A Study on Possible Ways to Improve Policy Information Services and Demand Survey Analysis

정책정보서비스에 대한 수요조사 분석 및 개선방안 제안에 관한 연구

Hyun-Jin Hong**
Younghee Noh***

ABSTRACT

Policy information is very valuable around the nation in its aspects of uniqueness, professionalism and specificity, so it has great significances to individual citizens. Therefore, it is necessary to prepare systematic instruments for anyone to have easy access to policy information owned by government and administrative institutions. And particularly, it is so impending to develop efficient policy information service(PIS) system. Indeed, however, Korea doesn't have yet established any policy or system to make policy information available en bloc to citizens. Thus, the purpose of this study is to conduct a survey to analyze actual profile of Korean policy information circulating institutions, and is also to analyze needs for domestic circulation of policy information, so that it can seek possible ways to consolidate domestic scattered policy information into a nationwide information system to improve national policy information infrastructure of Korea.

초 록

정책정보는 유일무이성, 전문성, 특정성 면에서 국가적으로 매우 가치가 있으며, 정책정보가 국민 개개인에게 주는 의미는 매우 크다고 할 수 있다. 따라서 정부 및 행정기관이 갖고 있는 정책정보에 개인 누구나 쉽게 접근할 수 있는 제도적인 장치가 필요함은 물론 효율적인 정책정보서비스시스템의 개발은 매우 시급한 과제라 할 수 있다. 그러나 국내에는 정책정보를 총괄적으로 제공하기 위한 정책이나 시스템이 없는 것이 현실이다. 이에 본 연구에서는 설문조사를 통해 우리나라 정책정보유통기관의 현황을 분석하고, 국내 정책정보유통에 대한 요구분석을 하고자한다. 이를 통해 국내에 산재되어 있는 정책정보를 국가적 차원으로 통합하여 국가정책정보 인프라를 향상시킬수 있는 방안을 모색해 보고자 한다.

Keywords: policy information service(PIS), national digital government policy library(NDGPL), policy information web portal system(PIWPS), demand survey, circulation of policy information

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^{**} Professor, Dept. of Library and Information Science, Chonnam National University (hjhong@chonnam.ac.kr)

^{***} Assistant Professor, Dept. of Library and Information Science, KonKuk University (corresponding author, irs4u@kku.ac.kr)

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1. Introduction

1.1 Necessity and Purpose of Study

In many cases, policy information has direct influences on national living, and whether one owns it or not may cause considerable outcomes. Besides, citizens are sometimes cheated with wrong policy information or distorted communication. That is why it is necessary to prepare systematic instruments for anyone to have easy access to policy information owned by government and administrative institutions, and it is very impending to develop efficient PIS(Policy Information Service) system.

Indeed, however, there is not yet any policy or system to make policy information available en bloc to citizens in Korea. Because of complicated central government organization and a huge amount of data and material production, it is difficult to pinpoint any information available from government without any expertise. Also, the collection of these governmental publications is actually scattered, not centralized into one agency. That is, National Library of Korea, National Assembly Library and National Archives of Korea represent our domestic agencies responsible for collecting domestic governmental publications. Here, the National Assembly Library provides services mainly for the legislature, while the National Library of Korea mainly for officials of the administration. And National Archives of Korea collects governmental publications as a part of public records for the benefit of public information services. Moreover, some agencies provide governmental information services on web portal sites.

Here, it is found that this discrepancy among competent governmental agencies is an obstacle to providing unified PIS. In addition, science policy information, business policy information, governmental information and more are provided via different gateways, and even those information materials are not properly consolidated by each agency before circulation to the public.

In order to resolve these questions, it is required to seek for possible ways to consolidate domestic scattered policy information into a central agency from nationwide perspectives and thereby improve national policy information infrastructure. Moreover, it is required to develop a model for collaboration among public agency archives so that both public agency officials and citizens can have easy access to policy information in convenient and systematic ways. Then, it will be necessary to promote PIS to implement knowledge government.

In order to improve efficiency and effectiveness of domestic PIS, 1) the National Library of Korea(hereinafter "NLK") has been building NLK Policy Information Web Portal System(PIWPS; to be built up in 2008) that can encompass current agency-driven policy information web services, and 2) has established a project plan to build up 'National Digital Government Policy Library' (NDGPL; to be completed in 2012) as a branch library of NLK in support of policy-making activities of public officials working for certain gov-

ernmental agencies that are supposed to migrate to Multifunctional Administrative City(MAC).

In this context, this study aims to 1) support information required for policy-making activities of governmental and public agencies to establish a foundation for implementation of competitive knowledge government, 2) consolidate scattered policy information across governmental agencies into one system from nationwide perspectives to build up national policy information infrastructure, and 3) seek for possible ways to improve PIS to propose a model for implementing convenient and efficient PIS system.

1.2 Methodology

The purpose of this study is to 1) prepare a systematic and unified service for PIS to implement knowledge government, 2) help citizens to have easy access to national policy information, and 3) efficiently support policy-making activities of officials working for governmental agencies.

To the ends, this study adopted the following approaches to efficiently meet its goals:

First, in order to make a clear-cut definition on the basic concept and scope of policy information, this study reviews previous academic literatures and associated laws or regulations, and thereby seeks to define policy information appropriate for public library services.

Second, this study conducts a survey for libraries annexed to central and local government, national research institutes and other related agencies to

analyze actual profile of domestic PIS. Moreover, it seeks to perform demand survey on needs for PIS to propose better orientations of such services.

Third, this study seeks to organize an advisory committee that comprises advisors as specialists in information and policy information circulation under libraries of governmental departments or agencies, and further reflect on specialists' opinions.

1,3 Applications and Expected **Effects**

By supporting information required for policy-making activities of governmental and public agencies, this study sought to prepare a foundation to implement competitive knowledge government; consolidate policy information scattered across departments and agencies into a nationwide archive system to build up a national policy information infrastructure; and seek possible ways to improve PIS so that it could propose a model to implement convenient and efficient PIS system. Possible expected effects obtainable from this study can be outlined as follows:

First, it is expected that the results of this study will be useful to make policies to promote PIS and establish functions, roles and visions of NLK policy information service.

Second, it is expected that the results of this study will be useful as a reference material for conceptualization and benchmarking of PIS from the NDGPL that is scheduled to be built up as a branch library of NLK in Multifunctional Administrative City(MAC).

Third, it will be possible to seek possible ways to consolidate policy information scattered across departments or agencies for the better national policy information infrastructure, and also provide systematic and comprehensive PIS based on collaborations among libraries to implement knowledge-based policy information system for the benefit of higher national competitive edges.

Fourth, it will be possible to maximize budget-saving effects by collaboration and resource sharing among libraries under governmental and public agencies, improve inferior environment of departmental/agency libraries, and make best use of professional personnel.

