PATENT COOPERATION TREATY

Common Quality Framework for
International Search and Preliminary Examination

Report Under Paragraph 21.17 of the **PCT International Search and Preliminary Examination Guidelines**		
by:		***Canadian Intellectual Property Office***
on:		***January 4, 2007***
Documents referred to in this report: *[list any documents which appended to the report for information or publicly available documents which are referred to]*		

Each Authority must provide information with respect to its Quality Management System (QMS) arranged under the main headings as set forth in this template. The descriptions in this template below each main heading should be considered examples of the type and arrangement of information that should be included under each heading. Each Authority may provide additional information beyond that set forth in this template as desired.

This template is to be used for a main report under paragraph 21.17 of the PCT International Search and Preliminary Examination Guidelines. Updating reports may thereafter usually be presented in abbreviated format using template T21-18.

INTRODUCTION (PARAGRAPHS 21.01–21.02)

The Authority should provide general background information relevant to the quality management system (QMS). The following may be included, if applicable:

• Recognised normative reference or basis for quality management system besides Chapter 21, e.g. ISO 9000.

• An organigram showing at least the organisational units responsible for implementation of the Authority's QMS. It could be referred to in the rest of the report, as necessary.

In accordance with Circular C. PCT 1090 dated November 22, 2006, and in accordance with the agreement reached by the Meeting of International Authorities Under the PCT (PCT/MIA) at its 13th session, the Canadian Intellectual Property Office (CIPO) respectfully submits its report on A Common Quality Framework for International Search and Preliminary Examination.

CIPO started to offer its services as an International Searching Authority and International Preliminary Examining Authority on July 26, 2004. Since that date, the Patent Branch has been implementing the various components to establish a quality management system largely based on ISO 9000. The Patent Branch is committed to develop a quality management system that will improve the delivery of quality and timely IP products and services, as per CIPO's objective on this matter.

Our Quality Policy is the following: The Patent Branch is committed to a culture of excellence, underpinned by a Quality Management System. Individually and collectively we:

- Endeavor to meet our clients' needs and expectations while conforming with the Patent Act and Rules;

- Invest in communication and employee development so each and everyone is instrumental in our success;

- Strive for consistency and continuously improve our processes, products and services

