

Ex-Post Evaluation of Japanese Technical Cooperation Project  
“Utilization of Intellectual Property Information”

External Evaluator: Nobuyuki Kobayashi, OPMAC Corporation

**0. Summary**

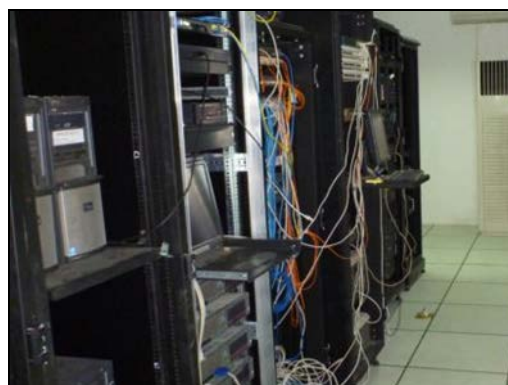
This project aimed at smooth application examination and easy acquisition of intellectual property information together with the enhancement of the management and protection of intellectual property through the development of an information system at the National Office of Intellectual Property of Vietnam (NOIP). The purpose of this project was consistent with policies and development needs at the times of both project planning and the ex-post evaluation and, therefore, its relevance is high. In developed information systems, while a part of the search system for examiners and electronic application systems has not been much used, intellectual property search systems for the public have been used in the case of application or corresponding to infringement by a wide variety of users, such as applicants, right holders, and agents. The administrative efficiency at NOIP was improved but the examination period tended to be prolonged, except for industrial design, mainly due to the increase in applications. For this reason, the effectiveness and impact of the project is fair. Both the project cost and the period of cooperation were within the plan and, therefore, the efficiency of the project is high. The planning capacity of NOIP staff for system development needs to be maintained while long- and medium-term plans become obsolete. They are issues in the technical capacities and, thus, the sustainability of this project is fair.

In light of the above, this project is evaluated to be satisfactory.

**1. Project Description**



Project Location



Equipment installed by the Project

**1.1 Background**

Vietnam has promoted economic liberalization since the middle 1980's, and a high rate of economic growth has been recorded as a result. Following economic development and globalization, the government of Vietnam has prepared relevant laws for protection of intellectual property, recognizing that protecting intellectual property is indispensable for technical innovation through research by companies and/or individuals in Vietnam and for the promotion of foreign investment. In November 2003, the “Agreement between Japan and the Socialist Republic of Viet Nam for the Liberalization, Promotion, and Protection of Investment” was concluded, and investment from Japan to Vietnam was revitalized. The protection of

intellectual property has become an important matter for Japanese firms.

In the first half of the 2000's, since reinforcement of the protection of intellectual property was a pressing need for Vietnam's participation in WTO, the relevant laws were being prepared. Also, there was the necessity not only for drafting the laws, but also for strengthening their implementation. To help meet these needs, aiming at efficient application processing, Japan International Cooperation Agency (JICA) assisted NOIP in building up an Industrial Property Administration System (hereinafter referred to as "IPAS") from 2001 to 2004 through the "Technical Cooperation Project for the Modernization of Industrial Property Administration". While attempts were made to improve the efficiency of application processing by the assistance, other matters that needed to be worked on for further efficiency became obvious, i.e. efficient searches for intellectual property information by NOIP staff, applicants, and agents, the speeding up of data input and lessening of input mistakes by accepting electronic applications.

Against this background, the Vietnamese government requested new technical cooperation, aiming at promoting the development of intellectual property information search systems and intellectual property information systems focusing on electronic application and also aiming at acquiring the capability necessary for the maintenance, management and update of information system development.

| List of Acronyms |   |   |
|------------------|---|---|
| FGD              | : | Focus Group Discussion                              |
| IPAS             | : | Industrial Property Administration System           |
| IPDL             | : | Intellectual Property Digital Library               |
| IP E-filing      | : | Intellectual Property Electronic Filing System      |
| IP Lib           | : | Intellectual Property Library System                |
| IP Sea           | : | Intellectual Property Search System                 |
| JETRO            | : | Japan External Trade Organization                   |
| JICA             | : | Japan International Cooperation Agency              |
| NOIP             | : | National Office of Intellectual Property of Vietnam |
| TRIPS            | : | Trade-Related Aspects of Intellectual Property      |
| VIPRI            | : | Vietnam Intellectual Property Right Institute       |
| WIPO             | : | World Intellectual Property Organization            |
| WTO              | : | World Trade Organization                            |

## 1.2 Project Outline

|                             |   |   |
|-----------------------------|---|---|
| Overall Goal                | Intellectual Property (IP) rights is controlled and protected more appropriately in Vietnam.  |   |
| Project Objective           | Through the utilization of the IP Information System, efficient application processing, management, and information service of the IP is available in NOIP.   |   |
| Output(s)                   | Output 1  | Adequate equipment and facilities for IP information system are installed and used.     |
|                             | Output 2  | IP information search system is available for IP substantive examination <sup>1</sup> . |
|                             | Output 3  | IP information is provided for the public through the Internet.                         |
|                             | Output 4  | E-filing is available   |
|                             | Output 5  | IP information system is operated and managed appropriately.                            |
| Inputs                      | <p>Japanese Side:</p> <ol style="list-style-type: none"> <li>1. Experts: 28 persons<br/>6 persons for Long-Term, 22 persons for Short-Term</li> <li>2. 16 Trainees received (Counterpart training in Japan)</li> <li>3. Equipment 128.42 million yen</li> <li>4. Local Cost approx. 84 million yen</li> <li>5. Others (incl. dispatch of related missions)</li> </ol> <p>Vietnamese Side:</p> <ol style="list-style-type: none"> <li>1. 29 Counterparts</li> <li>2. Equipment and Facilities</li> <li>3. Client PC 143 units</li> <li>4. Server room and Connection Cables</li> <li>5. Local Cost VND 4.76 billion (Utilities, Seminars, etc.)</li> </ol> |   |
| Total cost                  | 422.69 million yen  |   |
| Period of Cooperation       | January 2005 – March 2009   |   |
| Implementing Agency         | Ministry of Science and Technology/National Office of Intellectual Property of Vietnam  |   |
| Cooperation Agency in Japan | Japan Patent Office   |   |
| Related Projects            | Japanese Technical Cooperation Project for Modernization of Industrial Property Administration (MOIPA) <sup>2</sup><br>(period of cooperation: April 2000 – June 2004)  |   |

## 1.3 Outline of the Terminal Evaluation

### 1.3.1 Achievement of Overall Goal

At the time of the terminal evaluation, it was pointed out that: (1) although the incidence of impacts depends on external assumptions, there is a high prospect of achieving the overall goal of the project assuming that the current efforts were continued, and (2) the Overall Goal will be achieved as long as continuous efforts on the development and maintenance of the intellectual property information system were carried out.

<sup>1</sup> Substantive examination is an examination to assess whether an application satisfies the conditions for intellectual property right.

<sup>2</sup> While MOIPA supported the development of IPAS, this project conducted database tuning of IPAS.

### 1.3.2 Achievement of Project Objective

At the time of the terminal evaluation, there was the prospect that most of the project outputs would be achieved within the project period. It was pointed out that it was desirable to achieve the outputs, which were not affected by external assumptions, within the project period in order to achieve the project objective and sustain its effectiveness.

### 1.3.3 Recommendations

At the time of the terminal evaluation, NOIP was recommended to continue maintenance and regular updates of the intellectual property information system based on an annual action plan. It was also recommended that NOIP should modify the medium-long term plan<sup>3</sup> prepared by this project every year, making practical use of the technical skills for planning and analysis which were transferred by Japanese experts.

## 2. Outline of the Evaluation Study

### 2.1 External Evaluator

Nobuyuki Kobayashi, OPMAC Corporation

### 2.2 Duration of Evaluation Study

Duration of the Study: September 2011 – October 2012

Duration of the Field Study: November 24 – December 21, 2011 and  
April 2 – April 14, 2012

### 2.3 Constraints during the Evaluation Study

For many of the indicators to assess the incidence of project effects, data was not collected at the time of the terminal evaluation nor at the ex-post evaluation. In addition, there were several cases where indicators are not defined concretely. For this reason, judgment was made on alternative indicators when necessary, though it was difficult to set the level of achievement of the project. In addition, because the terminal evaluation report was not obtainable, information on the status at the time of the project completion came mainly from a project completion report and minutes of the discussions on the terminal evaluation with the counterpart agency.