2. Theoretical Backgrounds

This chapter will discuss conceptual definitions of administrative and policy information which is differently defined depending on scholars and agencies or even in the Public Agency Information Disclosure Act. Then, it will clearly define further material scope of policy information and the extent of disclosure of policy information for each service destination, as well as concepts on policy information that is addressed as major topic in this study.

This study deals with definition, categories and circulation system of administrative information, because it is difficult to unambiguously define policy information versus administrative information, and policy information belongs to a category of administrative information as defined by scholars. Therefore, discussions on actual categories of administrative information and needs for joint use of such information will be a basis for establishing concepts on policy information.

2.1 Categories of Administrative Information

Policy information belongs to a category of administrative information. According to Article 2-4, the Electronic Government Act(hereinafter referred to as 'e-Government Act'), it is found that the administrative information refers to material prepared or acquired by(or under the maintenance of) any administrative agency for its public duties, and is usually expressed in form of codes, letters, sounds, voices, video images or the like via electronic processing.

Public administration is closely associated with national living across complex and extended spheres, and is also available in various fields, i.e. personnel management, financial administration, organization, welfare, environment, urban planning and more. There are various forms of public administration, such as legal enforcement, administrative guidance, simple actions in the capacity of private individual, and more. Lately, the amount of personal information or corporate information and information related to the third party has been remarkably increasing, rather than in-

formation on public administration itself. The administrative information can be classified broadly into 3 categories, i.e. 1) policy-procedural information based on time variance, 2) organizational phased information based on vertical dimension of organization, and 3) task-functional information based on horizontal dimension of organization(Lee Seung-shin, 1994).

1) Policy-procedural information

This type of information includes policy information, plan information, execution information and assessment information. Policy information refers to actual profile or challenges, arguing points, forecast and policy line of public administration. It becomes a reference material for judgment on general public administration, and is available in form of municipal minutes, self-government's short-term schedule, budget overview, account settlement analysis, various statistics, white paper and report.

2) Organizational phased information

Organizational phased information falls into strategic information, management information and operative information according to respective characteristics. Strategic information refers to information for strategic planning and policy-making process initiated by top management. That is, it refers to information required for establishing administrative directives, devising new policies, and coordinating policies or projects.

3) Task-functional information

This is a sort of administrative information that is classified according to the administrative organization and annual expenditure(budget structure) of local self-government. It can fall into 6 major categories of functional information, i.e. general administration, social welfare administration, industrial economy administration, regional development administration, cultural/sports administration and civil defense. Task-functional information can be classified into diverse major categories of functional information on the level of municipal and provincial department office. Therefore, on the level of municipal and provincial department office, task-functional information can fall into 19 intermediary categories such as planning management, home/financial affairs, social welfare/public health and sanitation/environment and greenbelt, agriculture and forestry/fisheries/commerce and industry/transport/regional economy, construction/ urban planning/housing/water service, cultural and public relations/sports, and civil defense/fire fighting. Furthermore, task-functional information can be further classified into 60 minor categories on the level of municipal and provincial division, or even into total 154 detailed functional categories.

Moreover, administrative information can fall broadly into tangible and intangible information. Usually, tangible information refers to 'document', such as written records and register(ledger), book, drawing(chart), photograph, film, tape and disk. On the other hand, intangible information refers to oral statement(comment) without any form, such as conference. But if the content of conference is recorded on certain media via tape or shorthand report, it becomes tangible information.

2.2 Needs for Joint Use of Administrative Information

1) Meaning

The joint use of administrative information refers to common use(sharing) of administrative information - i.e. information that an administrative agency creates or acquires and owns in form of document or electronic media within its organization for its task performance or business purpose - as a part of competent task process among departments inside and outside agency or between agency and individuals(Kim Hyeon-jin, 1999). According to definition provided in the Regulations on Joint Use of Administrative Information(revised on Mar. 28, 1998; abolished on June 30, 2001), this refers to 'a case that an administrative agency obtains and uses administrative information in form of diskette, tape and other equivalent media from another agency or via information and telecommunication network.'

2) Needs

The ultimate goal of e-Government is to enhance administration efficiency and transparency by electronic processing and organic connection of governmental tasks based on IT technologies, so that both citizens and companies can get easy access to desired information and services anytime and anyplace. Thus, our current e-Government Act provides the principle of joint use of administrative information in order to jointly use administrative information, forbid duplicate collection of same information and ban any request for submitting attached documents for public grievance, which are confirmable between administrative agencies (the Ministry of Government Administration and Home Affairs, 2001).

It is necessary to make joint use of administrative information, because the administrative information owned and managed by public institutions allows them to efficiently conduct their administrative works and allows policy-makers to make a rational decision of policies, ultimately in favor of improving services for the public. In particular, it is implied that sharing and joint use of information required for policy execution will require timely providing information necessary for demand agencies by way of electronic connections on system as well as integration and associated maintenance of major information sources for joint use, and will also require processing and categorizing any information generated to exert capacity to reproduce more value-added information, so that the joint use of administrative information will be useful for deciding critical national matters and preparing possible countermeasures. Administrative information includes even non-personal information as electronic data prepared, maintained and managed by administrative agencies or the like. In this regard, it will be required to further extend and circulate administrative information covering poli-

cy matters, which may be associated with information disclosure provided in the Public Agency Information Disclosure Act. In other words, the joint use of shared administrative information and the proactive disclosure of publishable administrative information contribute to sharing knowledge, promoting reference materials for governmental policies to the public and activating related academic studies. Thus, it will be required to carry out the Principle of Access Assurance that allows anyone - whether disabled, aged or female - to have easier access to administrative information at any time without any social discrimination. On the other side, it will be necessary to legally assure the right of access to such information and roll out Internet education or promotion for easier use of computer facilities. But it requires further studies on which information should be available to whom. That is, it is required to screen information before disclosure and involve information disclosure without any unfair discrimination against access to relevant information. Now, in terms of administrative knowledge management, the Article 23 of the e-Government Act provides that 'any public administration agency may build and administer an electronic system to utilize critical information for policy-making process, provided that such critical information refers to proven matters which have significant values as major reference material for policy-making process of the agency, including but not limited only to administrative information related to works in the agency, personal experiences and expertise or know-how

as produced or distributed in the agency.' Thus, it is necessary to develop institutional basis to produce, process and manage administrative information as major reference material for policy-making process. Out of various materials, personal information has nothing to do with the protection of personal information in a sense that it includes statistic data or equivalent created to disable specific individual identification, but it is also required to note that personal information presupposes unambiguous classification in another sense that it is same administrative information for joint use.

The legal and institutional grounds for the joint use of administrative information can be found in e-Government Act, the Basic Act on Information Networking Promotion, and the Public Records Management Act, as well as regulations of council established in accordance with other laws based thereon or Library Act.

