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NIA NATIONAL INFORMATION SOCIETY AGENCY

Open Data of KOREA

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Ⅰ. NIA Introduction

National Information Society Agency (NIA)

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In a world of newly emerging knowledge and information paradigms, NIA continues to be the definitive expert agency charged with a central role in the information of the nation society.

2015.9
Moving office to Daegue and Jeju

2009.5
Integrate launched as National Information Society Agency (NIA)

2003.1
Reorganized as Korea Agency for Digital Opportunity and Promotion (KADO)

1987.1
Established as National Computerization Agency (NCA)

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Ⅱ. Open Data of KOREA Overview

Open Data Center

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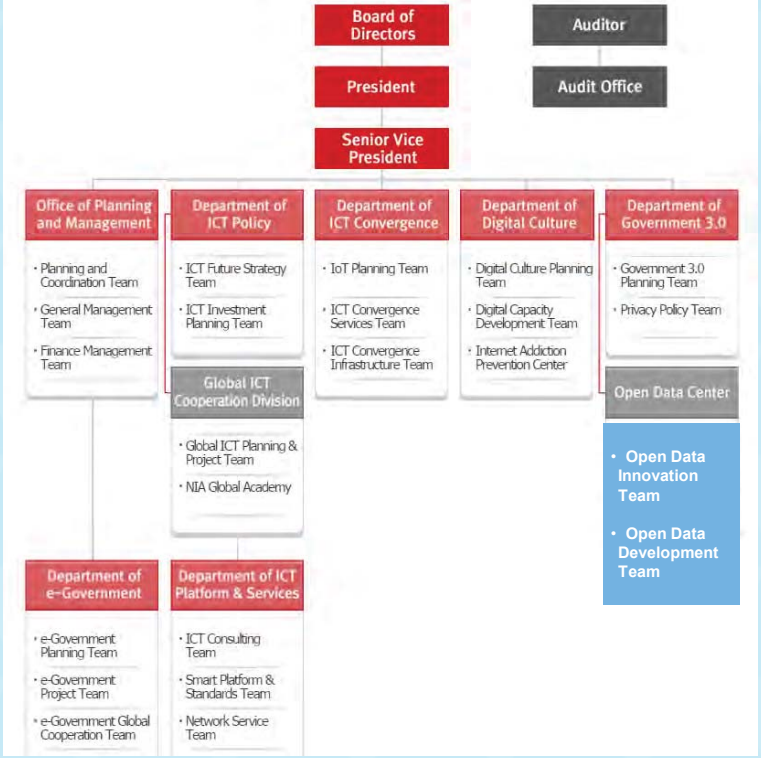
The Open Data Center launched in November, 2013 and established and operated by
『 Open Data Law 』 Art. 13 of Act on promotion of the provision and use of open data