## 3. Results of the Evaluation (Overall Rating: B<sup>4</sup>)

### 3.1 Relevance (Rating: ③<sup>5</sup>)

#### 3.1.1 Relevance with the Development Plan of Vietnam

In 2004 when this project was planned, the reinforcement of activities relevant to accumulation of intellectual property rights and protection a part of Vietnamese national development plans, i.e. “The 10 year Socio-Economic Development Strategy 2001-2010” and “The 5 year Socio-Economic Development Plan 2001-2005 (SEDP2001-2005)”. Directly after the inauguration of WTO in 1995, Vietnam had aspired to join the WTO and continued multi-lateral and bi-lateral consultations towards entry. As each WTO member country is required to fulfill an Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), the building up of a legal system to reinforce the protection of intellectual

<sup>3</sup> In order to improve technical capacity of the counterparts, this project supported NOIP in the preparation of a medium-long term plan for the operation and development of the intellectual property information system.

<sup>4</sup> A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

<sup>5</sup> ③: High, ②: Fair, ①: Low

property became a policy issue in Vietnam.

In the Vietnamese national development plan, “The 5 year Socio-Economic Development Plan 2006-2010 (SEDP2006-2010)”, the building up of a legal system for joining WTO it was planned. As part of the plan, the government worked on drafting the law relevant to the protection of intellectual property during project implementation. The Law on Intellectual Property was passed in November 2005 (enforced in July 2006, amended in June 2009, and the amended has enforced in January 2010) and Vietnam joined in WTO in January 2007. At project completion in 2009, the Vietnamese government as a WTO member country needed to have proper protection of intellectual property based on a Law on Intellectual Property.

As seen above, the policy for the reinforcement of the protection of intellectual property had been steadfastly maintained both at the time of project planning and termination and continuous efforts towards the building up of a legal system were made in order to guarantee observance of TRIPS Agreement. This project ultimately aims at the protection of intellectual property through information system development<sup>6</sup> in NOIP, and therefore, the project objective corresponded with the national development policy of Vietnam.

### 3.1.2 Relevance with the Development Needs of Vietnam

In a hearing at the time of the ex-ante evaluation, applicants, right holders, and agents, who are the ultimate beneficiaries, had required “prompt and appropriate application processing”, “disclosure of intellectual property information, such as application, examination, and registration”, and “simple electronic application.” Examiners needed an electronic database which quickly responds to and adequately comprehends existing intellectual property information for prompt and appropriate application processing. At the time of project planning in 2004, it was possible the NOIP staff to use intellectual property information search system. However, as the system did not have a design specification, it was impossible to confirm the details of the system specification, which meant a risk that it would not be possible to maintain and operate it. Besides, the existing search system had a security problem in that the system directly accessed IPAS database, including undisclosed information. Secondly, although it is necessary to confirm if an application infringes on registered rights when applying for intellectual property rights, an intellectual property information search system (hereinafter referred to as IPDL) for the public had not been established and disclosed intellectual property information was limited to paper-based information. It therefore took a long time for applicants and agents to search for intellectual property information. In addition, paper-based applications tend to cause wrong conversion and input mistakes in OCR reading of application documents or transcriptions. Therefore, there was the expectation for an electronic application system to prevent such mistakes and to contribute to the smooth processing of application examination.

At the time of the project completion in 2009, the Law on Intellectual Property of Vietnam had stipulated a time limit for the application period<sup>7</sup> and NOIP had been required to complete an application examination within this period. On the other hand, the number of applications had rapidly increased in the year when the project was completed (2009) compared to the number in the year preceding the start of the project (2004) (see Table 1). As NOIP was required to complete the examinations of an increasing number of applications within the period, there was an urgent need to examine applications efficiently.

The intellectual property information search system for the public (hereinafter referred to as “IP Lib”) developed in this project has provided users a means of collecting intellectual property information comprehensively and simply. If IP Lib had not been used at the time of

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<sup>6</sup> The overview of the developed intellectual property information system is explained in Table 3 of “3.2.1.1 Project Output.”

<sup>7</sup> The law on Intellectual Property amended in June 2009 stipulates that formality examination for all types of intellectual property rights has to be completed within a month from the date of applying. As regards substantive examinations, the time limit for examination periods differs according to the type of intellectual property rights: within 18 months from the date of application disclosure or of request for substantive examination for patents, 7 months from application disclosure for industrial design, and 9 months from application disclosure for trademarks.

project completion, it would have been difficult to obtain comprehensive intellectual property information from the Internet and fulfilling the need of applicants and agents to search for intellectual property information simply would have been extremely difficult.

Table 1: Applications for major types of intellectual property right

|                    | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|
| Patent             | 1,431  | 1,947  | 2,166  | 2,860  | 3,199  | 2,890  | 3,582  |
| Vietnamese         | 103    | 180    | 196    | 219    | 204    | 258    | 306    |
| Foreigners         | 1,328  | 1,767  | 1,970  | 2,641  | 2,995  | 2,632  | 3,276  |
| Industrial Design  | 972    | 1,335  | 1,595  | 1,905  | 1,736  | 1,899  | 1,730  |
| Vietnamese         | 686    | 889    | 1,105  | 1,338  | 1,088  | 1,430  | 1,207  |
| Foreigners         | 286    | 446    | 490    | 567    | 648    | 469    | 523    |
| Domestic Trademark | 14,916 | 18,018 | 23,058 | 27,110 | 27,713 | 28,677 | 27,923 |
| Vietnamese         | 10,641 | 12,884 | 16,071 | 19,653 | 20,831 | 22,378 | 21,204 |
| Foreigners         | 4,275  | 5,134  | 6,987  | 7,457  | 6,882  | 6,299  | 6,719  |

Source: NOIP Annual Reports

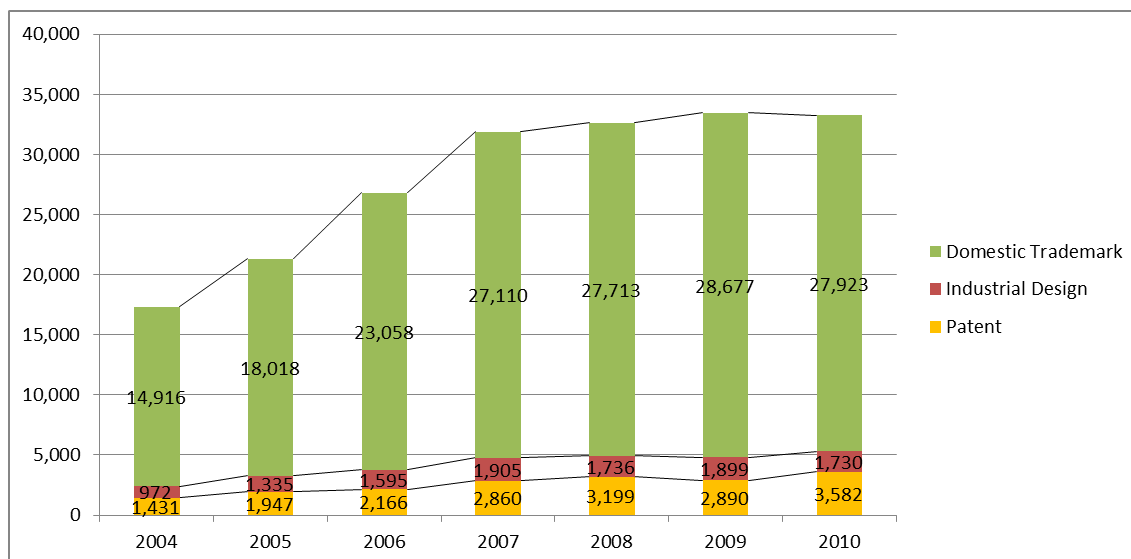


Figure 1: Changes in applications for major types of intellectual property right

During project implementation, the need for the protection of intellectual property increased following development of the Vietnamese economy and globalization. The search system for the public developed in this project deals with patents, industrial design and trademarks, and in these areas the number of applications for intellectual property right by Vietnamese and foreigners has steeply increased. In consideration of the above circumstance, this project attempted to contribute to the smooth application examination and easy acquisition of intellectual property information through the development of an intellectual property information system. It is judged, therefore, the project objective adequately corresponds with the development needs of Vietnam.