3) Overseas information disclosure systems and their actual profiles

Many advanced countries have legislated disclosure of policy or administrative information(e.g. Sweden, USA, Finland, Denmark, Norway, France, the Netherlands, Australia, Canada, New Zealand, Austria, Japan, etc). Particularly, Sweden is the country that enforced information disclosure system for the first time worldwide, and USA has well-arranged information disclosure and privacy protection system incomparably with any other country. Moreover, Canada has its own information

disclosure system proposed and completed by federal government in 1982. Japan has prepared the Information Disclosure Act even later(1999) than Korea, but similarly to Korea, Japan has local governments enforced information disclosure system by enactment of local ordinance before enactment under central government(Kang Heun-gu, 2003).

In Sweden, the history of legal movement to assure civil rights to claim for information on official documents goes back to 18th century. That is, 'the Freedom of the Press Act'(enacted in 1766) as a part of Swedish Constitution admitted 'civil rights to have free access to official documents as a means to protect citizens from illegal behaviors or unfair indictment of public institutions', so that it established principle of disclosing official documents.

In the Unites States, the legitimate access to governmental information was permitted only after initial enactment of Administrative Procedure Act(APA, 1946). Moreover, ex-President Clinton proclaimed Presidential Decree on FOIA(1993) to establish criteria on information disclosure. In 1996, the proactive will of Clinton Administration toward information disclosure led to the enactment of the Electronic Freedom of Information Amendment(EFOIA).

As a representative bureaucratic state, France faced more needs to democratize public administration. Such needs became discussed on a full scale in parallel with a report entitled 'the Legitimate Access to Administrative Documents' (de Obac, 1975), resulting in enactment of Access to

Administrative Document Act, Official Document Act and Remark on Reason of Administrative Behavior Act respectively on July 11, 1979.

In Canada, the Access Act was enacted on the initiative of Liberal Party Administration in 1981 for the benefit of institutionalizing disclosure of information. The Access Act limits the scope of governmental information disclosure to documents, computer files, films and recordings.

In Japan, 'Administrative Information Disclosure Subcommittee' was installed under the Administrative Reform Committee In 1995. In March 1998, said Bill was submitted and passed to the Diet. Then, 'the Act on Disclosure of Information Owned by Public Administrative Agency' was enacted on May 14, 1999 and has been enforced since 2001.

On June 7, 1990, the European Community(EC) announced 'Guideline on Disclosure of Environmental Information', urging that all membership countries should authorize civil rights to claim for disclosure of any environmental information, and legislate court remedy for violation of private right against rejection of such disclosure. In this context, Germany has enacted and enforced Umwelt informations gesetz(UIG) since July 16, 1994 to assure individual's civil rights to free access to or use of environmental information owned by administrative agency as well as wide communication of such information, to the extent of rights to claim for environmental information.

2,3 Concepts and Scope of Policy Information

1) Definition of policy information

Supposing that policy is a sort of future-oriented action plan, the preparation of this plan requires policy information on environment, system and policy-related personnel. However, we know that there are various definitions on policy information required for this policy process.

As discussed above, policy information belongs to a category of administrative information, if it follows classification based on type of information for each policy process. And policy information represents actual profile, challenges or issues of administration, future forecast, policy line and more, so it becomes a reference material for judgment on general administration. For instance, municipal minutes, local government' short-term schedule, budget overview, account settlement analysis, various statistic data, white paper and reports belong to policy information. Rappaport (1975) explained that policy information is a well-arranged material useful for policy-making process and is also indispensable to the survival of every goal-oriented knowledge. Kang Shin-taek (1978) argued that it is data and knowledge used for policy formation, and Choi Bong-gi(1981) concluded that it is information required for policy-makers as well as information required all the time throughout all policy-making procedures; Policy information is required for situational analysis in policy-making process, alternative policy in-

vention or analysis and even future forecast. Moreover, it is also required for control and modification of policy execution process, and works as essential factor for assessment of policy results. And Lee Dae-yeong(1984) argued that policy information is materials required all the time throughout policy process(including execution and assessment), including but not limited to data processed for policy-making process.

According to these definitions, policy information generally refers to materials comprising information required for policy-makers in their policy-making process, and can be also defined as materials required all the time throughout every policy process including policy execution and result evaluation.

However, the purpose of this study is to help nationwide and systematically collect and provide private policy-related information helpful for policy-making process as well as all information materials produced by governmental agencies. Moreover, another expected effects of this study are to save national cost of time and economy by joint use of such policy information, timely provide required information for demand agencies, and reprocess and reclassify as-created information so that they can exert a capacity to recreate more value-added information.

Therefore, this study intends to limit the conceptual definition of policy information to any information required for policy-makers throughout all policy processes including drafting, decision and evaluation of a policy, as well as any in78

formation required for researchers and the public to understand domestic and global policies. Here, the scope of policy information is limited to policy materials based primarily on produce of pre-policy process, such as municipal minutes, local self-government's short-term schedule, budget overview, account settlement analysis, various statistics, white paper and reports.

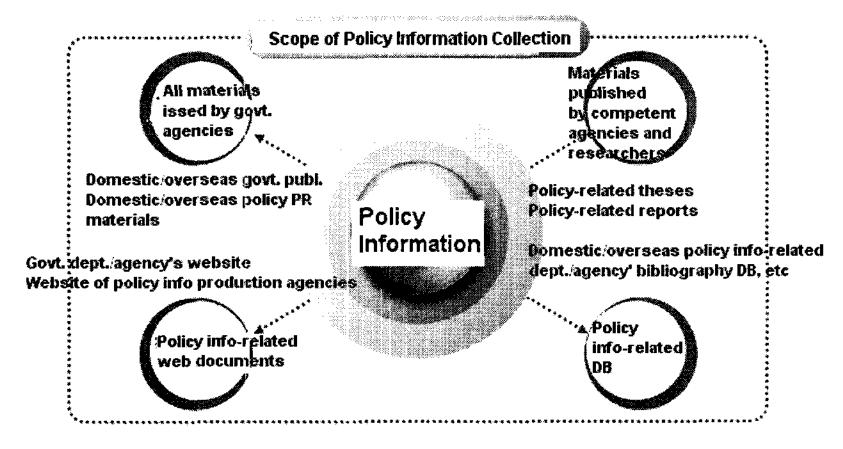
2) Scope and service coverage of policy information

Similarly to other general information categorization, policy information may be classified according to various criteria such as topic, category and production agency. First, it falls broadly into tangible and intangible information. Next, tangible information falls into document, book, drawing, photograph, tape, disk, etc, while intangible information falls into oral statement, conference discussions, etc. For instance, USA.gov. classifies policy information into information for citizens, that

for business and non-profit organization, that for government officials, that for foreign visitors in USA and more. In other overseas cases, it is common that policy information is classified just by given topics without any certain criteria or according to non-standard criteria.