Open Data Center

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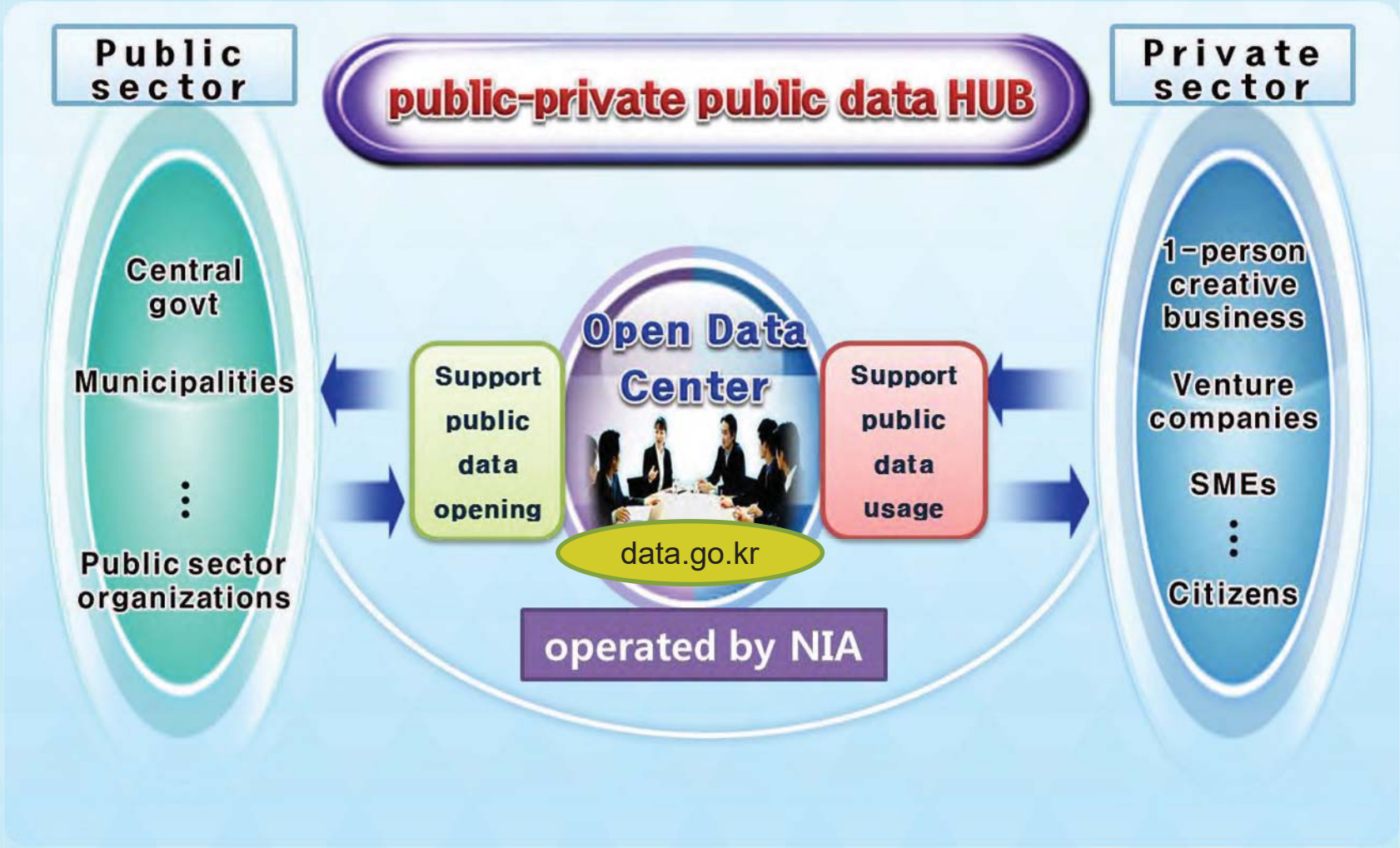

* NIA : National Information Society Agency

General Consensus on Open Data Direction

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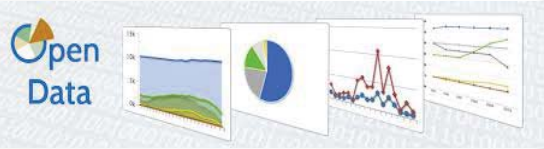
Strategy

- **Opening up all open data in Negative list way to maximize effect (open by default)**
- **Ensure right to use open data freely**
- **Ensure equality principle in open data access**
- **Ensure commercial use of open data to produce virtual goods/services & profit generation**

Open data scope

- Electronic information or data produced, obtained, managed by public orgs
  - Ex. geo, weather, maritime, environment, economy, population, transportation, leisure, agri, crime, patent, etc



Open data provision

- Opening up of data to allow access and use in machine readable form
  - **machine-readable** : state in which data structure can be verified and data can be modified, transformed, filtered through software

Provision exceptions

- Data subject to non-disclosure by 'Information Disclosure Act' (national security, personal info, etc)
- Data containing third party rights which have not been cleared
- Data subject to non-disclosure by relevant laws