The following organigram shows the organizational units responsible for implementation of the quality management system:
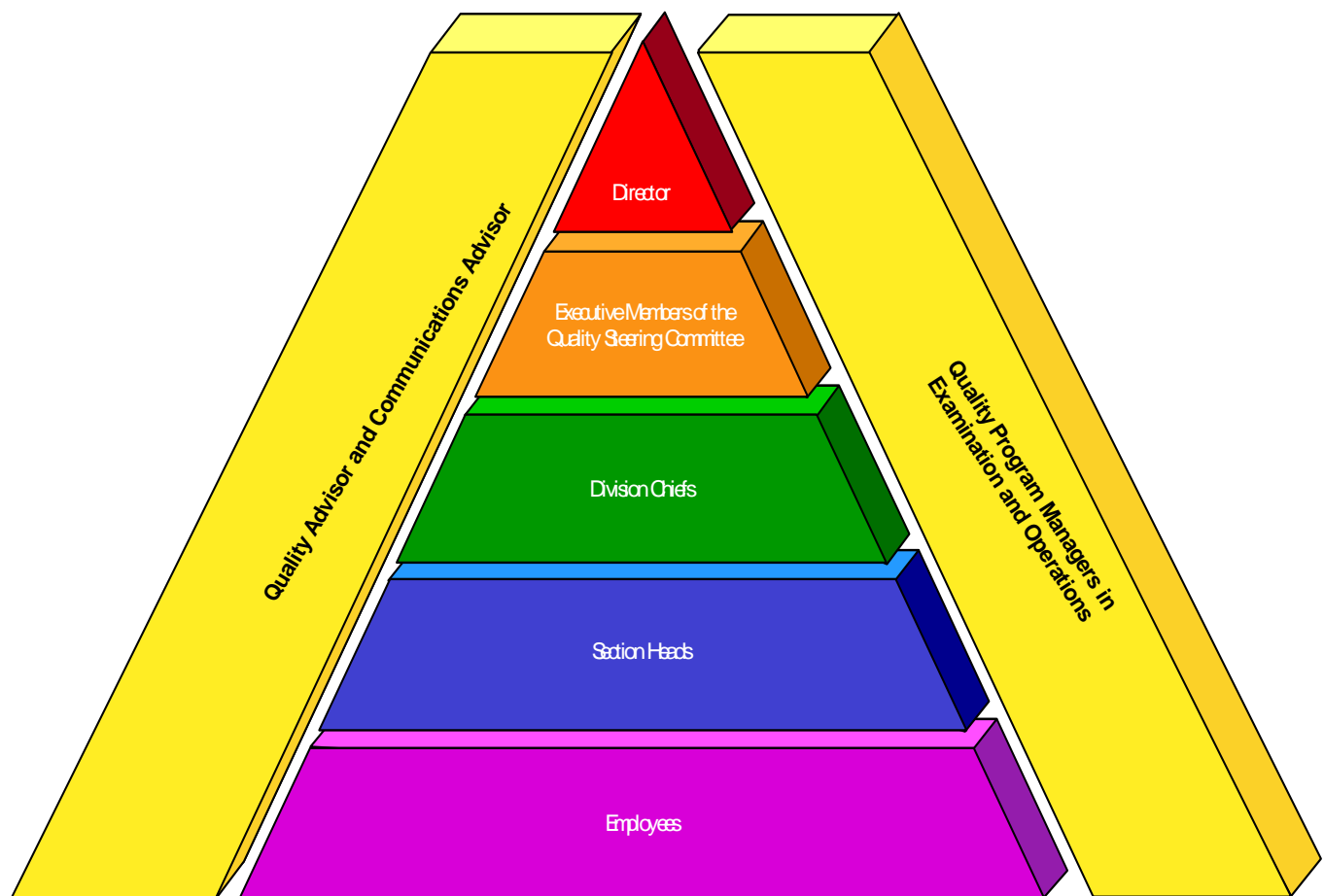
The Quality Steering Committee (QSC) provides governance for the development and deployment of the Quality Management System (QMS) in the Patent Branch and oversees other value-added quality initiatives within the Branch. This Committee meets every two weeks and ad hoc meetings may be convened to address urgent or complex issues.

Report based on template T21-17 as adopted May 2006

QUALITY MANAGEMENT SYSTEM (PARAGRAPHS 21.03–21.09)

Establishment and maintenance of QMS (Paragraph 21.03)

> *The Authority should show that it has established and is maintaining, or is establishing, a QMS which:*
>
> *(a)   sets out basic requirements regarding resources, administrative procedures, feedback and communication channels required to underpin search and examination (S&E);*
>
> *(b)   incorporates a quality assurance scheme for monitoring compliance with these basic requirements and with PCT/GL/ISPE.*

a) A Quality Initiative has been developed and it shows the seven different key concepts that are/will be implemented by the Patent Branch from 2004-2009:

- Infrastructure Development
- Gathering Requirements
- System Documentation
- Awareness and Training
- Improvement Projects
- System Implementation
- Evaluation

With this approach Patent Branch expects the following results:

- Outstanding contribution towards CIPO's vision, mandate and objectives
- Very high level of trust and satisfaction among our clients
- Very high level of satisfaction among our employees and changes in the organizational culture
- International recognition towards the Patent Branch Quality Management System

The Quality Management System initiative includes procedures, processes and means necessary to manage quality within the organization. It applies to all Patent Branch activities and affects all groups within branch.