This study intends to propose the scope of policy information materials according to above definitions on policy information as follows: That is, as long as PIS available from NLK(National Library of Korea) is concerned, the scope of policy information collection and service can be classified into the following 4 categories:

In this study, the class of users relying on PIS may be somewhat different from user class of each governmental department/agency. Central administrative agencies introduce PCRM(Policy Customer Relationship Management) solution to acquire and systematically maintain policy clients, and thereby make efforts to improve customer satisfaction. For example, in view of actual classification cases on



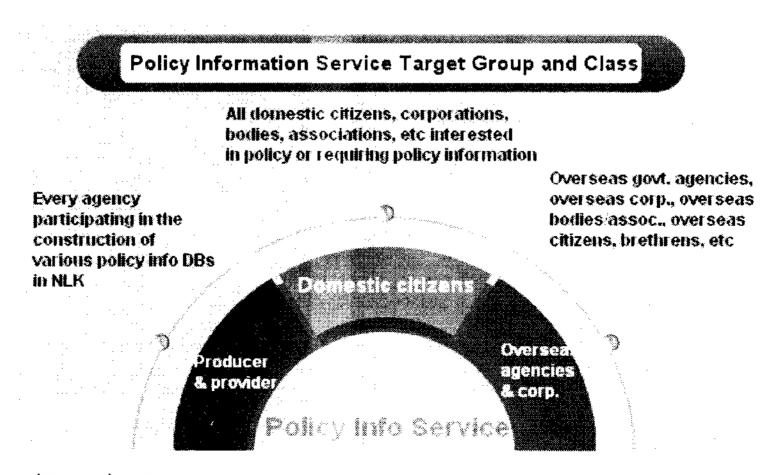
(Fig. 1) Scope of Policy Information Collection

policy clients of certain governmental department/agency, it is found that policy clients fall broadly into 5 categories, i.e. inside client, partner client, policy demand client, interested party client and foreign client. But NLK has no policy information database established yet in it, and there is no user relying on such database, so it is actually impossible to classify and present policy clients. Thus, as NLK is a service library to collect and provide information materials, this study attempts to categorize PIS users according to same criteria as those for classifying common library information users. That is, this study classifies NLK PIS users into three groups, and sets the following scope of information available to each group(However, the restriction over access to information depending on current membership status - whether paid or free - is to help acquire basic materials on policy client in the future):

3. Analysis on Needs for Policy Information Service(PIS)

- 3.1 General Profile of Respondents and Library
- 1) Number of agencies participating in survey

In the questionnaire survey hereof, this study sought to conduct policy information profile survey and demand analysis on governmental agencies publishing policy information, so that it could propose a model for PIS based on said survey and analysis. There were total 298 agency libraries that participated in this survey, including libraries installed in central administrative agencies, incidental agencies, state-affiliated institutions, governmentfunded institutions, government-invested institutions and local governments. Here, questionnaire sheets were distributed on Oct. 31, 2007 and collected on



Policy Information Service Target Group and Class ⟨Fig. 2⟩

Nov. 30, 2007. As a result, total 112 questionnaire sheets were collected from all 298 agency libraries(collection rate: 37.5%). Next, total 109 questionnaire sheets were adopted for data analysis, except for 3 incomplete or invalid sheets. Questionnaire sheet collection rates for each respondent group are illustrated in <Table 1> below. Out of all 109 respondent agencies, central administrative agencies comprised majority(35 agencies, 34.3%), which was followed by state-affiliated institutions (19.6%), government-funded institutions (16.7%) and local governments(13.7%) respectively.

2) Library staffing profile

According to profiling library staffing in respondent agencies, it was found that most agency libraries(42%) employed only 1 staff, while other libraries employed 2 or 3 staffs(30% and 12% respectively). This result indicates that governmental agency libraries face extremely disadvantageous circumstances due to lack of professional librarians.

3) Library personnel qualification

According to survey on library personnel qualification, it was found that most staffs(61.4%) qualified as librarian, which was followed by administrative official(12.9%) and other(25.7%).

4) Total budget scale

According to survey on total budget scale of agency libraries, it was found that most libraries(35.9%) made budget ranging from ₩10 million to ₩50 million, which was followed by less than ₩10 million(21.4%), ₩ 50 million~ ₩100 million(23.2%) (see <Table 2>).

5) Library area and quantity of materials

In response to a question about whether library area is equal to or wider than 165 m² (as legal reference area for specialized library) and another question about whether the quantity of materials stored in library reaches legal minimum reference material quantity for specialized library(i.e. more than 3,000 volumes in specialized fields), it was found that more than half of all agency libraries(55.4%) had

< lable	1>	Library	location	category
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Category	Frequency	Percentage
Central administrative agency	35	34.3%
Incidental agency	9	8.8%
State-affiliated institution	20	19.6%
Government-funded institution	17	16.7%
Government-invested institution	3	2.9%
Local government	14	13.7%
Other	4	3.9%
Total	102	100.0%

Total budget(R)	Frequency	Percentage
R < ₩10 million	22	21.4%
₩10 million ≤ R < ₩50 million	37	35.9%
₩50 million ≤ R < ₩100 million	20	19.4%
₩100 million ≤ R < ₩150 million	10	9.7%
₩150 million ≤ R < ₩200 million	2	1.9%
₩200 million ≤ R	10	9.7%
Other	2	1.9%
Total	103	100.0%

(Table 2) Total budget scale

reference area or wider, and most agency libraries (86.4%) had more books than minimum reference material quantity.

6) Book stock scale

For book stock scale of library, it was found that most libraries (58.3%) had $10,000 \sim 50,000$ volumes, while 13.6% had 50,000~100,000 volumes, and 12.6% had $3,000 \sim 10,000$ volumes.

7) Ratio of library material sources

In response to a question about the ratio of library material sources, supposing that total percentage of all library material sources is equal to 100%, it was found that half of them(50%) relied on purchase, which was followed by donation(24%), internal publishing division(16%) and joining membership(6%).

8) Bibliography maintenance system

It was found that most favorite bibliography maintenance systems used in agency libraries were represented by Maestro(Orom Info, 18%), which was followed by VOLCANO-i(LibTech, 12%), self-customized system(9%), KOLAS(NLK, 8%) and SA3000(SA&K, 8%) respectively (see <Table 3>).

9) Daily mean number of library users

For daily mean number of library users, it was found that 31.6% libraries had 10~20 visitors per day, which was followed by less than 10 visitors(26.5%), $20 \sim 30$ visitors(15.3%) and so on.