Momentum building for concrete policy action

Law and Organization Framework

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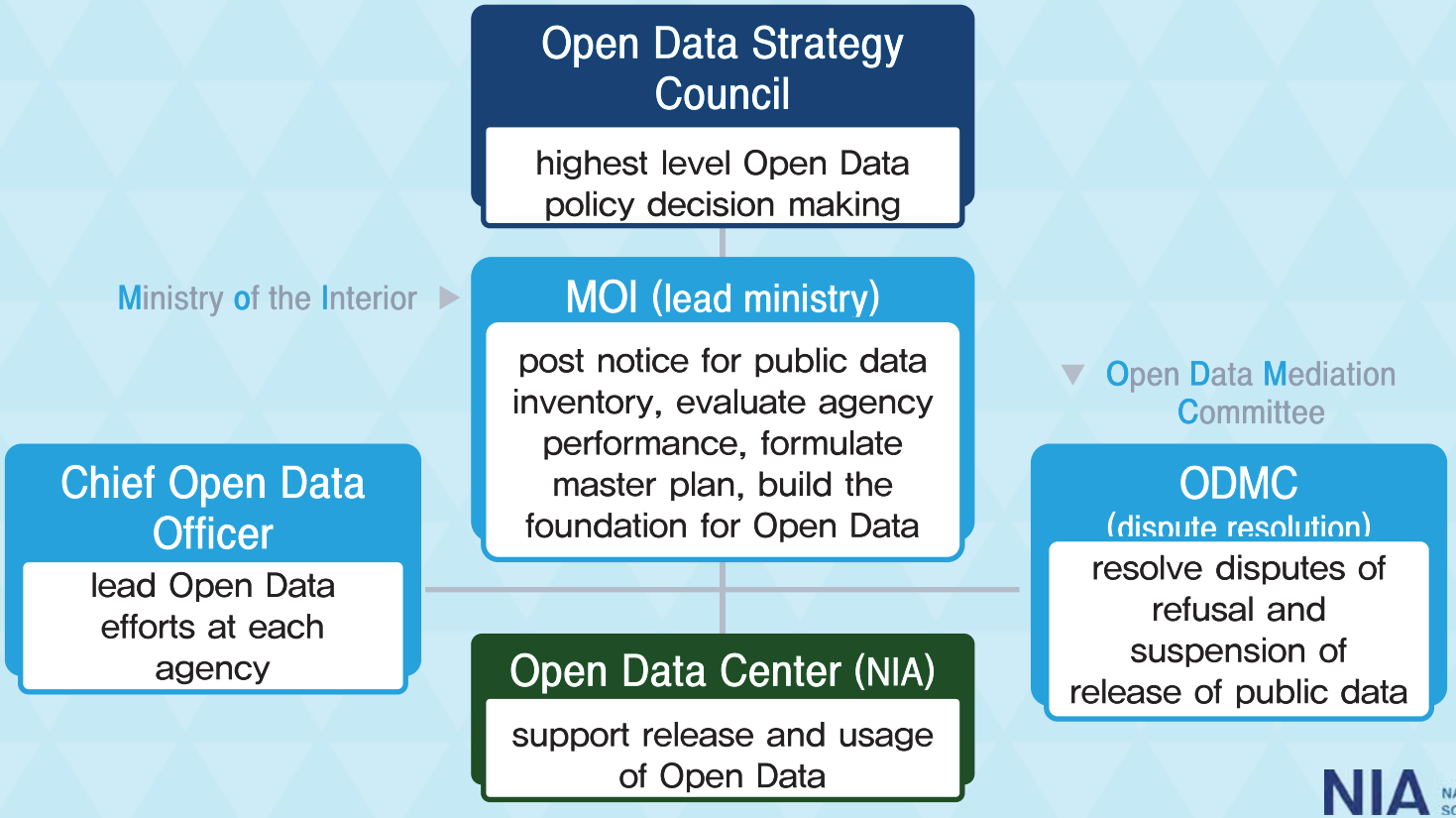
『 Open Data Law 』 enactment (world 1st)

a law to effectively coordinate pan-government policy on open data

*** passage at National Assembly(June 27, 2013) → effective(October 31, 2013)**

Key points : Open by default, ensure right to use data (incl commercially), data provision obligation and immunity from liability