In August-September 2006, a gap analysis with the ISO9001: 2000 standard was effectuated. A report listing recommendations was prepared and submitted to the Quality Steering Committee. Following the gap analysis report, a Patent Examination Improvement Plan was prepared. This plan lists a number of improvements projects with the goal of increasing quality in the Patent Branch. We are presently at the stage of prioritizing the various improvement projects.

Patent Branch has also developed an internal website on Quality Management that describes our quality policy, our quality objectives, the quality improvement projects currently in force, the terms of reference of the Quality Steering Committee, a list of supporting documents (e.g. the quality management communication plan), a list of work tools and links (e.g. a user guide for the primary quality tools and the responsibilities of the quality improvement team members) and a section dedicated to feedback from our employees.

The purpose of the website on Quality Management is:

- To report information about the improvement of the Quality Management System (e.g. development of the quality manual);
- To collect employee comments related to quality problems and suggestions of ways to solve these problems;
- To communicate client and employee points of view, as well as the results of quality evaluation projects;
- To present progress reports on quality improvement projects and provide tools and techniques for easier management of such projects; and
- To provide general information about quality management (e.g. definitions, recognized principles, systems of reference, etc.).

The quality management site is therefore an ideal way for employees to better understand and participate in the quality process.

b) Recently, the Patent Branch has done a gap analysis with the ISO9001: 2000 standard showing what was missing to comply with the standard. Following the gap analysis, a list of improvement projects was created. Once all the improvement projects are completed, the Patent Branch will then work on the quality assurance scheme.

Resources - infrastructure (Paragraph 21.05)

Provide information about the infrastructure in place which ensures the following:

(a)   Adequate quantity of search and examination (S&E) staff, including:

    (i)   means for matching the quantity of S&E staff to the inflow of work;

    (ii)   means for ensuring that recruited S&E staff have the necessary technical qualifications;

    (iii)   means for ensuring that S&E staff have language skills, or have access to supporting translation arrangements, as necessary to meet Rule 34.

(b)   Adequate quantity and skills of administrative staff to support S&E.

(c)   Provision of appropriate equipment and facilities to support S&E.

(d)   Provision of the minimum documentation supporting S&E, as referred to in Rule 34.

(e)   Provision of up-to-date work manuals. These must include explanations of:

    (i)   quality criteria and standards;

    (ii)   descriptions of work procedures;

    (iii)   instructions ensuring that the work procedures are adhered to.

(f)   Provision of an effective training and development program for all staff involved in S&E, including means to ensure the acquisition and maintenance of the necessary experience, skills and familiarity with work manuals.

(g)   Continuously monitoring and identifying resources, other than staff, required to deal with demand and comply with quality standards for S&E.

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a) CIPO has almost 900 employees and 50% of them work in the Patent Branch. The Patent Branch has now over 300 patent examiners. Patent examiners do both search and examination

under the national regulations and the PCT. Examination work is distributed among four major divisions: Mechanical, Chemical, Biotech and Electrical. The following table identifies work units and program managers by division.

Table 1
Examination work units

Divisions	Work units
Mechanical	8 units 1 program manager (responsible for training)
Chemical	7 units
Biotechnology	4 units
Electrical	6 units 2 program managers (responsible for informatics services and documentation)

Patent Branch has also a Patent Administrative Policy, Classification and International Affairs Division including:

Division	Work unit
Patent Administrative Policy, Classification and International Affairs	1 unit in classification 3 officers 1 program manager (responsible for ISA/IPEA)

The Patent Branch has a highly qualified, competent and growing corps of patent examiners in all fields of technology. The current examination staff is more than sufficient to handle the ISA/IPEA work inflow and could accommodate any unforeseen increases in workload. To ensure that the Patent Branch has enough examiners to match the inflow of work, the Patent Branch arranges four targeted recruitment campaigns per year. This guarantees that resources are sufficient in the technologies where they are required.

During the process of recruitment, a team evaluates the candidates according to specific criteria. The candidates must then go through a rigorous exam and interview process.