10) Priority of respective library works

The priority of respective library works in the order of ranking can be illustrated in <Table 4> below:

3.2 Survey on PIS Profile

Policy information refers to materials comprising information required for policy-makers in policy-making process, and also refers to all materials required all the time throughout policy process including policy execution and policy result evaluation. The following items refer to questions about this PIS:

System(maker)	Frequency	Percentage
Maestro(Orom Info)	18	18.0%
SOLARS(Inek)	9	9.0%
VOLCANO-i(LibTech)	12	12.0%
ilips(Linksoft)	3	3.0%
SA3000(SA&K)	8	8.0%
KOLAS(NLK)	8	8.0%
MAE(Kyungil Tech, Inc)	3	3.0%
TG-Libero(Sambo Info)	2	2.0%
S@Silkroad(SA&K)	5	5.0%
Bookshelf(Phose Info)	7	7.0%
infgo(Hanmi Data)	1	1.0%
Self-customized system	9	9.0%
Other	15	15.0%
Total	100	100.0%

(Table 3) Actual profile of bibliography maintenance system

(Table 4) Priority of respective library works

Priority	1st rank	2nd rank	3rd rank	4th rank	5th rank	6th rank	No answer	Subtotal
Purchase of materials	27.2%	30.1%	20.4%	12.6%	2.9%	0.0%	6.8%	100.0%
Material arrangement	37.9%	26.2%	21.4%	7.8%	2.9%	1.0%	2.9%	100.0%
Lending/return services	15.5%	27.2%	25.2%	14.6%	7.8%	0.0%	9.7%	100.0%
Inquiry for reference	10.7%	9.7%	14.6%	33.0%	16.5%	0.0%	15.5%	100.0%
Guide to new publications	1.9%	6.8%	19.4%	48.5%	7.8%	0.0%	15.5%	100.0%
Other	4.9%	1.0%	1.9%	1.9%	1.0%	2.9%	86.4%	100.0%

1) Channels used to obtain policy information materials

For channels that libraries rely on to obtain policy information, it was found that most of libraries (35%) relied on donation, which was followed by purchase(27%), internal publishing division(23%) and joining membership(8%).

2) Ratio of policy information materials In response to a question about the ratio of policy information materials(including governmental publications) out of all book stocks, it was found that most libraries(45.1%) answered 'less than 15%', which was followed by 15%~30%(21.6%), more than 45%(20.6%) and 30%~45%(12.7%) (see <Table 5>).

3) Ratio variations in the quantity of policy information books

For ratio variations in the quantity of policy

Ratio of policy materials(R)	Frequency	Percentage
R < 15%	46	45.1%
15% ≤ R ⟨ 30%	22	21.6%
30% ≤ R < 45%	13	12.7%
45% ≤ R < 60%	10	9.8%
60% ≤ R < 75%	6	5.9%
75% ≤ R ⟨ 90%	4	3.9%
90% ≤ R	1	1.0%
Total	102	100.0%

(Table 5) Ratio of policy information materials out of all book stocks

information books, it was found that more than half of libraries(52%) showed little or no variations, while 41.2% libraries showed annual increasing quantity of books. Therefore, it is found that there is almost no library showing decreasing quantity of policy information materials per annum.

4) Values of governmental publications as information source

In response to a question about whether governmental publication as a sort of policy information has values as information source, it was found that most libraries answered 'very valuable' (24.3%) and 'valuable' (52.4%) (see <Table 6>).

5) Availability of policy information

In response to a question about actual availability of policy information, it was found that 28.2% libraries answered 'comparable to other kinds of material', 19.4% answered 'high', 10.7% answered 'almost zero' and so forth. This result indicates that policy information is not so much useful for library users, so it will be required to make further

analysis on possible causes of such low availability (see <Table 7>).

6) Means to obtain policy information

In response to a question about existence of reading list committee as a means to obtain policy information sources, it was found that 87.6% libraries answered 'no', 82.4% answered 'no aquisition policy available' and 72.5% answered 'no acquisition librarian available.' That is, this result indicates that most libraries have little or no means to obtain policy information(e.g. reading list committee, book acquisition policy, acquisition librarian, etc). So it will be required to take corresponding measures as soon as possible (see <Table 8>).

7) How to choose materials for acquiring policy information

In response to a question about how to choose materials for acquiring policy information, it was found that relatively many libraries relied upon direct inquiry to publication agency(27.6%) or user's application for purchase(21.4%), while rela-

Values as policy information	Frequency	Percentage	Mean(SD)
Valueless as information	0	0.0%	
Not so much valuable	2	1.9%]
Moderate	22	21.4%	3,99
Valuable	54	52.4%	(0.73)
Very valuable	25	24.3%	
Total	103	100.0%	

(Table 6) Values of governmental publications as information source

(Table 7) Availability of policy information

Availability of policy information	Frequency	Percentage	Mean(SD)
Almost zero	11	10.7%	
Low	33	32.0%	
Comparable to other kinds of material	29	28.2%	2.85
High	20	19.4%	(1.15)
Very high	10	9.7%	
Total	103	100.0%	

⟨Table 8⟩ Means to obtain policy information

	Reading list committee	acquisition policy	acquisition librarian
Yes	12(12.4%)	16(17.6%)	25(27.5%)
No	85(87,6%)	75(82.4%)	66(72.5%)
Total	97(100.0%)	91(100,0%)	91(100.0%)

tively low ratio of libraries relied on referring to bibliography tool(16%) or distribution agency's guide(5.1%). Thus, it will be urgently demanded to develop appropriate bibliography tool (see <Table 9>).

8) Acquisition and maintenance

For opinions about acquisition and maintenance of policy information materials, it was found that over half of libraries answered 'difficult' (48 %)

and 'very difficult'(9%), while much less ratio of libraries answered 'easy' (9%) and 'very easy' (2%). Overall, this result indicates that our libraries have more or less difficulties in acquiring policy information materials.

9) Problems in acquisition of policy information materials

In response to a question about why it was di-

How to choose	Frequency	Percentage
Direct inquiry to publication agency	27	27.6%
Reference to bibliography tool	16	16.3%
Distribution agency's guide	5	5.1%
User's application for purchase	21	21.4%
Other	29	29.6%
Total	98	100.0%

(Table 9) How to choose materials for acquiring policy information

fficult to acquire policy information materials, it was found that most respondents pointed out 'lack of bibliography tool'(mean = 4.37 out of full 5-point Likert scale) out of all 9 items, which was followed by absence of overall policy information supervising agency(mean = 4.28), absence of policy information portal system(mean = 4.24), lack of material PR(mean = 4.20) and difficulty in acquiring retrospective or alternative materials (mean = 4.17). This result indicates that when libraries try to acquire policy information, it is very difficult to identify published materials due to lack of bibliography tools. This result also indicates that the absence of overall policy information supervising agency and the absence of policy information portal system add to obstacles to acquiring policy information materials. So it is urgently required to prepare countermeasures (see <Table 10>).

10) Problems in maintenance of policy information materials

In response to a question about 'why do you think it difficult to maintain policy information materials?', it was found that most libraries answered 'lack of guidelines for exchanging or sharing materials' (mean = 3.94), which was followed by 'lack of storage space' (mean = 3.87) and 'absence of appropriate material disposal guidelines' (mean = 3.73). This result indicates that insufficient storage space implies more importance of preparing guidelines for exchanging or sharing materials as well as appropriate material disposal guidelines than before (see <Table 11>).