Results of Open Data Disclosure

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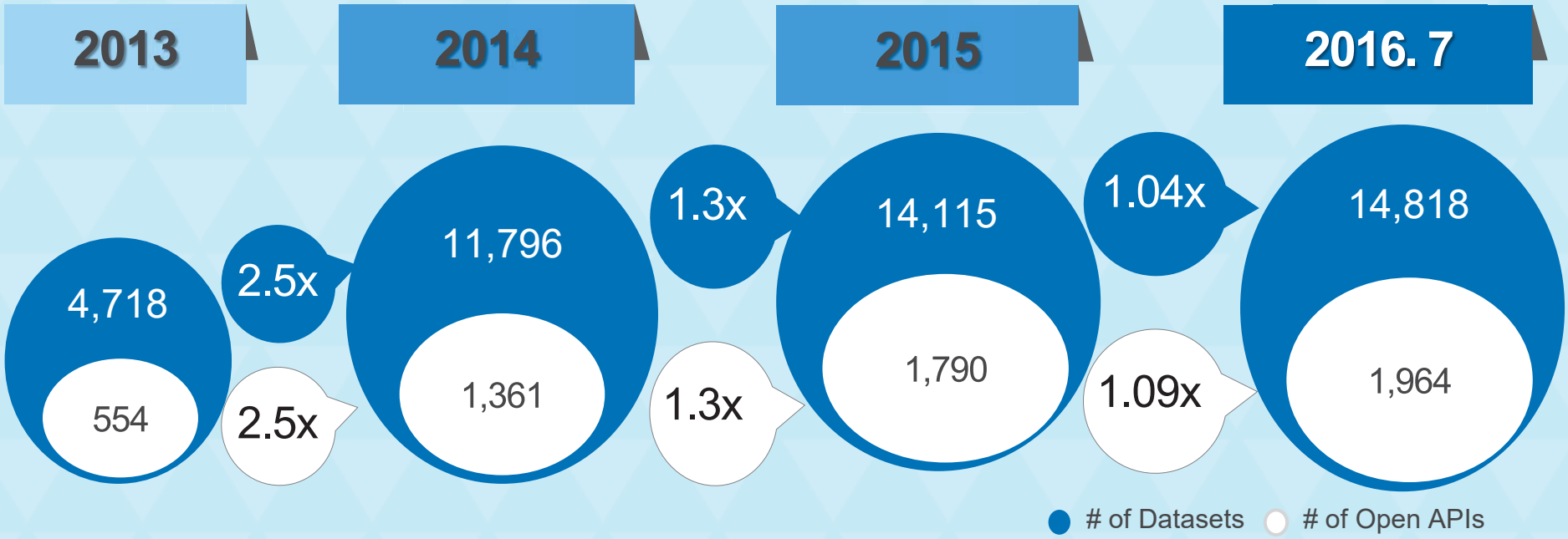

PUBLISHER

655

14,818 datasets published

1,964 Open APIs published

PUBLISHED STATUS

16,794

Private Sector Use of Open Data

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	2014.12		2016.7
Download Datasets	119,633 datasets	9.88x	1,182,465 datasets
Applying for Open APIs usage	33,687 open APIs	3.6x	121,542 open APIs
Development Private Services	395 services	2.31x	913 services

*calculation of a cumulative sum

Open Data Case Studies

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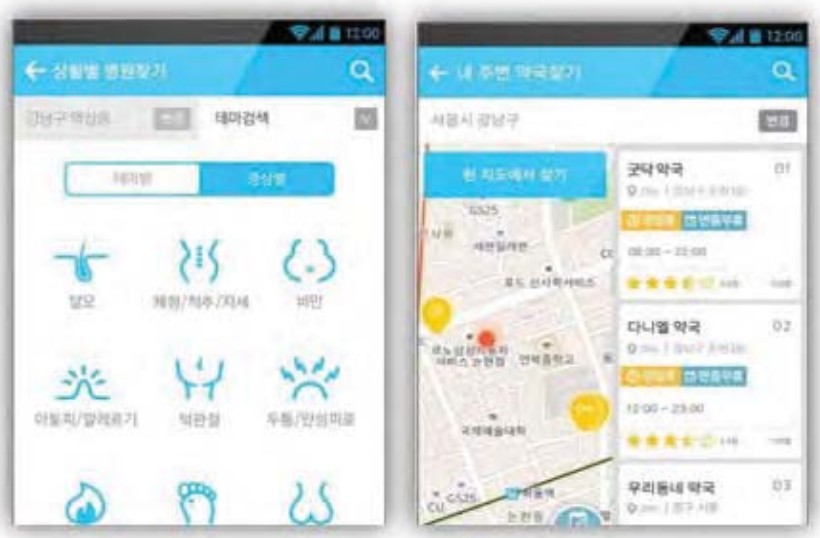
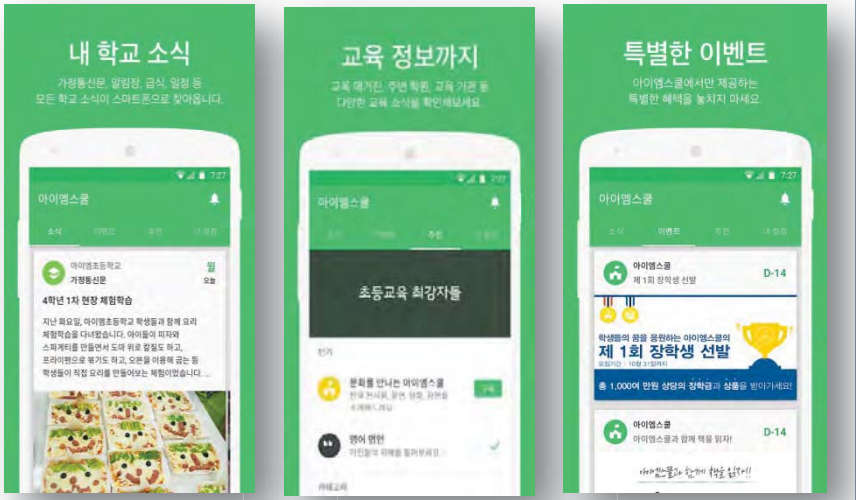
Goodoc (Yello Mobile)