While Patent Branch accepts both French and English patent applications, the French applications represent only 3-4% of our PCT applications. Therefore, 10-15% of our examiners possess bilingual, and sometimes trilingual, capabilities. Altogether patent examiners are proficient in over twenty different languages covering those languages in which the minimum documentation is provided.

b) The Patent Branch is supported by another major division, namely Patent Operations. This division has over 160 employees distributed in several work units. The following table identifies the main work units:

Table 2
Operations work units

- Mail sorting and image scanning - Formalities - Optical Character Recognition (OCR) zone - File preparation - Patent Data Quality Services	-Assignment -Maintenance fees - PCT (national phase entry) - PCT (international) - Examination support I - Examination support II

The PCT International Unit has highly skilled administrative personnel comprising one Section Head, two mail clerks and 10 International PCT Analysts responsible for PCT work in the Receiving Office and in the International Searching and Examining Authorities. This group has also been trained to support the examination staff and facilitate the international search and examination process.

c) In conjunction with the Informatics Services Branch (ISB), the Patent Branch has developed a modern and efficient system entitled InterApp to handle the prosecution of international applications electronically. The software has been developed in C++ and includes various modules. Two of the main modules are a workflow management system, and a document management system. The document management system permits the Patent Branch to electronically stamp the application with various modifications/corrections and stores them in a db2 database.

All applications are scanned upon receipt in TIFF T6G4 black and White 300 dpi formats. Notices are currently prepared in WordPerfect using mail merge templates and are converted to TIFF and stored in the system once printed (no scanning of notices).

The multi-user system allows many people to view the same application concurrently. Examiners can view/print applications, prepare notices, save their notices in the system. Quality Control steps are part of the workflow, so once an International Search report and Written Opinion (ISR/WO) are prepared, a task is created to enable the Section Head to review these documents. Once the QC is complete, the PCT International Unit receives a task to print and mail the documents. The PCT Analyst performs a further QC before the documents are converted to TIFF using a special printer driver.

d) The search and examination process is enhanced by the Patent Branch's access to a vast collection of patent documents that exceed the minimum documentation requirements as dictated by the PCT. Patent Branch also has access to five EPOQUE stations under a test agreement with the European Patent Office (EPO). The Patent Branch is presently working on an arrangement to provide EPOQUE access to all patent examiners. The plan is to provide EPOQUE to examiners in batches of 50 until each examiner has access to EPOQUE on their workstation. In addition to the Canadian collection being available electronically and other IPOs' collection also being available electronically, patent examiners are using a variety of commercial databases. Patent Branch has a budget of over 1 million CAD for commercial database use.

Additionally, the CIPO Resource Centre (CRC) offers global access to strategic technical and business information including access to multiple periodicals via the CRC electronic resources and other Canadian libraries.

e) In addition to the patent examiner training material, Search Strategies and Tools, Job Aids, PCT and Regulations, PCT International Search and Preliminary Examination Guidelines, Patent Branch has established procedures and work instructions to be used by the examiners and the PCT Analysts. Detailed checklists have also been established. Some examples of the procedures created are: Checking the Request, Checking PCT Mail, Classification, Check Demand, Refund, Generate Notice, Process Fee, QC scan, Receive Search Copy, Scan PCT Mail, Search and Establish Opinion, Sequence Listing. We are now in the process of reviewing these procedures and work instructions. Each is regularly reviewed every 8-12 months. The date of the next revision is always indicated on the front page of the document. Once a new document is adopted, it is distributed to each examiner and put on CIPO's intranet.

f) The training for all new examiners is rigorous as they start their career with an intensive three-month classroom program before joining their section under the supervision of a Section Head and mentored by a senior examiner. They return to the classroom for a month of advanced training at the end of their first year and spend their second year perfecting and honing their skills before completing their apprenticeship.