### 3.1.3 Relevance with Japan's ODA Policy

At the time of project planning in 2004, Japan's Official Development Assistance (ODA) Charter emphasized assistance to Asian countries and was also strongly conscious of the necessity for institution building and human resource development aiming at self-help by

developing countries based on good governance. In order to stimulate sustainable growth supported by trade and investment, institution building and human resource development in the field of the protection of intellectual property right were emphasized in the Charter. In concrete terms, Japan's ODA Charter, decided upon by the Cabinet in 2003, placed the Asian region as a priority area for assistance. It was recognized that relations with East Asian countries particularly need to be strengthened through ODA, considering the reinforcement of economic cooperation. Furthermore, in "Sustainable Growth", out of four priority issues of the Charter, assistance for institution building and human resource development were stressed and "appropriate protection of intellectual property right" was given importance.

Both the Country Assistance Program of the Ministry of Foreign Affairs and JICA's Country Assistance Strategy recognize capacity development of the Vietnamese government in the protection of intellectual property as an important field of cooperation aiming at the activation of foreign investment in Vietnam. The Country Assistance Program set out a plan in 2004 which regards three fields of cooperation as priority areas. The "Promotion of Growth" was placed as one of them. In addition, capacity development of the implementing agency for the protection of intellectual property was identified as a concrete task of cooperation in the field of "Promotion of Growth". In similar terms to the Country Assistance Program of the Ministry of Foreign Affairs, JICA's Country Assistance Strategy also came up with a policy to cope with capacity development of the implementing agency for the protection of intellectual property in the field of "Promotion of Growth; Development of the Investment Environment"

This project assisted in the development of the intellectual property information system and the capacity development necessary to support the system in the Asian region. Also, the project attempted the protection of intellectual property through the smooth acquisition of intellectual property information and the speeding up of the application process. As mentioned above, Japan's ODA policy attaches importance to institution building and human resource development for the protection of intellectual property. In light of the project objective and activities, it is judged that the project has a high consistency with Japan's ODA policy.

This project has been highly relevant to the country's development plan and development needs, as well as to Japan's ODA policy, therefore its relevance is high.

### **3.2 Effectiveness and Impact<sup>8</sup> (Rating: ②)**

#### **3.2.1 Effectiveness**

Among the evaluation criteria, the incidence of project effects at the time of project completion, as "Effectiveness", is mentioned in "3.2.1 Effectiveness" while the incidence of project effects at the time of the ex-post evaluation, as "Impact", is shown in "3.2.2 Impact". The assessment of "Effectiveness" is to be conducted from both the viewpoints of: (1) project outputs at the time of project completion and achievement of the project objective, and (2) the degree to how far the project objective contributes to the project outputs.

The project has five Outputs, including three types of newly developed intellectual property information systems (IP Sea, IP Lib, and IP E-filing). Thus, the connections between the Outputs to the Project Objectives were complicated. For a better understanding, Figure 2 explains the outline of the intellectual property information system in NOIP while the outlines of activities, the contribution to the establishment of the intellectual property information system, prospective beneficiaries and relevance with the Project Objectives have been summarized according to each of the Outputs in Table 2. In addition, Table 3 shows an overview of the newly developed information system.

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<sup>8</sup> "Effectiveness" is rated taking into account of "impact".

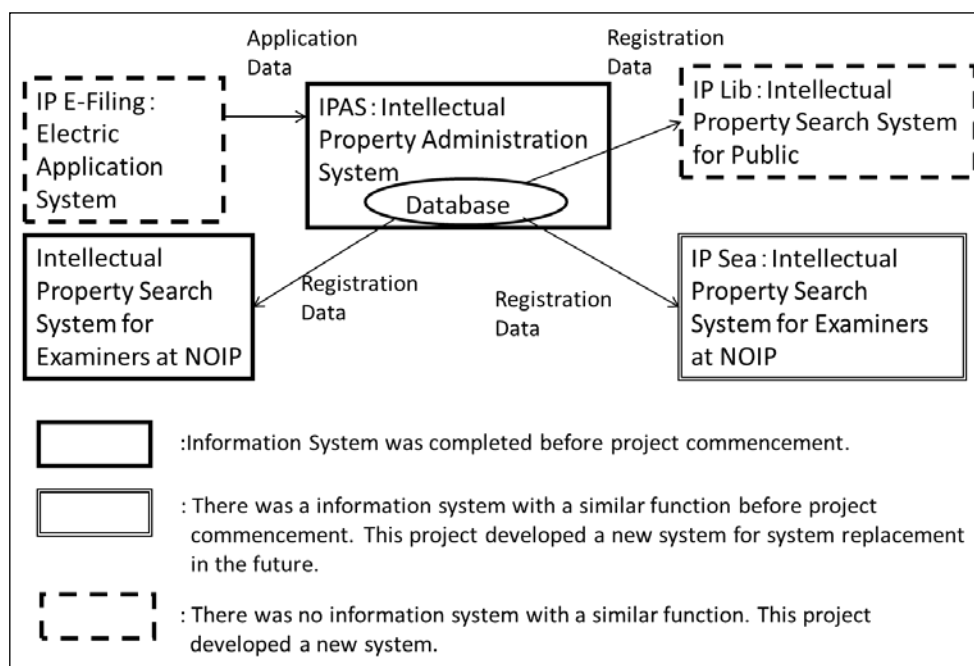


Figure 2: Overview of the intellectual property information system in NOIP

Table 2: Outlines of System Development

| Output   | Main activities   | Relevant system                                     | Prospective beneficiaries                             | Relevance to the Project Objectives* |                 |                 |
|----------|---|---|---|--------------------------------------|-----------------|-----------------|
|          |   |   |   | Indicator 1                          | Indicator 2     | Indicator 3     |
| Output 1 | Installation of equipment for intellectual property information system            | intellectual property information system in general | NOIP staff  | Relevant                             | Relevant        | Relevant        |
| Output 2 | Development of intellectual property information search system for NOIP examiners | IP Sea  | NOIP examiners  | Highly relevant                      | Irrelevant      | Irrelevant      |
| Output 3 | Development of intellectual property information search system for the public     | IP Lib  | Applicants, agents, right holders, enforcing agencies | Relevant                             | Highly relevant | Highly relevant |
| Output 4 | Development of electronic application system                                      | IP E-Filing   | Applicant, agents                                     | Highly relevant                      | Irrelevant      | Irrelevant      |
| Output 5 | Preparation of operational and management basic rules, training                   | intellectual property information system in general | NOIP staff  | Relevant                             | Relevant        | Relevant        |

Source: JICA's internal documents and interview with the counterpart agency. Note: \* The indicators for the Project Objectives are Indicator 1 "Efficiency of the application processing in NOIP", Indicator 2 "IPDL is used by the public" and Indicator 3 "Improvement the degree of satisfaction of the applicants and rights holders IP administration service NOIP"



Table 3: Overview of the newly developed information system

| Information system | Function   | Usage   | Timing of Release   |
|--------------------|--|---|---|
| IP Sea             | Search of intellectual property information for NOIP examiners | There are search systems for patents, industrial design, and trademarks. NOIP examiners confirm a proceeding right through substantive examination.       | Trademark-Official release: September 2008, Patent and Industrial Design-Release to system environment*: March 2009 |
| IP Lib             | Search of intellectual property information for the public     | Applicants and agents confirm a proceeding right before applications. Right holders confirm the contents of rights in infringement cases.                 | Official release of expanded version: November 2008   |
| IP E-filing        | Acceptance of electric application                             | Applicants and agents submit applications by electric data. This reduces data input in NOIP and contributes to the efficiency of application examination. | Acceptance of applications: June 2007   |

Source: Report of ex-ante evaluation team and interviews with NOIP staff and the expert dispatched

Note: \* The systems were in a trial phase at project completion and were not officially released.

### 3.2.1.1 Project Output

In this project, five outputs were set out as the direct project effects. The situation regarding the achievement of the project outputs at the time of project completion is presented as follows:

- 1) Output 1 “Adequate equipment and facilities for IP information system are installed and used”

For Output 1, two indicators (1. Number of operating days of equipment and facilities for the intellectual property information system, 2. Periods when the equipment and facilities for the intellectual property information system could not be used) were set. The information system is under operation almost throughout the whole year. It is judged, therefore, that Output 1 was achieved. At the time of project completion in 2009, the intellectual property information system had been operated more than 350 days a year. The terminal evaluation did not collect data for periods when the equipment and facilities could not be used. The operation of the database on intellectual property information (hereinafter referred to as “IP Lib”) that it is possible for the public to use, the operation of the server was changed to continuous operation from the limited operation during working time only before project implementation. Given this situation, the number of days per year minus operation days is considered to be the period when the facilities could not be used. This was less than 15 days in 2009.