11) Possible ways to improve current circulation structure for policy information materials

In response to a question about possible ways to improve current circulation structure for policy information materials, it was found that most libraries pointed out building integrated governmental publication database(mean = 4.48), which was followed by governmental publication access tool(mean = 4.40), construction of electronic distribution system(mean = 4.26), arrangement of book(copy) delivery regulations(mean = 4.13), stepping up PR activities for governmental publications(mean = 4.07), and installation of dedicated maintenance agency specializing in issue and distribution of governmental publications(mean =

Problems in acquisition	Frequency	Mean	SD	Rank
Lack of bibliography tool	82	4.37	0.75	1
Difficulty in acquiring retrospective or alternative materials	81	4.17	0.74	5
Scattered distribution channels of paid publications	80	4.16	0.77	6
Lack of up-to-dateness, title and volume of paid publications	82	4.04	0.79	8
No rational criteria on distribution of free publications	82	4.15	0.83	7
Lack of material PR	83	4.20	0.73	4
Absence of overall policy information supervising agency	81	4.28	0.78	2
Absence of policy information portal system	78	4.24	0.81	3
Total	649	4.20	0.77	

(Table 10) Problems in acquisition of policy information materials

(Table 11) Problems in maintenance of policy information materials

Problems in maintenance	Frequency	Mean	SD	Rank
Lack of storage space	82	3.87	1.23	2
Difficulty in material classification and book listing	81	3.05	1.20	5
Lack of guidelines for exchanging or sharing materials	82	3.94	0.95	1
Absence of appropriate material disposal guidelines	82	3.73	1.13	3
Lack of specialized librarians	83	3,57	1.11	4
Total	410	3.63	1.13	

4.05). This result indicates that our governmental agency libraries find it urgently demanded to build up integrated governmental publication DB, prepare governmental publication access tools and establish electronic distribution system as a means to improve current circulation structure for policy information materials (see <Table 12>).

12) Needs to implement centralized PIS

In response to a question about needs to implement centralized PIS nationwide, it was found that most libraries answered 'very necessary' (31.1%) and 'necessary' (38.8%). This result indicates that 70% of all our libraries found it necessary to imple-

ment centralized PIS around the nation (see <Table 13>).

13) Possible ways to collect policy information and improve relevant service efficiency

For possible ways to collect policy information and improve relevant service efficiency, it was found that most libraries pointed out collection of materials through departmental organization (mean = 4.09) followed by promotion initiated by Presidential agency(mean = 3.56) and so forth (see <Table 14>).

⟨Table 12⟩ Possible ways to improve circulation structure for policy information materials

Possible ways to improve circulation structure	Frequency	Mean	SD	Rank
1. Arrangement of book(copy) delivery regulations	92	4.13	0.77	4
2. Governmental publication access tools	96	4.40	0.61	2
3. Stepping up PR activities for governmental publication	95	4.07	0.78	5
4. Expansion of paid publication distribution channels	92	3.78	0.87	7
5. Expansion of depository library	92	3,63	0.91	9
6. Agreement between depository libraries	93	3.72	0.93	8
7. Building up e-Distribution System	94	4.26	0.87	3
8. Building up integrated governmental publication DB	97	4.48	0.71	1
9. Installing dedicated maintenance agency specializing in issue and distribution of governmental publication	93	4.05	1.04	6
Total	844	4.06	0,83	

(Table 13) Needs to implement centralized PIS

Needs for centralized service	Frequency	Percentage
Not at all	10	9.7
Not so much necessary	15	14.6
Moderate	6	5.8
Necessary	40	38.8
Very necessary	32	31.1
Total	103	100.0

(Table 14) Possible ways to collect policy information and improve relevant service efficiency

How to improve service efficiency	Frequency	Mean	SD	Rank
Promotion initiated by Presidential agency	96	3,56	1.15	2
Regular meeting of departmental representatives	94	3.54	1.09	3
Material collection under the control of departmental organization system	94	4.09	0.96	1
Total	284	3.73	1.07	

14) Required functions for PIWPS

In terms of required functions for NLK PIWPS(to be completed in 2008), it was found that mean score on all 29 items exceeded 3 points on full 5-point Likert scale, as shown in <Table 15>. This result demonstrated that our agency libraries had high awareness about the importance of these functions. Fig. 24 illustrates top 10 func-

tions required for the PIWPS according to the order of importance. Here, it is found that the highest priority of functions was placed on original text service of policy material(4.40), which was followed by building electronic information delivery system(mean = 4.30), publication of book collection list(DB)(mean = 4.23), digitalization of stored library materials(mean = 4.22), and collection of major overseas policy information, plus translation services(mean = 4.17). Therefore, it will be foremost required to focus primarily on policy material original text service, electronic information delivery system and book collection list(DB) for completion of NLK PIWPS in 2008. To this end, it is essential to build up consolidated information environment through collaborative networking with governmental agency libraries. That is, it is expected that our promising web portal system in near future will have various functions such as resource exploration, integrated search interface, distributed search, direct content access, personalization and more.

15) Major functions of the National Digital Government Policy Library(NDGPL)

In response to a question about the functional priority of NDGPL to be completed in 2012, it was found that most of our libraries valued material maintenance and digitalization(mean = 4.59) most, which was followed by national bibliography indexing(mean = 4.35), national archive(mean = 4.35), building national book stock(mean = 4.33), development and maintenance of bibliography DB(mean = 4.33), and services for collecting and using overseas major policy information(mean = 4.31). Moreover, it was found that mean score on 13 items listed in <Table 16> exceeded 3.0 on full 5-point Likert scale, which indicates that our respondent agencies have high awareness on the importance of these functions.

⟨Table 15⟩ Required functions for PIWPS

Rank	Required functions	Frequency	Mean	SD
1	Original text service for policy material	95	4.40	0.59
2	Construction of electronic information delivery system	91	4.30	0.61
3	Publication of book collection list(DB)	94	4.23	0.86
4	Digitalization of stored library materials	93	4.22	0.75
5	Collection of major overseas policy information, plus translation service	93	4.17	0.80
6	Standardized regulations over data migration, collection, maintenance, disposal, etc	93	4.15	0.72
7	Development of internet book stock(digital archiving via download)	91	4.14	0.78
8	Development of internet book stock(enhanced gateway per topic or user class via links)	88	4.14	0.73
9	Exchange and support of domestic/international info materials	89	4.13	0.80
10	Standardization of policy info(incl. development of various standard policy data format)	91	4.13	0.81
11	Interconnection of library and search portal(engine)	90	4.12	0.78