- Data Sources : Hospitals and pharmacies information
  Services : Nearest and available Hospitals and pharmacies information in your location
- Highlights :
  - Increased revenue 167%(YoY) : total $3.5 million in 2015, compare to $1.3 million in 2014
  - Open data best practices recognized by the UN

IAMSCHOOL (IAMCOMPANY)



- Data Sources : School calendar and meals information
- Services : Integrated school news providing service (notice, school meals etc.)
- Highlights :
  - No.1 school mobile announcements in Korea(based on the second half of 2015)
  - 100 schools conducted services after entering Taiwan market in three months.

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Ⅲ. Main Services of ODC

Policy Plans and Guidelines

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* **Master Plan**

The 1st Open Data 3 year Master Plan (December 2013)

The 2nd Open Data 3 year Master Plan in Progress (2017~2019)

* **Yearly Plan**

2014/2015/2016 Open Data Plans

(all central govt ministries, provincial level govts : 60)

* **Guidelines**

Open Data Management Guidelines (March 2014)

*Mandated by 『 Open Data Law 』

Open Data Strategy Council

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* Operating the **private-public collaboration activity** “Open Data Strategy Council”: **Established on the basis of Art. 5 of the Open Data Law** ; composed of **government and local governments** departments and **technical experts of private sector** related to the data area to deliberate and adjust the **government's major policies** and **plans on open data** and **check and evaluate its implementation**.

Open Data Mediation Committee

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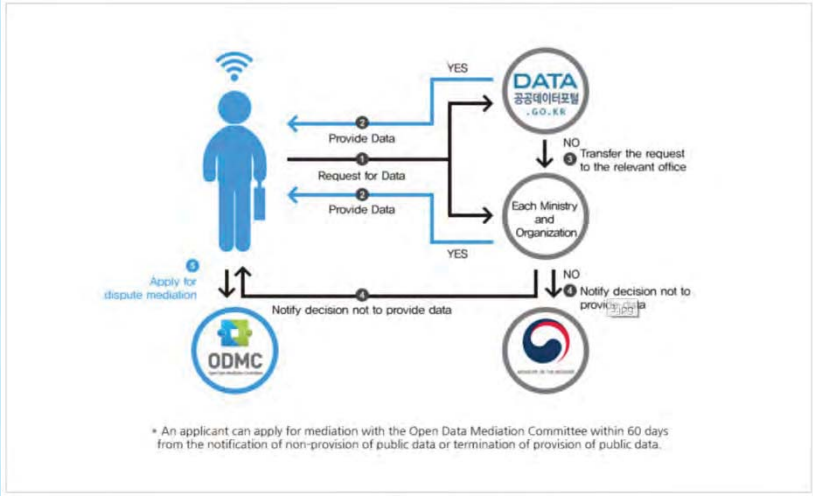
* **What is open data dispute mediation system?**

The system provides simple procedures for mediating open data disputes when public institutions refuse or stop providing public data

* **Open Data Mediation Committee**

Dispute mediation, pre-mediation, consultation, and training related to public data provision



Open Data Portal (data.go.kr)

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* **How to use open data?**

Go to the open data portal (data.go.kr) and search for data you want for downloading and use. If the data you want are not available, you can request disclosure of open data.

***663 Government and public institutions** opening up government data,
15,186 File Data and **2,025 Open APIs provided**(as of August 2016)

Published Key Data for Korea (Data BigBang Project)

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Key data for Korea in 36 areas selected by people

*Data BigBang Project : Opening high value and high demand 36 areas data

weather, transportation, land, food/medicine, agri/livestock, culture/tourism, disaster/safety, health/welfare, procurement, patent, maritime/fisheries, laws/justice, science/technology, labor/employment, environment etc.