All patent examiners receive four days of training on the PCT International Search and Preliminary Examination processes and requirements.   In addition, there are ongoing-targeted training and development available for all patent examiners and administration personnel. This includes attendance at technical conferences, seminars with agents on specific subject matter, management training, training on new or amended practices, new search tools and system modifications.

g) In order to manage properly the process that handles the search and examination, the Patent Branch closely follows the IT requirements, the documentation requirements and the work manuals as referred in c) d) and e).

Administration - procedures (Paragraphs 21.06(a) and (b))

Provide information on those administrative procedures and control mechanisms which ensure the following:

(a)   Timeliness of S&E and related functions, to quality standards in accordance with PCT/GL/ISPE.

(b)   Coping with fluctuations in demand and backlog management.

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a) With respect to the handling of search and examination requests and performing related functions, Patent Branch has implemented a control mechanism in the international application computerized processing system InterApp to ensure the timely issuance of ISRs/WOs.

Each stage of the task is color coded to enable users to quickly determine when a time limit will expire. There is an automatic process when a task is beyond the predetermined time limit where, if further action must be taken, another task is generated. A weekly query is run to determine the necessary action for affected applications. These affected applications are brought to the attention of senior staff members who take the appropriate action (i.e. contact the applicant/agent by phone, facsimile or send the appropriate notice).

b) In order to ensure that expected turn-around times are maintained, each new staff member receives basic training from experienced PCT analysts, as well as guidelines to follow. As experience is gained with each specific task (e.g. Receiving Office for new applications), the analyst or mail clerk is given further training to ensure that there is always someone available to handle fluctuations in workload in Operations.

Quality Assurance Procedures (Paragraph 21.07)

Provide information on procedures that ensure that S&E reports of a quality standard in accordance with PCT/GL/ISPE are issued. In particular, provide information on:

(a)   Activities related to verification, validation and monitoring; as carried out in order to assess compliance of S&E work with PCT/GL/ISPE.

(b)   Processes for measuring, recording, monitoring and analysing performance of the QMS to assess its conformity with the requirements of Chapter 21 and, if applicable, any other normative reference for the QMS.

(c)   Activities related to verifying the effectiveness of actions taken to deal with deficiencies, including:

*   (i) those actions taken to eliminate, correct or authorise release of deficient S&E work which does not comply with the quality standards;*

*   (ii) those actions taken to eliminate the causes of deficient S&E work and prevent the deficiencies from recurring.*

(d)   Activities ensuring the continuous improvement of established processes underpinning the issue of S&E reports.

Patent Branch has procedures to ensure that ISRs and WOs are issued according to the deadlines specified in the PCT. The automated system InterApp has built-in reminders to remind examiners that the deadline in approaching. Also, we ask that examiners bring the file to their Section Head for a final quality control a month before the due date to ensure that Patent Branch is sending the ISR/WO on time.

a) The verification and validation of the search and examination work is accomplished with a peer review procedure. Before the completion of the task, the examiner and the peer review person have to complete a checklist that is forwarded to the Section Head. The Section Head analyses the checklist and performs a final quality control on the file. The data taken from these checklists is compiled and used to identify deficiencies and make recommendations to the appropriate area and, if necessary, to the training section.

b) Patent Branch is in the process of collecting data and has achieved some progress in this area although this component remains in development.

c) Every two weeks, the Head of the PCT International Unit and the program manager in charge of ISA/IPEA prepare a list of all the errors found in search reports, written opinions, and international preliminary reports on patentability. These reports are then compiled to analyze trends and the appropriate corrective measure is determined. Depending on the errors, the examiners or Section Heads may be reminded of the procedure or they could possibly be scheduled for further training. The errors are also evaluated to find out if these errors are due to a lack of information within the Branch or because of a misunderstanding by the examiners.

d) All the procedures are regularly reviewed to ensure they are still up to date. Each procedure is reviewed every 8-12 months.

Feedback arrangements (Paragraph 21.08)

Give information on arrangements to:

(a)   Provide feedback to staff informing them of results of verification, validation and monitoring carried out in order to assess compliance of S&E work, so that:

  (i) deficient S&E work is corrected;

  (ii) corrective action, i.e. action necessary to prevent recurrence, is identified and implemented;

  (ii) best practice is identified, disseminated and adopted.

