out or received by an Office. The International Bureau would then make a compendium of such training activities available on its website.

## Demand and Supply; coordination

1. Demand for training activities by beneficiary Offices exceeds supply by donor Offices, in particular for on-the-job training opportunities and classroom‑type examiner training, notably advanced classroom‑type training.
2. It is thus suggested that the International Bureau should invite Offices able to provide such training:
   1. to provide on-the-job training opportunities for more examiners and of sufficient length;
   2. to provide more advanced classroom-type training activities and to widen the range of subject matter taught; and
   3. to provide more opportunities for examiners from other Offices to participate as guest trainees in events organized primarily for their own examiners.
3. It is further suggested that the International Bureau should invite Member States able to fund training activities to consider setting up Fund-in-Trust arrangements, or expanding existing Fund-in-Trust arrangements, with a view to making additional funds available for the provision of training of examiners from developing countries.
4. There is a need for a better coordination of the provision of substantive patent examiner training.
5. It is thus suggested that the International Bureau should develop a concept for improved coordination of training of substantive patent examiners, with a particular view to coordination with donor Offices, for discussion by the Working Group at the next session

## Self-study

1. The wealth and advantages of e-learning, long-distance learning and other self-study opportunities (“self-study”) in examiner training are not yet fully explored. More could be done to enhance access to self-study opportunities and to enrich the diversity of content of self-study material and courses.
2. It is thus suggested that the International Bureau should:
   1. invite Offices that are offering self-study material and courses to inform the International Bureau of any such offers and contents;
   2. prepare a compilation of self-study materials and courses that are relevant for the training of substantive examiners; and
   3. explore the preparation of further self-study material and courses on topics of particular interest for substantive patent examiners.

## management of examiner training

### Competency Models

1. Offices that organize in house training of their examiners are able to control the content of the training units so the different training activities to cover all competencies required for their examiners. However, Offices which largely depend on external training support cannot necessarily be assured that the broad variety of training activities organized by donor Offices to which their examiners are invited fully covers all competencies required for their examiners.
2. A sufficiently detailed competency model (CM) would facilitate the identification and standardized communication (for example, to WIPO or donor Offices) of specific training needs for beneficiary Offices. For donor Offices, a CM would facilitate a standardized description of training contents in terms of competencies covered by a specific training activity, as well as the determination of prerequisites for participation in more advanced training activities.
3. Furthermore, a CM would facilitate the tracking of the individual training progress of examiners by competencies attained through participation in training events and enable future individual training needs to be identified. This would permit more efficient management of individual examiner training by better coordination between providers to ensure that the spectrum of training offers sufficiently covers all competencies.
4. The coordination of patent examiner training would therefore greatly benefit if all beneficiary Offices adopted sufficiently detailed and suitable CMs, and if training activities were described in terms of competencies covered.
5. While no single CM will be applicable to all patent examiners, there will be many competencies that apply to all examiners. For example, certain competencies will depend on the area of technology in which examiners work or the search tools available for examiners. An examiner in mechanics need not have special skills for chemical structure searches in specialized databases. CMs may also depend on the size of an Office. For example, it is not likely that an Office with a small number of examiners would be able to conduct stand-alone examination and prior art searches in all areas of technology. Examiners of such Offices would rather need skills in utilizing the work products from other Offices where examiners with specific technical expertise have carried out prior art searches, for example on patent family members.
6. Offices should therefore be able to define or select CMs that are suitable for their examiners. An inventory of various competencies needed for all tasks in substantive examination in various technical fields and utilizing various tools could therefore be developed. Offices would then be able to tailor the CM for an individual examiner by selecting required competencies from the inventory.
7. Such a CM could then form the basis for planning and coordinating the training of individual examiners. An Office could manage this training either itself or delegate it to another organization, for example, the International Bureau. In particular, smaller Offices with limited human resource management capacities may need external support in managing examiner training.
8. It is thus suggested that the International Bureau should:
   1. invite Offices to share with the International Bureau the curricula that they have developed for the training of their substantive patent examiners;
   2. invite Offices to share with the International Bureau their competency models for substantive patent examiners;
   3. prepare a compilation of such competency models to develop an inventory of various competencies that may be required for substantive patent examiners in Offices of various sizes.

### Learning Management Systems

1. A learning management system (LMS) may facilitate the administration of individualized training management based on a competency model or a defined training curriculum. For example, it would enable the recording of an examiner's participation in training activities or the competencies attained, and the automated identification and assignment of activities yet to be taken to complete the training. Additionally, it would enable learning success to be recorded and thereby automate a repeat assignment to a training activity in which the trainee failed and also avoid duplicate assignments to activities that had already been accomplished. An LMS may further facilitate any automated reporting, such as the learning progress of individual trainees, or of various statistics of training activities of potential interest for donor and beneficiary Offices.
2. The coordination and management of patent examiner training would certainly benefit from an LMS. One Office indeed suggested the development of a system managed by the International Bureau similar to an LMS, where training needs would be recorded and accessed by donors and beneficiaries to match needs with demand.
3. The WIPO Academy already disposes of considerable expertise in developing, deploying and utilizing an LMS which is used for managing the training delivered through WIPO's distance learning courses. The development of a LMS specifically for the training of substantive patent examiners could further benefit from similar developments planned in the framework of the IPET initiative and of the expertise of the six Offices that are already using such a system.
4. An LMS used for better coordination and management of patent examiner training through WIPO could also be made available to other Offices that are interested in managing their examiner training by means of such a system.
5. It is thus suggested that the International Bureau should explore the development and management of a learning management system and prepare a concept for discussion by the Working Group at the next session.
6. *The Working Group is invited to comment on the contents of the present document, in particular on the suggestions set out in paragraphs 45, 47, 48, 50, 52, 60 and 65, above.*

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