12	Resource sharing service(to provide various ways to obtain original text in connection with online bookstore or related sites)	92	4.08	0.79
13	Book(copy) delivering library	93	4.08	0.77
14	Joint purchase and distribution of overseas electronic info(web DB, e-Journal, e-Book, etc)	94	4.04	0.88
15	Preparing joint data preservation policy and strategy	90	4.03	0.79
16	Development of collection level metadata	87	3.98	0.78
17	Building up local networks(to share, keep and process local information)	90	3.92	0.85
18	Expansion of customized policy info services(SDI)(via e-mail, RSS, etc)	88	3.91	0.83
19	User support services involving experts	90	3.90	0.75
20	Interlibrary loan	90	3,83	0.75
21	Segmentation per topic and user type	86	3.79	0.75
22	Preparing online exhibition space(including policy information service PR)	87	3.78	0.84
23	Development of policy information thesaurus	86	3.76	0.77
24	Assessment of abstract, bibliographical notes and information	88	3.73	0,85
25	Collaboration list	88	3.72	0.84
26	Collaborative reference services	87	3.71	0.75
27	Specialized data collection	88	3,55	0.87
28	Community(video conference, mailing list, specialist forum, etc)	86	3,45	0,86
	Total	2,518	3,98	0.78

⟨Table 16⟩ Functional priority of NDGPL

Rank	Major functions	Frequency	Mean	SD
1	Data maintenance and digitalization	97	4.59	0.59
2	National bibliography indexing	93	4,35	0.65
2	National archive	92	4.35	0.73
4	Building national book stock(to keep migrated materials)	92	4.33	0.79
4	Development and maintenance of bibliography DB	92	4.33	0.66
6	Services for collecting and using overseas major policy information	95	4.31	0.76
7	Production of national bibliography	90	4.24	0.75
8	Librarian training and (re) orientation	92	4.22	0.84
9	Book(copy) delivering library	92	4.20	0.73
10	Integrated and networked policy info system involving central and local governments	92	4.13	0.89
11	PIS Development for information-untargeted class	93	4.12	0,76
12	National reference service center	95	4.03	0.82
13	Interlibrary loan	91	3,88	0.83
	Total	1,206	4.24	0.75

3.3 Respondent' Remarks (Open-ended Item)

The final item of questionnaire used herein was an open-ended question, asking respondents 'to give open-minded opinions helpful to develop efficient systems for the systematic maintenance and circulation of domestic policy information in Korea.' As a result, there were a variety of opinions presented to this item. Their opinions could be broadly outlined as follows:

First, it is necessary to make clear-cut definitions on the scope and significance of policy information.

Second, it is required to rearrange and legislate book(copy) delivery system so as to resolve question of suspended book(copy) delivery per agency.

Third, it is recommended to prepare legislation so that specialized library can be established for each institution, and it is necessary to perform a standardization project(including standard system or manual) to share information among institutions.

Fourth, it is required that each department or agency library should be committed to consistent maintenance of governmental/official materials. That is, it is important to establish dedicated agency specializing in centralized distribution line maintenance or circulation of those materials as a means to implement integrated library in organization.

Fifth, it is required to systematically implement dedicated information center and PIS per topic under NDGPL according to specialized fields.

3.4 Comprehensive PIS Profiling and Its Implications

Information materials published by central administrative agency or local government may be more crucial than any other data, and there are specialized and dedicated topic fields available for each institution. So it is found that governmental agency library is a sort of dedicated library specializing in each topic, and materials stored in this library are very valuable in the aspect of uniqueness, preservability and professionalism. Nevertheless, it is nonsense that these valuable materials are little maintained without careful supervision. To find out questions in practice, this study sought to make comprehensive analysis on survey results. Then, it could come to the following implications:

3.4.1 Deteriorated Governmental Agency Libraries

For staffing and budget, it was found that 84% of all our libraries employed 3 or less staffs, and 56% made annual budget less than ₩50 million. For library area, it was found that 54% of all our libraries failed to meet the minimum requirement of legal reference area(i.e. 165 m²) for specialized library, although it is relatively low requirement. Besides, it is noted that relatively many libraries(20%) hold less than 10,000 volumes on the scale of book stock. Governmental agency library materials cannot be measured only on the level of quantity, since they have significances

in the aspect of uniqueness and specialty. But it is undoubtedly questionable and unfortunate that our governmental libraries still fail to collect required materials for each department or agency due to insufficient space and budget.

2) Poor consistency of bibliography maintenance system

The results of profile survey showed that our governmental agency libraries had inconsistent bibliography maintenance system, but relied upon 20 or more systems including self-customized system. Thus, it will be required to implement integrated bibliography maintenance system in favor of better system/DB compatibility and convenience, and particularly to provide system supports for deteriorated libraries. Since deteriorated governmental agency libraries face many challenges in budget and staffing for replacing outdated system by new one or upgrading system functions, it is advisable that NLK should develop and support system to ensure that they can break through the challenges. On the other hand, it was found that working-level interview and public hearing revealed high needs for support of consistent bibliography maintenance system.

3) Low availability and low service work priority The results of profile survey showed that 73.4% of all our libraries had less than 30 visitors on the average per day, and even 26.5% had less than 10 visitors per day, which all indicate very low availability of governmental libraries. Therefore,

it is found that the priority of library works focus primarily on purchase or arrangement of materials and book lending/return, rather than reference service or other face-to-face user service.

As discussed above, these results are possibly attributed to intolerably deteriorated hardware/software infrastructure of library. Therefore, it will be required to proactively develop personal/physical library resources and automated library system as a part of support for better institutional information competitiveness and higher library work efficiency.

However, governmental agency libraries provide services primarily for organizational members, so it is unreasonable to measure library availability only based on the number of users, unlike other common libraries. In addition, many materials and data are already available and accessible in form of original text across online library networks or even to remote PC. Indeed, this latest user trend has influences on the number of library visitors who use materials.

3.4.2 Inadequate Policy Information Maintenance and Usage

1) Necessity to develop non-commercial policy information distribution system

For possible channels to acquire policy information materials, it was found that 25% of all our libraries relied on purchase, and 65% relied on internal publishing division, donation, exchange and deposit, which shows that policy information, unlike common materials, is more likely collected free of charge, rather than via commercial paid distribution system. So it is necessary to develop non-commercial policy information distribution system as soon as possible, so that policy information will be circulated in more efficient and cost-effective ways.

2) Low priority and availability of policy information

Despite inherent responsibility for supporting organizational researches and keeping many policy materials helpful for policy-making process, it is found that most of our governmental agency libraries place very low priority on policy information, which is associated with low availability of policy information. This question is attributed largely to too narrow library space and absence or deterioration of storage, so that even some agencies inevitably choose to dispose outdated materials - just stored for 1 year - blindly. Therefore, it will be required to prepare possible ways to keep these agency materials jointly on the governmental level, and also consider efficiency of information usage through electronic networking and development of distribution system.