Open the public data in 11 areas covering national health, real estate, and hiking courses

2015

Fully open in 22 areas including real estate transactions, food and medicine information, national disasters, education and public administration

2016

Complete providing open data in 36 areas including written judgments

Making more government information available to the public to meet the popular needs

2017

Data Quality Management and Standardization

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* **Public DB quality management & open API**

- **Support DB quality management especially in strategic areas and establish pan-government common quality management process**
- **Expand open API provision : 503(2013) → 3,000 (2017)**

  - Public DB quality management projects
    → **35 projects(2013), 40 projects(2014), 41 projects(2015), 40 projects(2016)**
  - Support open API development
    → **25 projects(2014), 25 projects(2015), 30 projects(2016)**

* **Standardization**

- **High quality data infrastructure via maintaining accuracy and consistency of data through pan-government efforts**

  - Public data standardization projects standardize data fields, terminology, format, code of each type of data (e.g. parking facility)
    → **data structure and format standardization for machine readable open format**

Quality Control for Open Data

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* **QC evaluation** : Define the five levels for QC process for open data

* **Expand use of open format :** Increase up to 70% of all files by 2017

Check Data Error and Open API Services

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* Error checking for open data of Open Data Portal
* Quality improvement, such as real-time fault diagnosis, for Open Data Portal and API Providers

Open Square-D

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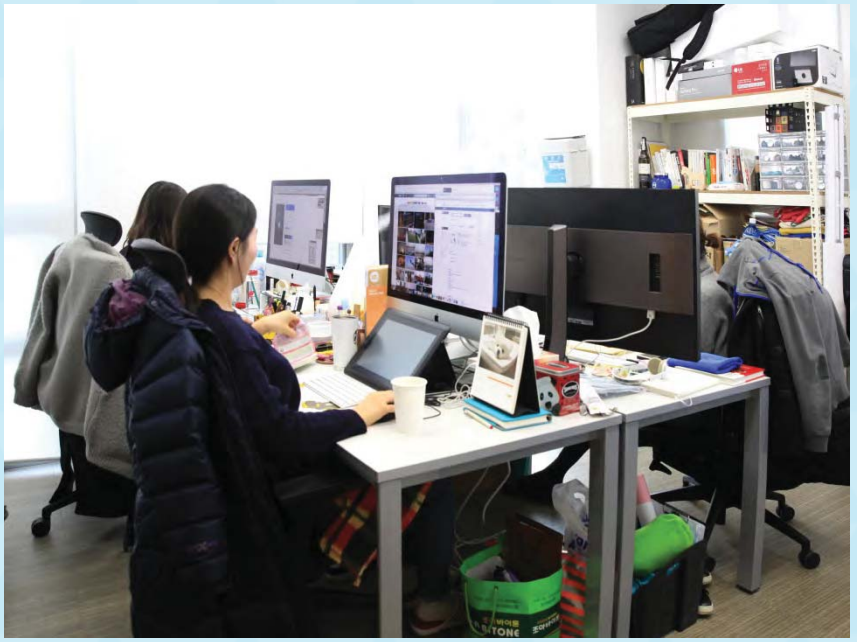
- The 'Open Square-D' is an one-stop support center for startup to support brainstorming, starting-up, and supporting each step of business using open data.
- Currently a total of 11 Corporates tenants, Investment Seminar, 1:1 customized consulting services