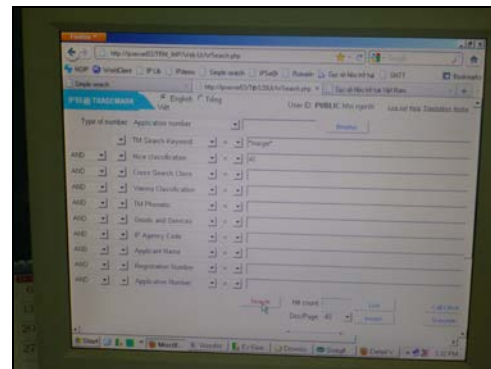


Photo 1: Screen shot of IP Sea

- 2) Output 2 “IP information search system is available for IP substantive examination”

For Output 2, one indicator (1. Number of days of utilization of the intellectual property information search system by the examiners) was established. As data on the above indicator was not collected in the terminal evaluation, an alternative indicator (availability of intellectual property information system) was used. This ex-post evaluation employs this indicator. Output 2 has been achieved, considering the intellectual property information search system for NOIP examiners (hereinafter referred to as “IP Sea”) was furnished with the functions originally planned. Nevertheless, system development to add functions from the former search system was

continued by project completion as examiners were accustomed to using the former system. In this process, the development of the search system for trademarks, which has the largest number of applications, was ahead of others. In IP Sea, the search system for trademarks was officially released under the name of the Director General of NOIP at the time of project completion. On the other hand, the search system for patents and industrial design was in the trial stage at the time of project completion, and its development had not yet been completed. In patent and industrial design, examiners had used a search system which had been developed before the commencement of the project for substantive examination and, therefore, IP Sea did not produce the project effects (efficiency in application examination).

The following three factors have been given as the main causes of the delay in IP Sea development: (1) a lack of experience on the part of the vendor, (2) a wide range of ideas for the improvement of functions given by NOIP examiners, (3) difficulties in mutual understanding among the staff of NOIP, JICA experts, and vendors. It was difficult to achieve both quality of products and the deadlines for delivery in the system developed by vendors, and products with the planned quality were not made in accordance with the planned schedule. Besides, as examiners were versed in using the intellectual property information search system used before the project implementation, they wanted the functions of the former system to be installed in IP Sea. As the result, it took time to draw together their opinions in order to reflect them in the system functions. In a hearing with vendors, an opinion was given that communication and mutual understanding among the staff of the IT Division of NOIP, examiners, JICA experts, and local vendors was not easy and therefore it was hard to decide the details of the system functions.

In addition to the development of the IP information search system, the project achieved a reduction in the time for response through database tuning of the IPAS system (administrative work system) introduced in the “Japanese Technical Cooperation Project for Modernization of Industrial Property Administration”.

### 3) Output 3 “IP information is provided for the public through the Internet”

For Output 3, two indicators (1. The amount of intellectual property information provided for the public through the Internet, 2. The frequency of updating intellectual property information provided through the Internet) were set. IP Lib stored approximately 160,000 intellectual property rights at the time of project completion in 2009 and data updating has been held routinely. It is judged, therefore, Output 3 had been achieved.

Table 4: Number of registered intellectual property rights

| Year               | 2007    | 2008    | 2009    | 2010    | 2011    |
|--------------------|---------|---------|---------|---------|---------|
| Total registration | 112,735 | 138,103 | 162,838 | 181,389 | 205,028 |
| Patents            | 6,770   | 7,436   | 8,142   | 8,964   | 9,949   |
| Utility Solutions  | 671     | 746     | 810     | 868     | 937     |
| Industrial Design  | 11,398  | 12,735  | 13,971  | 15,123  | 16,268  |
| Trademarks         | 93,896  | 117,186 | 139,915 | 156,434 | 177,874 |

Source: NOIP

IP Lib officially released its basic functions in 2007. In November 2008, patents, utility solutions, industrial design, and trademarks were registered in IP Lib with extended functions, and since project completion, the number of registrations of intellectual property rights has continuously increased (see Table 4). According to NOIP, IP Lib has been continuously updated every two weeks in principle after the release to the public.

Compared with other systems developed by this project, IP Lib had had a wider range of prospective beneficiaries including applicants, agents, rights holders and enforcing agencies. For this reason, IP Lib is a critical in ensuring the dissemination of project effects.

4) Output 4 “E-filing is available”

One indicator (1.Number of applications filed through the electronic filing system) was selected for Output 4 but a target for the indicator was not established. Given that electric application had been officially commenced by project completion, Output 4 could be seen as having been achieved to some extents. However, electric the application system was an off-line system unlike in the plan and there were no applications via the electric applications system (IP E-filing). For these reasons, the project effects were not fully produced.

NOIP started accepting applications through the off-line electronic filing system in June 2007. Although on-line application was planned at the stage of project planning, off-line applications using a combination of both paper and electronic data had been used by the completion of this project. After starting accepting electronic applications, NOIP opened seminars and explanatory meetings to promote the use of IP E-filing. However, no application by electronic data had been filed by the end of the project.

The reason for that is that no public certification agency had been established by the end of the project in spite of the fact that on-line applications require a certification by the agency. It was assumed, at the planning stage of the project, that the drawing up of laws on electronic certification and the establishment of a public certification agency would be achieved in the same period, but the latter took more time. In order to proceed with the development of the on-line system as soon as the agency was established, dispatched experts and counterparts routinely visited the relevant government offices and monitored the establishment of the public certification agency.

The probability that a public certification agency may not be established in addition to the drawing up of laws of electronic certification should have been examined at the planning stage of the project. A public certification agency is indispensable for on-line applications. Also, it is an external assumption, a difficult task to achieve its establishment within the project.

5) Output 5 “IP information system is operated and managed appropriately”

With respect to Output 5, two indicators (1. Operation and management framework of the intellectual property information system established, 2. Seven C/P personnel able to independently operate, maintain and manage the intellectual property information system) were established. Operational regulations and detailed rules were established and 10 counterparts acquired the appropriate level of technical capacity. For these reasons, it can be judged that Output 5 has been achieved.

Regarding Indicator 1, regulations for the operation and management of the information system were prepared, the text was drawn up by March 2008 and the detailed rules were decided by March 2009. Respecting Indicator 2, NOIP staff had acquired the skills necessary for the development and operation of the intellectual property information system during project implementation. In capacity assessment for ten personnel of the counterpart (assessment was

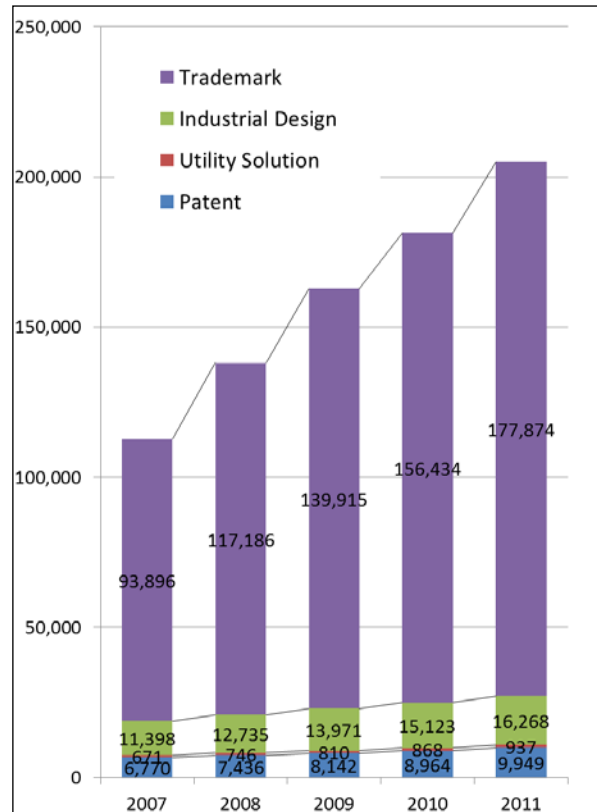


Figure 3: Changes in registered intellectual property rights

given in five grades for thirteen items in six fields) in October 2008, although two persons were given grade of 2 for “Design” in “System Development”, others attained grade of 3 or higher. Although there still remains room for improvement in the field of “System Development”, the staff has acquired sufficient skills in the operation, maintenance and management of the intellectual property information system.