3) Absence of policy information maintenance and acquisition policy

It was found that our governmental libraries joining this survey had little or no means(e.g. librarian specializing in policy information, acquisition policy and reading list committee) prepared to obtain policy information, and had no bibliog-

raphy tool developed to help acquire policy information systematically and efficiently. That is why they have challenges in acquisition of policy information.

As these libraries point out, it is found that they have many problems in acquiring policy information, such as insufficient bibliography tools, absence of overall policy information supervising agency, absence of policy information portal system and absence of distribution system. On the other hand, they have difficulties in policy information maintenance, such as lack of formulated guideline to exchange or share materials, lack of storage space and absence of appropriate disposal criteria.

4) Needs for possible ways to realize efficient distribution of policy information

As a part of possible ways to realize efficient distribution of policy information, staffs of our respondent libraries found it required to implement centralized PIS around the nation through material collection based on departmental organization system, promotion initiated by Presidential agency, regular meeting of departmental representatives, etc. And as a part of detailed solutions, they proposed building integrated governmental publication DB, stepping up access tools for governmental publication, building electronic distribution system, rearranging book(copy) delivery regulations, and installing dedicated maintenance agency specializing in the publication and distribution of governmental publications.

5) Absence of policy information content and services

According to profiling current NLK web sites or online governmental libraries, it is found that we are absolutely wanting in content related to policy information and original text content, let alone interactive communication, various communities and innovative services based on up-to-the-minute IT technologies. Thus, it is required to improve these questions.

Conclusions and Proposals

Despite the significance of policy information essential for a country and its individual citizens, it is unfortunate that we have no formulated policy or system to make policy information available en bloc to users. Indeed, as central government has complex organizations and there is a huge amount of data and materials produced ceaselessly, it is not easy to pinpoint proper information available from government without professional knowledge. Moreover, different agencies to collect governmental publications are scattered, not consolidated in Korea.

In this context, this study aims to 1) support information required for policy-making activities of governmental and public agencies to establish a foundation for implementation of competitive knowledge government, 2) consolidate scattered policy information across governmental agencies into one system from nationwide perspectives to

build up national policy information infrastructure, and 3) seek for possible ways to improve PIS(Policy Information Service) to propose a possible model for implementing convenient and efficient PIS system.

To meet the goals, this study conducted a questionnaire survey for libraries incidental to central government agencies, local government, national research institutions, etc so as to analyze actual profile of domestic PIS and perform demand survey on needs for policy information. The results of analysis can be outlined as follows:

- 1) For possible channels to acquire policy information materials, it was found that 25% of all our libraries relied on purchase, and 65% relied on internal publishing division, donation, exchange and deposit, which shows that policy information, unlike common materials, is more likely collected free of charge, rather than via commercial paid distribution system. So it is necessary to develop non-commercial policy information distribution system as soon as possible, so that policy information will be circulated in more efficient and cost-effective ways.
- 2) It was found that our governmental libraries joining this survey had little or no means(e.g. librarian specializing in policy information, acquisition policy and reading list committee) prepared to obtain policy information, and had no bibliography tool developed to help acquire policy information systematically and efficiently. That is why they have challenges in acquisition of policy information.

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As these libraries point out, it is found that they have many problems in acquiring policy information, such as insufficient bibliography tools, absence of overall policy information supervising agency, absence of policy information portal system and absence of distribution system. On the other hand, they have difficulties in policy information maintenance, such as lack of formulated guideline to exchange or share materials, lack of storage space and absence of appropriate disposal criteria.

- 3) As a part of possible ways to realize efficient distribution of policy information, staffs of our respondent libraries found it required to implement centralized PIS around the nation through material collection based on departmental organization system, promotion initiated by Presidential agency, regular meeting of departmental representatives, etc. And as a part of detailed solutions, they proposed building integrated governmental publication DB, stepping up access tools for governmental publication, building electronic distribution system, rearranging book(copy) delivery regulations, and installing dedicated maintenance agency specializing in the publication and distribution of governmental publications.
- 4) According to profiling current NLK web sites or online governmental libraries, it is found that we are absolutely wanting in content related to policy information and original text content, let alone interactive communication, various communities and innovative services based on up-to-the-minute IT technologies. Thus, it will be required

to improve these questions.

Second, this study conducted questionnaire survey to analyze needs for promising services available on NLK PIWPS(Policy Information Web Portal System) to be completed in 2008. The results of analysis can be outlined as follows:

- 1) It will be foremost required to focus primarily on providing policy material original text service, building electronic information delivery system and publishing book collection list(DB). To this end, it is essential to build up consolidated information environment via collaborative networking with governmental agency libraries.
- 2) It will be required to enhance interoperability of information services through international compatible standardization and element technologies, and explore possible ways to evolve and advance into future-oriented portal services encompassing latest digital technologies such as Semantic Web, Web 2.0 and Ubiquitous which are all core technologies for next generation portal services.
- 3) It is expected that promising functions of web portal system in near future will include integrated search and categorization, user interface(UI), content management and personalization. Thus, it is recommended to build up NLK PIWPS to realize proactive user participation, shared information resources and open integrated search platform.

Third, this study conducted questionnaire survey to analyze needs for NDGPL to be completed in 2012. The results of analysis can be outlined as follows:

- 1) It is very demanded that NDGPL, as a local branch of NLK, should play its roles as data maintenance center as well as mediator of central library office.
- 2) So it is required that NDGPL should perform its inherent functions such as executing legal deposit works of central office(NLK) by proxy, providing bibliography information to prepare national bibliography DB and build up comprehensive search system, and uploading digital data to national digital libraries.
- 3) In addition, it is recommended that NDGPL should execute policy functions of central office(NLK), act as regional base for interlibrary loan by means of materials migrated from central and regional libraries as well as internal materials collected, and provide services directly for end users.
- 4) Above all, it will be necessary that NDGPL should focus primarily on its essential function as data library to accommodate materials migrated from central and regional libraries as well as policy information materials collected inside. Moreover, it will be also required for NDGPL to focus on performing its functions to execute and support national library policies and collect and develop policy information materials.

This study refers to a basic research to provide

integrated PIS to end users, and requires follow-up studies focusing on possible ways to overall manage and service policy information including governmental publications nationwide. To this end, it is advisable that follow-up studies should focus on the following considerations in favor of permanent development of policy information:

First, it will be required to prepare further strategy and programs to develop and propagate bibliography maintenance system. To this end, it will be necessary to consolidate scattered bibliography maintenance systems into one system for better compatibility and convenience of system and DB, particularly in the interest of system supports for deteriorated libraries. Because deteriorated governmental agency libraries face many challenges in budget and staffing for replacing outdated system by new one or upgrading system functions, it is advisable that NLK should develop and support system to ensure that they can break through the challenges.

Second, this study focused on analyzing actual needs of libraries supporting policy information. But it is recommended that follow-up studies should focus on deducing possible ways to improve PIS by analyzing the needs of end users who rely on policy information as well as those of policy information producers.

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