Analysis of Collection and Management of the Korea National R&D Report

Dec. 8, 2014 Kiseok Choi

Korea Institute of Science & Technology



CONTENTS

I. Introduction
II. The production type and management of national R&D outcomes
III. Collection and management of national R&D report information
IV. Conclusion



Introduction

Management Scheme of National R&D Programs

Definition of National R&D Program

- a R&D program in science and technology, in which a certain R&D project is chosen and partially or wholly funded by the government or public organization

Establish a general distribution system on the related information

- National Science & Technology Information System

kept and managed by the government

- regulated to be registered on the research outcome management agency(KISTI)



Production type of national R&D outcomes

- The outcome of national R&D programs
 - all research results which occur after the fulfillment of the research projects regardless of their type and period
 - The outcome types of national R&D programs
 - Tangible/Intangible outcome
 - science and technology research outcome
 - Primary/Secondary outcome



Production type of national R&D outcomes

- The outcome types of national R&D programs
 - > Tangible outcome
 - > various results obtained from the byproducts of R&D, including biological resources, compounds and information data
 - Intangible outcome
 - knowledge performance acquired through R&D, including knowledge assets (expatent, etc.)
- science and technology research outcome
 - > Primary outcome:
 - the result which directly occurs for a short period time
 - Ex) knowledge creation, technology development, product production and process improvement
 - > Secondary outcome:
 - social and economic effects derived from the primary outcome
 - > cost reduction, increase in sales and other social and economic contributions



Management of the outcome of national R&D programs

- the management of national R&D reports is a critical part in the management of the research outcomes of national R&D programs
 - the establishment of the information distribution system for collect, manage and use national R&D reports
 - prevent redundant research or investment and select a new research project through the mutual exchange of R&D information



Progress and projects of national R&D programs

- Current Status of National R&D Programs, their Investments and Specific Projects by Year
 - Korea's national R&D programs have continuously risen since the 1990s
 - grown by more than 10% annually

Year Category	2008	2009	2010	2011	2012
Investment (x KRW 100 million)	109,936	124,145	136,827	148,528	159,064
No. of Programs	486	474	483	493	537
No. of Specific Projects	37,449	39,565	39,254	41,619	43,192



National R&D report production trend

- National R&D Report Production Trend
 - Since a strict survey on the number of final report started in 2012, it has declined

Ye Category	2010	2011	2012	Total
No. of Report Produced	14,565	15,044	9,646	39,255



Current non-disclosure of national R&D reports by bureau-1

- Classification of Non-disclosure Projects of National R&D Programs
 - the reports' non-disclosure rate has been as high as 36.9% (last 3 years)

Category	2010	2011	2012	Total (Aver- age)
Total Projects	8,540	8,461	4,805	21,806
Disclosed Projects	4,399	5,635	3,736	13,770
Non-disclosure Projects	4,141	2,826	1,069	8,036
Non-disclosure Ratio (%)	48.5%	33.4%	22.2%	36.9%



Current non-disclosure of national R&D reports by bureau-2

- Classification of Non-disclosure Projects of National R&D Programs by Bureau
 - Small and Medium Business Administration was the highest with 100%
 - Even stay non-disclosure after 3 years of patent processing time

	No. of Projects	Disclosed	Undisclosed	Percentage(%)
Ministry of Education, Science and Technology	8,622	8,302	320	3.7
Ministry of Knowledge Economy	5,014	1,838	3,176	63.3
Ministry of Agriculture and Forestry	471	327	144	30.6
Ministry of Health and welfare	780	606	174	22.3
Ministry of Environment	388	371	17	4.4
Ministry of Land, Transport and Maritime Affairs	308	209	99	32.1
Small and Medium Business Administration	3,884	-	3,884	100
Rural Development Administration	1,083	1,073	10	0.9
Korea Food and Drug Administration	861	835	26	3.0
Defense Acquisition Program Administration	4	1	3	75.0
Total	21,415	13,562	7,853	36.7



Collection and management of national R&D reports by the KISTI-1

- Development of National R&D Report Database by the KISTI
 - the ratio of government-led collection and management of national R&D reports is low
 - the percentage of database to the conventional national R&D reports was about 69%

Year	2008	2009	2010	2011	2012
No. of Productions	17,233	18,160	14,565	15,044	9,646
Development Cases	4,623	7,108	8,540	8,461	4,805



Collection and management of national R&D reports by the KISTI-2

- Collection of Non-disclosure National R&D Reports by KISTI
 - the percentage of non-disclosure national R&D reports is very high
 - non-disclosure reports are accounting for 48.0% of total national R&D reports

Category	2008	2009	2010	2011	2012	Total
No. of Total Reports Registered	4,623	7,108	8,540	8,461	4,805	33,537
No. Non- disclosure Reports	3,213	4,836	4,141	2,826	1,069	16,085
Non- disclosure reports (%)	69.5%	68.0%	48.5%	33.4%	22.2%	48.0%



Conclusion

Conclusion

The information distribution systems for national R&D reports have been managed quite well

- current information management and distribution of national R&D reports are still very poor
- need to develop a system to disclose non-disclosure national R&D reports and distribute them

Future study

For the integrated registration and management and efficient distribution of national R&D reports

- use of a standardized R&D report form for the systematic and unified submission and registration
- a copyright issue which could be raised during the online services