### 3.2.1.2 Achievement of Project Objectives

In order to measure the degree of achievement for the Project Objectives (“Through the utilization of the Intellectual Property Information System, efficient application processing, management, and information services of the IP is available in NOIP”), three indicators were established. The project effects are the improvement of efficiency in application processing and management and the provision of information on intellectual property outside of NOIP (applicants, agents, rights holders, enforcing agencies) in this project. Both of these are equally important in the achievement of the Project Objectives. Achievement of the former effect is assessed by Indicator 1 and achievement of the latter by Indicators 2 and 3. The status of achievement of the indicator is as follows.

#### 1) Indicator 1 “Efficiency of the application processing in NOIP”

The terminal evaluation employed qualitative information. The ex-post evaluation, however, used alternative indicators (Handling of applications for intellectual property right and Examination periods of application) in order to assess the achievement of Indicator 1 quantitatively. While the efficiency of administrative work in NOIP has been improved at project completion in 2009, a part of the intellectual property information system developed has not been used and there is an external factor (a substantial increase of applications). As a result, the examination period was beyond the legal limits. Thus, Indicator 1 was not achieved as planned.

Table 5: Handling of applications for intellectual property rights

|                      | First year of Project (2005) | Last year of Project (2009) |
|----------------------|------------------------------|-----------------------------|
| Total Handling*      | More than 18,000             | 55,241                      |
| Number of NOIP staff | 185                          | 285                         |
| Handling/staff       | 97.3                         | 193.8                       |

Source: NOIP

Note: \* Total of registrations, refusals, amendments, assignments, etc.

Table 6: Examination periods of application for intellectual property rights \*

| Type of IP        | Units: months |      |      |      |      |      |      |      |              |
|-------------------|---------------|------|------|------|------|------|------|------|--------------|
|                   | 2004          | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Legal Limits |
| Patents           | 50.7          | 50.7 | 51.1 | 52.4 | 54.6 | 59   | 60.9 | 60.8 | 19           |
| Industrial Design | 17.2          | 14.2 | 13.6 | 11.7 | 11.3 | 11.9 | 13   | 14.1 | 8            |
| Trademarks        | 16.2          | 18.1 | 20.9 | 20.3 | 21.7 | 19.4 | 19.4 | 19.9 | 10           |

Source: NOIP

Note: \* Months from filing date to registration date. The Law on Intellectual Property amended in 2009 stipulated a maximum examination period 19 months for patents (Formality examination-1 month, Substantive examination-18 months), 8 months for industrial design (Formality examination-1 month, Substantive examination-7 months) and 10 months for trademarks (Formality examination-1 month, Substantive examination-9 months).

The number of applications for intellectual property rights handled by NOIP sharply increased due to the increase in applications overall. The number of applications handled per employee also increased (See Table 5). It is conjectured that the investment in computerization

(introduction of servers, client PCs, and printers) through this project contributed to improvements in administrative efficiency. Also, in this project, a reduction in the time needed for responses was made by improvement of the IPAS system, which resulted in an improvement in administrative efficiency. As described in “3.2.1.1. Project Output”, however, the search system developed before the project started was still used to search for patents and industrial designs by examiners and neither IP E-filing was used. Thus, these have not contributed to an improvement in administrative efficiency.

It was recognized, at the time of project planning, that the “efficient processing” of applications for intellectual property rights in the project objective included application processing within legal limits. Yet, periods for application examination have tended to be prolonged and application processing was not being completed within the legal limits at the time of project completion in 2009 (see Table 6). Actual application examination was 1.5 -3 times the legal limits, depending on the types of intellectual property rights. In addition to the non-use of IP E-filing, which is mentioned in Output 4 of “3.2.1.1 Project Outputs”, external factors also contributed to the extension of the application examination period. According to NOIP, the following three factors were mentioned as causes of the extension of the examination period: (1) the number of applications sharply increased during project implementation (see Table 1), (2) while the number of examiners was increased in order to correspond to the increasing applications, it still took time for them to be versed in the work, (3) the number of patents not completed to be examined in foreign countries increased, so that cases where it is impossible to refer to the results of examinations in other countries also increased.

#### 2) Indicator 2 “IPDL is used by the public”

The terminal evaluation employed qualitative information. The ex-post evaluation, however, used alternative indicators (number of access to IP Lib) in order to assess the achievement of Indicator 2 quantitatively. However, the amount of access to IP Lib before 2009 was not recorded. It is difficult, therefore, to judge achievement based on quantitative data.

Interviews with IP Lib users confirmed that patent law firms as agents of application for intellectual property rights and to tackle infringement had begun to use IP Lib. Under the project, seminars were held for expected users in order to promote the use of IP Lib.

#### 3) Indicator 3 “Improvement of the degree of satisfaction of the applicants and rights holders to IP administration service by NOIP”

In the terminal evaluation, interviews with IP Lib users confirmed that the users were satisfied, though a survey was not conducted. This ex-post evaluation identified the benefits behind satisfaction through interviews with patent law firms. According to hearings with IP Lib users, it is obvious that the search system has contributed to improvements in administrative efficiency, and it is considered that Indicator 3 has largely been achieved.

Since most applications are filed through patent law firms, the firms are the main users of IP Lib. According to some patent law firms<sup>9</sup>, it has been necessary for them to investigate, in filing, whether there is any registered right on which an application infringes. Before IP Lib was established, they had confirmed this using official gazettes kept in the firms and/or materials deposited in NOIP. After IP Lib was established, it became possible to proceed application administration by investigating through the system and by making use of other information sources having narrowed the investigation areas. According to patent law firms, as the information on intellectual property open to the public is scarce in Vietnam, narrowing the investigation area through IP Lib is important for efficient application administration.

While the target for Indicator 3 was achieved, inadequate data collection does not allow a fair assessment of Indicator 2. As for Indicator 1, a part of the intellectual property information system developed by this project was not utilized. Therefore, the project objectives were only

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<sup>9</sup> Interviews were conducted with five patent law firms in Hanoi and Ho Chi Minh.

partially achieved. Both the non-use of a part of the developed information system and, as an external factor, an increase in applications prevented a shorter examination period. Among the project effects of this project (improvement of efficiency in application processing and the management and provision of information on intellectual property outside of NOIP), IP Sea is partially used for examination of trademarks, which has the highest number of applications, for the former project effect, while the provision of information via IP Lib was obvious in the latter project effect. Thus, the project effects are fair.

### 3.2.2 Impact

In this study, use of the intellectual property information system and the incidence of benefits at the time of the ex-post evaluation were reconfirmed, and since the development of the intellectual property information system was continuing at the end of the project, it is considered that the benefit had not appeared at the time of project completion.

#### 3.2.2.1 Achievement of the Overall Goal

In order to measure the extent to which the Overall Goal (“Intellectual Property (IP) rights is controlled and protected more appropriately in Vietnam”) had been achieved, four indicators were established. Indicators 1 to 3 were used to confirm the effectiveness of the project while keeping a consistency with the overall goal. Indicator 4 dealt with the incidence of project effects in Vietnam as a whole. How far each indicator is being achieved is presented as follows.

##### 1) Indicator 1 “IP application handling is appropriately done in NOIP”

In order to assess the achievement of Indicator 1 quantitatively, this ex-post evaluation used the application examination period as an alternative indicator and the legal limits<sup>10</sup> stipulated by the Law on Intellectual Property as a target. From project completion to the time of the ex-post evaluation, examination periods had become prolonged and it remained that the period exceeded the legal limits (see Table 6). Therefore, Indicator 1 was not achieved as planned.

As mentioned in Indicator 1 of “3.2.1.2 Achievement of Project Objectives”, both internal (non-use of a part of the system) and external factors (large volume of applications, examiners’ experience with their tasks, difficulty of using examination results in other countries) have also resulted in extensions of the examination period. According to patent law firms, there were many cases where examinations were not completed within the period.

After the project terminated, the operation of the intellectual property information system has tended to be improved (see Table 7). Since at one point the server did not work due an increase in temperature in the server room, a new air conditioner was installed at the end of 2010. Although a back-up power source is prepared for working hours, if the power supply is cut off at night or at the weekend, access to IP Lib is difficult.