(b)   Accommodate prompt feedback from WIPO, designated and elected offices; so that potential systemic issues, e.g. recurring deficiencies of S&E work, as identified by these bodies, are evaluated and addressed.

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a) Section Heads from all Divisions meet regularly to discuss issues raised by their examiners. If the problem is not resolved, the issue is brought to the Board of ISA Consistency (BISAC). This Board meets regularly to discuss issues that have been brought to them from Section Heads. The Board includes a Section Head from each division and, if necessary, the program manager in charge of ISA/IPEA. The main goal of the Board is to make sure that there is consistency in the output among Divisions. Once the Board has rendered a decision, the members of the BISAC are responsible to bring the decision to the other Section Heads who will forward it to their examiners. To ensure that all examiners are aware of the decisions, communiqués are sent to examiners regularly and to the program manager in charge of training.

For the day-to-day work, all complaints are directed through the Head of the PCT International Unit and the appropriate corrective action is determined. If the complaint is directed to the examiner in charge of the file, a task is generated for the examiner to determine the corrective course of action. A complaint tracking mechanism is currently in place that enables the Head of the PCT International Unit to determine the actions necessary to prevent a recurrence. If the complaint is directed to the operations staff, the Head of the PCT International Unit determines if the problem arose as a result of a lack of training or due to the necessity for procedures to be updated or the requirement for new procedures to be put in place. A statistical report is prepared monthly in order to determine the course of action necessary to ensure that our clients' needs are being met.

Report based on template T21-17 as adopted May 2006

Also, every two weeks, the program manager in charge of the ISA/IPEA meets with the Head of the PCT International Unit (Operations) to discuss problems encountered on the international search reports, written opinions and international preliminary reports on patentability. A list of the most common errors is then prepared and sent to all Section Heads to inform them of the errors found on the different reports.

The Patent Branch, as mentioned earlier, has also elaborated a Quality Management website where employees can provide information on quality problems and suggestions for solutions.

b) As part of its responsibilities, the PCT International Unit communicates with WIPO as well as with the designated and elected Offices.

Communication, Guidance and Responses to Users (Paragraphs 21.06(c), 21.09)

Give information on arrangements to:

(a)   Provide communication channels for dealing promptly with enquiries and enabling appropriate two-way communication between applicants and examiners.

(b)   Provide concise and comprehensive guidance and information to users (particularly unrepresented applicants) on the S&E process using the website of your Authority, guidance literature, and other means.

(c)   Monitor and react to user needs and feedback, including:

(i)   measuring user satisfaction and perception;

(ii) handling complaints;

(iii) correcting deficiencies identified by users;

(iv) taking corrective action, i.e. action to eliminate the cause of deficiencies, in response to recurring or systematic deficiencies identified by users.

(v)   taking preventive action, i.e. action to eliminate the cause of potential deficiencies, in response to potential deficiencies or problems identified by users;

(vi)   ensuring needs and legitimate expectations of users are met.

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a) To ensure effective communication with users, Patent Branch has opened a two-way channel of communication with applicants and examiners/PCT International Unit. By doing so, enquiries are dealt with promptly. Applicants are encouraged to start communication with the examiner as soon as a Demand is filed. Examiners have also been trained to open discussions with the applicant during the Chapter II procedure.

b) Some information is posted on CIPO's website to help users better understand the search and examination process.

The Patent Branch has also hired a Communications Advisor who is in charge of all types of communications, internal and external, concerning the branch. A "PCT International Phase"

page has been added to CIPO's website and a "Changes to Office Practice" page is also used to inform applicants about updates or new developments in the Office.

c) At the beginning, we heavily relied on client feedback, under the Client Relationship Management (CRM) strategy, to assess the conformity with the requirements and expectations. The CRM manages CIPO's ongoing client listening and learning processes, allowing CIPO to communicate with its clients and integrate their feedback into business planning cycle. By helping the organization better understand what external clients think of our products and services – and how client's needs are evolving – CIPO Executive and business lines can better focus their service improvement efforts.