Table 7: Operation days of the intellectual property information system

| 2009               | 2010               | 2011*              |
|--------------------|--------------------|--------------------|
| More than 350 days | More than 355 days | More than 330 days |

Source: NOIP

Note: \* As of November 2011

At the time of the ex-post evaluation, only the search system for trademarks in IP Sea had been used. Searches for industrial design and patents used the system developed before the

<sup>10</sup> The time limit of the examination period is explained in footnote 7. As mentioned in Indicator 1 of “3.2.1.2. Achievement of Project Objectives”, it was recognized that “appropriate processing of intellectual property” included application processing within the legal period at the time of project planning. This definition was emphasized also for the judgment for evaluation.

project started. The search system for trademarks was ahead of the other search systems and its usage commenced officially during the project period. For industrial design and patents, the development of IP Sea had not been completed by project completion. As examiners were versed with the use of the existing search system and had not frequently used the new system, the use of the new system was not commenced officially. On both types of intellectual property rights, data conversion to the IP Sea database has been suspended.

There were no applications through IP E-filing at the time of the ex-post evaluation. It was not possible to file applications by electronic media only. Furthermore, there was no incentive in terms of application costs for users to apply using both paper and electronic media. According to JICA experts, the following two factors were mentioned as causes why IP E-filing had not been much used, i.e. (1) applications by electronic media only were not accepted and it was necessary to file using both paper and electronic media, and so the administrative burden for applicants was not lightened, (2) as there was little difference in application cost between applications using paper and electronic media in combination and paper-based only applications, the incentive for data input was weak. In hearings with examiners and the staff of IT Divisions, there was the opinion that, because it is difficult to discern forged documents, applications using electronic data only are hardly acceptable without certification from a public certification agency.

2) Indicator 2 “IP Digital Library (IPDL) is used by the public”

In order to assess the achievement of Indicator 2 quantitatively, the amount of access to IP Lib is employed as an alternative indicator. After the project terminated, the amount of access to IP Lib tended to increase (see Table 8) reaching approximately 400 per day in 2011. As mentioned in Indicator 3 of “3.2.1.2. Achievement of the Project Objectives”, IP Lib has been frequently used for application administration by patent law firms. As public users have utilized IP Lib after project completion, it can be considered that Indicator 2 was achieved.

In hearings with patent law firms and right holders<sup>11</sup>, although IP Lib continued to be a precious information source at the time of the ex-post evaluation, the following two points were indicated: (1) updates in information are sometimes late, (2) there are some items which is not inputted. At the time of the ex-post evaluation, patent law firms were the main users of IP Lib since this requires a basic knowledge of intellectual property right. There was a case, however, that an entrepreneur had participated in an intellectual property right seminar was using IP Lib and was planning a business after investigating study trends in this interesting filed.

Table 8: Access to IP Lib

|                             | 2010   | 2011    |
|-----------------------------|--------|---------|
| Access from Vietnam         | 64,444 | 154,910 |
| Access from outside Vietnam | 3,710  | 10,435  |

Source: NOIP

3) Indicator 3 “IP enforcement activities are strengthened by using IP information”

It was difficult to obtain quantitative information on Indicator 3. By interviewing patent law firms and a relevant government agency, this ex-post evaluation assessed whether IP Lib was utilized for infringement cases of intellectual property rights. This project has contributed to an appropriate crackdown on counterfeit products through the provision of intellectual property information to patent law farms and the Vietnam Intellectual Property Research Institute (hereinafter referred to as “VIPRI”). Thus, it can be considered that Indicator 3 was achieved.

With respect to correspondence with counterfeit products, in many cases, a right holder makes a request for administrative action to a regulatory agency or mediates with a violator

<sup>11</sup> Hearings were conducted with five IP Law firms in Hanoi and Ho Chi Minh and with a rights holder.

through a patent law firm. In particular, local subsidiaries of Japanese companies seldom have a division that deals with intellectual property in Vietnam. It has been pointed out, therefore, that patent law firms have a major role in correspondence with infringement<sup>12</sup>. For requests for administrative action to a regulatory agency, judgment of the infringement by VIPRI is recommended<sup>13</sup>. Through the hearings of this evaluation study, it was ascertained that patent law firms and/or VIPRI used IP Lib when dealing with cases of infringement. Patent law firm investigate whether a client is a legitimate rights holder by using IP Lib. Also, VIPRI has used IP Lib for the cross checking of application contents.

- 4) Indicator 4 “The evaluation on IP protection by the international organizations (WIPO, WTO, etc.) improved.

According to NOIP, comprehensive evaluation of the protection of intellectual property in Vietnam by international organizations was not conducted after the project terminated, so it is not possible to confirm the conditions of achievement.

Although the overall goal was somewhat achieved for target Indicator 2 and target Indicator 3, the period for application examination has been longer than before due to factors such as increases in applications and underutilization of IP E-filing in Indicator 1. Therefore, the overall goal was only partially achieved

#### 3.2.2.2 Other Impacts

As the result of a questionnaire with NOIP and hearings with people concerned, no negative impact on the natural and social environment has been confirmed. In order to grasp the project effects from many different angles, Focus Group Discussions (hereinafter referred to as “FGD”) with NOIP examiners and staff of the divisions relevant to the intellectual property information system<sup>14</sup> were implemented. In order to grasp participants’ opinions quantitatively, a vote was conducted after eliciting opinions about the discussion theme. Also, based on opinions from the participants, issues concerning the intellectual property information system contributing to the protection of intellectual property were taken as opinions for voting. The following is the outline of a FGD.

- Venue : NOIP Headquarter (Hanoi City)
- Date : 12<sup>th</sup> December 2011
- Participants : Examiners (6 persons: 3 males and 3 females), staff of divisions relevant to the IP information system (6 persons: 4 males and 2 females)
- Theme : “How the intellectual property information system contributes to the protection of intellectual property?”
- Voting Method : After narrowing down the opinions to about five, each person voted using three votes (In the case where he/she strongly agreed, multiple votes for the same opinion were accepted).

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<sup>12</sup> Based on interviews at JETRO

<sup>13</sup> Okada, Takako (2010), “Counter measures to counterfeit products in Vietnam and the Law on Intellectual Property (Effective from January 2010)”, *Patents Vol.63 No.12*

<sup>14</sup> The staff of an Intellectual Property Registration Division and an IT Division were targeted.



Table 9: Results of the FGD

| Examiners       |  |       | Staff relevant to the intellectual property information system |  |       |
|-----------------|--|-------|--|--|-------|
| Project effects |  |       |  |  |       |
| Rank            | Opinion  | Votes | Rank   | Opinion  | Votes |
| 1               | IPAS helps in managing documents and data in a well-organized manner.  | 7     | 1  | Supporting individuals, agencies during the filing process   | 6     |
| 2               | Intellectual property information system helps in searching for intellectual property rights much more quickly than before.    | 3     | 2  | Helping users/applicants monitor their application status more easily  | 1     |
| 2               | It helps in issuing intellectual property certificates in a more accurate manner.  | 2     | 2  | Reducing operational and management costs  | 1     |
| 4               | It helps in providing intellectual property information (regarding State Management: Law, Decrees, Circulars) to public users. | 1     | 2  | Helping in faster and more accurate assessment (of violation cases)  | 1     |
|                 |  |       | 2  | Providing research trends for inventors  | 1     |
| Issues          |  |       |  |  |       |
| 1               | Information and data on intellectual property is not regularly updated.  | 3     | 1  | Slow response of the intellectual property information system  | 3     |
| 2               | The responsive of the system is long (slow).   | 2     | 1  | More attention needs to be paid by management to the intellectual property information system as well as to information technology in general. | 3     |
|                 |  |       | 3  | Shortage in information technology staff.  | 2     |
|                 | Total  | 18    |  | Total  | 18    |

In the results of the FGD (see Table 9), In addition to the project effects identified by interviews with NOIP staff and IP Lib users (such as the improvement of efficiency in the application process of applicants and agents), participants recognized easy checking of the status of applications and the reduction of operating costs in NOIP. Besides this, since examiners process applications for intellectual property rights using the IPAS system, they consider that they have contributed to the protection of intellectual property by implementing smooth examination with the proper management of application documents. This project conducted database tuning of IPAS. While examiners consider that the late update of intellectual property information is an issue necessary to be improved, the staff relevant to the intellectual property information system recognize that insufficient resource allocation to the system is an issue.

This project has produced its effects to some extent and, therefore, its effectiveness and impact is fair. As for the Project Objective, Indicator 1 was only partially achieved because a part of the developed system was not utilized and this indicator was affected by external factors while Indicator 3 (satisfaction with the provision of intellectual property information) was achieved. The Overall Goal was partially achieved. The use of IP Lib has become more prevalent but the period for application examination is prolonged.

### 3.3 Efficiency (Rating: ③)

#### 3.3.1 Inputs

| Inputs                              | Plan  | Actual Performance   |
|-------------------------------------|---|--|
| (1) Experts                         | 4 persons for Long-Term<br>TBD after the commencement of project for Short-Term | 6 persons for Long-Term<br>22 persons for Short-Term   |
| (2) Trainees received               | Field(s) of training: TBD after commencement of the project                     | Field(s) of training: Intellectual Property Information Policy, Leadership Development for Information System Promotion, Management of Intellectual Property Information Systems, etc. |
| (3) Third-Country Training Programs | Field(s) of training: No Third-Country Training Programs were planned.          | Field(s) of training: None   |
| (4) Equipment                       | Network equipment, Servers, and Office equipment                                | Network equipment, Servers, Office equipment, Generators, etc.   |
| Total Project Cost                  | 530 million yen   | 422.69 million yen   |
| Total Local Cost                    | N/A   | 33.01 million yen <sup>15</sup>  |
| Period of Cooperation               | Jan. 2005– Mar. 2009 (51 months)  | Jan. 2005– Mar. 2009 (51 months)   |

##### 3.3.1.1 Elements of Inputs

With regard to inputs of the Japanese side, the dispatch of long-term experts was changed when the project was implemented, from 4 fields (chief advisor, intellectual property information, computer system, project coordinator) to 3 fields (chief advisor, intellectual property information, project coordinator). For the field of computer systems, multiple short-term experts were dispatched instead of a long-term expert. The reason why the number of long-term experts increased was that there was a change in experts during project implementation. Short-term experts were dispatched to 15 fields during project implementation<sup>16</sup>. According to answers from a questionnaire with NOIP, experts were selected based on the proper standards and the timing of dispatch was more or less appropriate. Assistance by experts was important especially for the process of the management of system development projects by a vendor such as NOIP when there was little experience on the part of the management. Also, NOIP commented that the installed facilities (network equipment, servers, PCs) properly corresponded to the needs.

As regards the inputs of the Vietnamese side, though it is difficult to make a precise comparison as the quantity of inputs was not clearly decided at the planning stage, it is judged that they are nearly as planned at the time of the terminal evaluation. Responding to increases in staff, 143 client PCs were installed in total for both replacement and new installation.

##### 3.3.1.2 Project Cost

The project cost was lower than planned (80% of the original plan). Although a strict comparison between plan and actual is difficult since there are input items for which the quantity at the planning stage was unclear, it is considered that the total period of dispatch was shortened as the result of changes from a long-term expert to multiple short-term experts dispatched in the field of computer systems, which was one of the factors in reducing the total cost of assistance.

<sup>15</sup> Based on the Minutes of Meeting at the time of the terminal evaluation. Converted using the exchange rate on a monthly mean (144.19 VND/JPY) during the project period.

<sup>16</sup> The positions of short-term experts were 1.Intellectual property information system/software and database, 2.Intellectual property information system/software and hardware, 3.Trademark search, 4.Industrial Design Search, 5.IPD, 6.Intellectual property information systems, 7.Intellectual property information system /computer systems, 8.E-filing, 9.Patent search, 10.E-filing on-line, 11.Network management, 12.System planning, 13.Effective utilization of intellectual property information systems for substantive examination, 14.Mid/Long-term plans for intellectual property information systems, 15.Utilization of intellectual property information systems.

### 3.3.1.3 Period of Cooperation

The period of cooperation was as planned (100% of the original plan). Within the planned period, the development of the intellectual property information system was completed with the originally planned functions, except for IP E-filing in which the external assumption prevented the development of an on-line system. As mentioned in Output 2 in “3.2.1.1. Project Outputs”, the development of a search system for patents and industrial design in IP Sea had not reached official release. As the counterparts of this project obtained an adequate capacity for the development and management of the intellectual property information system (see the Output 5 in “3.2.1.1 Project Outputs”), NOIP and the dispatched experts concluded that NOIP could continue system development until the official release and, therefore, the period of cooperation was not extended.

The inputs were appropriate for producing the outputs and for achieving the project objective. Both project cost and the period of cooperation were within the plan. Therefore, the efficiency of the project is high.

## 3.4 Sustainability (Rating: ②)

### 3.4.1 Related Policy towards the Project

The policy of the government of Vietnam aims at the installment of IT into government institutions and an on-line service for the public, which supports the maintenance, management and updates of the intellectual property information system introduced by the project. Therefore, the sustainability of this project in terms of policy and systems is high.

At the time of the ex-post evaluation, the Vietnamese government had continuously worked on the protection of intellectual property in its position as a WTO member country. As mentioned in “3.1.1. Relevance to the Development Plan of Vietnam”, Vietnam joined WTO in January 2007 and the protection of intellectual property was therefore required along with the TRIPS Agreement at the time of the ex-post evaluation. The Law on Intellectual Property has been continuously amended and its detailed regulations have been drawn up. In the amendment of 2009, the examination period and the procedures for the recognition of infringements were changed.

PM Decision No 1605/2010 aims at improvement of the operation of government agencies, the implementation of policies, the provision of public service and set the target for the program of IT introduction in government institutions. This aimed to promote the use of IT for internal administration in the public sector for efficiency improvement and cost reduction by 2015, together with the provision of online public services by 2020. The government of Vietnam has adopted a positive policy of promoting IT introduction in government institutions and online services.

### 3.4.2 Institutional and Operational Aspects of the Implementing Agency

There was no change hindering sustainability in the institutional and operational aspects from project commencement to the ex-post evaluation. Considering the need for further development of the intellectual property information system, it is desirable that the IT Division is strengthened on a long-term basis.

At the times of both project planning and of the terminal evaluation, NOIP had jurisdiction over several types of intellectual property rights such as patents, utility solutions, industrial design and trademarks. Although NOIP had assessed infringement of intellectual property rights at the time of project planning, it was no longer obligated to assess infringements at the time of the ex-post evaluation and general rights holders have asked VIPRI<sup>17</sup> for assessment of infringements. Although there was a change in the role of infringement assessments, NOIP

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<sup>17</sup> Based on JETRO (2008) *Introductory manual on counterfeit products overseas (revised version)* and JETRO (2012) *Manual on counterfeit products-Vietnam*.

remains responsible for examination, the basis for the protection of intellectual property and the provision of intellectual property information. Responding to the increase in the number of applications, NOIP expanded its divisions for examination, and the number of the staff members is increasing even after the project has terminated (see table 10).

Table 10: Number of NOIP staff

| Year                | 2008 | 2009 | 2010 | 2011 |
|---------------------|------|------|------|------|
| Number of employees | 268  | 285  | 285  | 302  |

Source: NOIP

At the time of the ex-post evaluation, the IT Division of NOIP was in charge of the operation and maintenance of the intellectual property information system. The number of staff members in the IT Division shifted from 12 persons in March 2009 to 13 persons in 2010, and to 12 persons in 2011. Among these, 7 staff members of the IT Division were involved in the implementation of this project, and 3 persons worked for the “Japanese Technical Cooperation Project for the Modernization of Industrial Property Administration.” There was no change in the functions of the IT Division and personnel changes and the retirement of staff assigned to the IT Division was limited after project completion. For these reasons, there are no serious problems in the intuitional setting for system maintenance in the short-run. It is judged, therefore, that no change harming sustainability has occurred. However, in light of the trend of increases in both the number of employees and the needs for the intellectual property information system, an expansion of the system scope is appropriate together with a reinforcement of the system, such as an increase in the personnel of the IT Division and an improvement of skills through training programs, based on a long-term and mid-term vision. In interviews with IT Division staff and vendors, it was pointed out that an increase in the personnel in the IT sector is appropriate in the case of a redevelopment of the intellectual property information system. Also, there was an opinion in the FGD that staff of the IT sector are in short supply. As mentioned in “3.4.3 Technical Aspects of the Implementing Agency”, it is advisable that the medium and long term plans are updated at the earliest opportunity. In the case of new system development, NOIP would face tasks with little experience (such as the process management of vendors) and the need to enhance human resources in terms of both quality and quantity.