Last spring, a PCT Administrators Round Table was host at Marusyk Bourassa Miller & Swain's office (MBM). WIPO, Patent Branch and other law firms gave presentations. WIPO gave a presentation on their organization; Patent Branch gave an overview of the Receiving Office, the International Searching Authority, the International Preliminary Examining Authority and the National Entry. Patent Branch also gave an overview of projects that are underway.

Recently, the Head of the PCT International Unit (Operations) and the program manager of ISA/IPEA completed a series of presentations concerning the PCT process to agents in eight different cities (Edmonton, Calgary, Vancouver, Montreal, Halifax, Toronto, Kitchener and Ottawa). It was a good opportunity to discuss problems and potential improvements with the IP community.

The presentations provided an overview of the PCT process from filing a request to National phase entry. It was designed for an audience with minimal experience in preparing and prosecuting PCT applications. The presentations offered a timeline of the different PCT due dates, the different types of amendments and the most common errors that Patent Branch has encountered. It also touched upon the PCT changes that came into effect on April 1st, 2006 and those coming into effect on April 1st, 2007.

INTERNAL REVIEW (PARAGRAPHS 21.10–21.15)

Paragraph 21.10 specifies that, in addition to a "quality assurance system for checking and ensuring compliance with the requirements set out in its QMS" [c.f. Paragraphs 21.03, 21.07], "each Authority should establish its own internal review arrangements to determine the extent to which it has established a QMS based on the above model". This model is set out by Chapter 21 as a whole [c.f. Paragraph 21.02]. Since a QMS which does not contain this provision for internal review would not meet the requirements of Chapter 21, the report under 21.17 should contain at least the information on the extent to which arrangements for internal review required by 21.10 are in place. These are as below.

Required Arrangements for Internal Review (Paragraph 21.10)

The Authority should show that arrangements are in place to ensure that:

(a)   An internal review is carried out to determine:

> *(i) the extent to which a QMS complying with the model of Chapter 21 has been established;*

> *(ii) the extent to which the Authority complies with the requirements of its QMS;*

> *(iii) the extent to which the Authority complies with PCT/GL/ISPE.*

(b)   The internal review demonstrates whether or not the requirements of the QMS and PCT/GL/ISPE are being applied consistently and effectively.

(c)   The internal review takes place at least once a year.

a) b) c) Patent Branch's ongoing commitment to management excellence includes the strengthening of strategic planning, comptrollership and performance measurement/evaluation processes. As part of the five-year plan to implement a Quality Management System (QMS) in all facets of its operations and improve quality, the Patent Branch has achieved some progress in the areas of Internal Review although these components remain in development. Several types of quality assessment may be undertaken and will be considered. They include quality diagnoses, quality investigations, audits and management reviews. Several quality assurance activities are planned for 2006-2007.

OPTIONAL INFORMATION UNDER PARAGRAPH 21.17

Guide to Internal Review Arrangements (Paragraphs 21.11–21.15)

Paragraph 21.11 states that 21.12 - 21.15 are "proposed as a guide to the basic components of an internal review mechanism and reporting system", and are thus optional. Authorities may respond to the following points to indicate the provisions they have in place for Internal Review.

The Authority may show that the following arrangements are in place and will be used for the purpose of internal review:

(a)   Arrangements providing information on conformity of S&E work; i.e. information from activities related to verification, validation and monitoring, as carried out in order to assess compliance of S&E work with PCT/GL/ISPE [c.f. point (a) under "Quality Assurance" above].

(b)   Arrangements providing information on the effectiveness, and the extent of implementation, of the QMS and its processes; whereby it can be established to which extent the QMS complies with the requirements of Chapter 21 and, if applicable, any other normative reference for the QMS.

[End of report]