#### 3.4.3 Technical Aspects of the Implementing Agency

As a result of technical transfer, it is judged that NOIP staff have acquired the relevant skills to conduct daily maintenance work of the intellectual property information systems. However, in spite of the recommendation in the terminal evaluation, an update of the medium-long term plan of the intellectual property information system has not been made and, thus, maintaining planning capacity and the obsolescence of the current medium-long term plan are considered critical issues from the technical aspects.

As mentioned in Output 5 of “3.2.1.1. Project Outputs”, capacity improvement of NOIP staff for the development and operation of information systems has been implemented. Also, NOIP has made a medium-long term plan for the operation and development of the intellectual property information system and has gained practical knowledge with the assistance of JICA experts. The terminal evaluation suggested that the medium-long term plan be revised every year by utilizing the improved capacity. Nevertheless, the necessity of revising the plan was not widely recognized in NOIP and the plan had not been updated at the time of the ex-post evaluation. Periodic updates of the medium and long-term plan help the counterparts maintain their planning capacity. In addition, there have been various changes in the working environment in the three years after project completion and the medium-long term plan needs to reflect these changes. Specifically, these changes are (1) the number of applications staying at a

high level, (2) obsolescence of equipment and database software installed by the “Japanese Technical Cooperation Project for the Modernization of Industrial Property Administration”, (3) the establishment of a public certification agency which is a precondition for online IP E-filing, (4) security issues rising from the fact that examiners still use old search systems for patents and industrial design and (5) correspondence with new fields of intellectual property rights (such as geographical indication<sup>18</sup>). The fact that the plan has not been updated is recognized as a technical issue of concern.

The staff of the IT Division have participated in training programs for the effective use of information systems, held by WIPO or the Japan Patent Office once a year or so. The IT Division has considered the replacement of database software, and demands for training on databases have increased. Also, training programs for newly employed staff to be examiners on search systems and document preparation using information system have been implemented once or twice a year. User manuals for the intellectual property information system as a whole and a manual for data conversion have been prepared and were used at the time of the ex-post evaluation.

According to the staff of the IT Division, the maintenance and inspection of the relevant equipment has been outsourced since 2011 and inspection based on a checklist has been conducted once every three months. Monitoring (temperature, humidity, noise) of a server room has been conducted by the staff of the IT Division as a routine operation. Also, the IT Division has made a data backup of IPAS once a day and of IP Lib and IP Sea once a month at least. Furthermore, they have recorded data into magnetic tapes once a year and these are kept in a safe. As mentioned in Indicator 1 of “3.2.2.1 Achievement of the Overall Goal”, the search systems for patents and industrial design in IP Sea had not been used at the time of the ex-post evaluation, and operational work such as data conversion had not been conducted.

#### 3.4.4 Financial Aspects of the Implementing Agency

NOIP has continuously invested in information systems since the project has terminated. It is considered, therefore, that the project’s sustainability in the financial aspects is high.

Budgets relevant to information systems at NOIP have increased since 2010, and the performance of IP systems has been maintained through the updating and expansion of the equipment (see Table 11), which is noteworthy, particularly in the purchasing of equipment such as servers and in the expansion of databases.

Table 11 : Budget for information systems at NOIP

| Year   | 2008                                       | 2009                                      | 2010                                       |
|--|--|---|--|
| Budget for information systems (JPY equivalent*) | VND 6,190 million (approx. JPY 33 million) | VND 5,816 million (approx. JPY28 million) | VND 9,137 million (approx. JPY 39 million) |

Source: NOIP

Note: \* 1 JPY=VND 186.46 at 2008, 1JPY= VND 206.00 at 2009, 1 JPY= VND233.95 at 2010

Although financial data related to the general budget could not be obtained, the number of staff increased as shown in “3.4.2. Institutional and Operational Aspects of the Implementing Agency”. It is conjectured that the allocation of the general budget has tended to increase similarly. Since it is possible for NOIP to allocate a part of application fees paid by applicants to the budget, the increase in the number of applications in recent years has provided a positive effect on financial sustainability.

Some problems have been observed in the structural and technical aspects of the executing agency, therefore, the sustainability of the project effects is fair.

<sup>18</sup> Where the quality or evaluation of a product is attributed mainly to its geographical origin, the indication of the origin or name of the origin are to be subjects of protection.

## **4. Conclusion, Lessons Learned and Recommendations**

### **4.1 Conclusion**

This project aimed at smooth application examination and easy acquisition of intellectual property information together with the enhancement of the management and protection of intellectual property through the development of an information system at NOIP. The purpose of this project was consistent with policies and development needs at the times of both project planning and the ex-post evaluation and, therefore, its relevance is high. In developed information systems, while a part of the search system for examiners and electronic application systems has not been much used, intellectual property search systems for the public have been used in the case of application or corresponding to infringement by a wide variety of users, such as applicants, right holders, and agents. The administrative efficiency at NOIP was improved but the examination period tended to be prolonged, except for industrial design, mainly due to the increase in applications. For this reason, the effectiveness and impact of the project is fair. Both the project cost and the period of cooperation were within the plan and, therefore, the efficiency of the project is high. The planning capacity of NOIP staff for system development needs to be maintained while long- and medium-term plans become obsolete. They are issues in the technical capacities and, thus, the sustainability of this project is fair.

In light of the above, this project is evaluated to be satisfactory.

### **4.2 Recommendations**

#### **4.2.1 Recommendations to the Executing Agency**

Although sufficient maintenance skills for equipment have been maintained through the continuous work of maintenance, definite efforts for planning of maintenance, updates, and the expansion of information systems based on the long-term view have not been observed. As the strengthening of capacity development of planning is an issue, it is desirable that NOIP regularly updates its medium-long term plan for maintenance and also its action plans.

#### **4.2.2 Recommendations to JICA**

The recommendations of the terminal evaluation included routine updates of a medium-long term plan on operation and development and action plans. At the time of the ex-post evaluation, however, NOIP was not reviewing the medium-long term plan on operation and development and action plans routinely. In order to improve the sustainability of this project, it is important for NOIP to make efforts to achieve the above recommendations. It is desirable for JICA to monitor NOIP's efforts and, if necessary, to encourage NOIP to take appropriate actions.

### **4.3 Lessons Learned**

#### **(1) Monitoring Based On the Right Indicators**

At the time of the ex-ante evaluation, unclear indicators had been set for some of the Outputs and the Project Objectives, so these were modified to more concrete indicators as the result of the project consultation mission. Also, the relevant data had not been collected for many indicators for the confirmation of the incidence of project effects both during project implementation and at the time of the ex-post evaluation. Given that an increase in applications and an extension in the examination period started during project implementation, correspondence within the project should have been considered based on the indicators. It is recommended to confirm the indicators regarding the collection of data for routine operation by the relevant organizations at the time of project planning, and to select indicators possible for continuous data collection, as well as to set up a monitoring system.

(2) Examination for Contingency Plan

Due to the lack of experience of local vendors involved in system development, products which could satisfy experts were not produced as planned. In addition, it was difficult to achieve mutual understanding on the technical specifications of the system among NOIP's counterparts, JICA experts, and local vendors. As a result, user interface of the system did not reach the level to satisfy examiners, and this resulted in a limitation on the use of the system after project completion. In the case where technical gaps among the counterparts, JICA experts, and vendors and/or limitations in mutual understanding are anticipated in a project for system development, it is advisable that countermeasures are assessed to solve problems at the planning stage and the project managed accordingly.

(3) Confirmation by Government Institutions Necessary for the Operation of the Legal System

At the time of the ex-ante evaluation, while the preparation of laws relevant to electronic application was recognized as an important external assumption while the situation was understood, the establishment of a public certification agency necessary for electronic application was not recognized as an external assumption. Although law relevant to electronic application had been prepared during project implementation, online application was put off due to the delay in the establishment of a public certification agency. In the case where law preparation is regarded as an external assumption, it is advisable that it is not only recognized as an external factor but also that the existence of the government institution needed for the operation of the legal system or prospect of its establishment is confirmed. It is also recommended that the risk factors in the incidence of project effects are understood, such as the negative effects on a project caused by the absence of a government institution and the possibility of countermeasures within the project.