Open Square-D

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The Open Data 500 Korea

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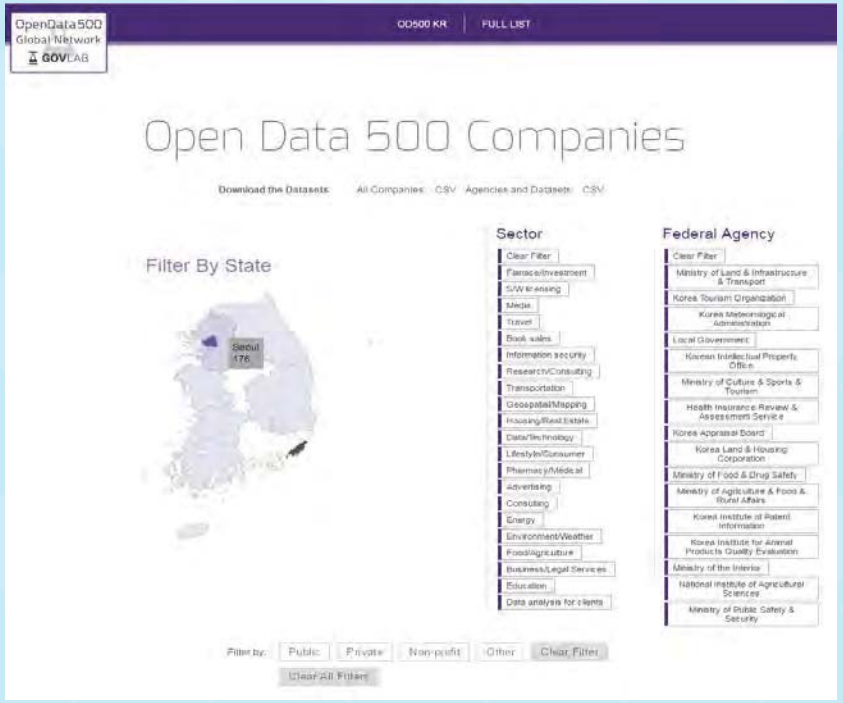
- **Business-to-business community using open government data to generate new business and develop new products and services.**
- **301 companies registered(as of 2015) ▸ 200 companies expected to register additionally(end of 2016)**



Open Data Startup Talk Show

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- Objectives : Leverage value and awareness of Open Data
- Target : Potential startups, students and the general public
- Agenda : Open Data case studies, support projects and policies
  (Total of 5 times held, more than 1,000 participants accumulated)

Open Data Startup Competition

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- Objectives : Dissemination and awareness raising of Open Data, developing innovative business models and commercialization
- Status : The 4th startup competition is presently in progress (since 2013)
- Categories : Ideas planning, product and service development, mashups
- Reception status : Total of 1260 cases (average competition ratio 27 : 1)
- Result : 27 of 47 teams start business successfully (success rate in product and service development 92%)

Open Data Hackathon

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- Objectives : Increase life-based public service using open data through ideas of the people
- Theme : "Adding the Open Data in your life? Convenient LIFE 3.0! “
- Reception status : Total of 1260 ideas (May 23-Jun 9, 2016)
- Awards : 5 teams award and receive cash prizes(Minister's Awards etc.)

Open Data Town in Gov.3.0 Festival

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- Objectives : To share experiences the advantage of using open data in life
- Theme : Government at your fingertips
- Contents : VR(Virtual Reality) of Open Data usage cases, startup services, introducing Open Data policies etc.
- Visitors : 100 thousand people, President, diplomatic missions of US etc.

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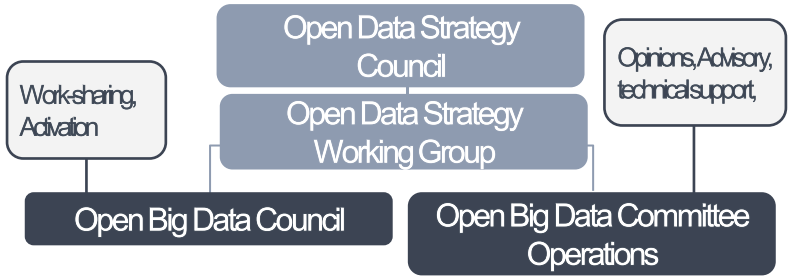
Implementation and value expansion of Big Data system

Implementation of Big Data System

Open Big Data Council and Committee Operations

Policy and strategy to promote and dissemination of Open Big Data



Evaluation System

Development reasonable analysis model of Big Data and evaluation system for using Big Data

Standard Cost Estimate for effectively manage Big Data Business

Value Expansion of Open Big Data

The education on the public Big Data

Strengthen the education on the public Big Data usage and professional manpower training

Open Big Data advertisement

Advertisement and international expansion

*

Implementation of Analytical Project & Development on Standard Model

Implementation Big Data

Implementation of Analytical Big Data Projects

2014	2015	2016
5 models	4 models	5 models

- Korea Forest Service: Forecast Forest Fire Danger
- Ministry of Public Safety and Security / Global Inspiration GyeongGi-Do: Fiscal Transparency Improvement in Apartment Maintenance Fee

Development & extension on standard analytic model

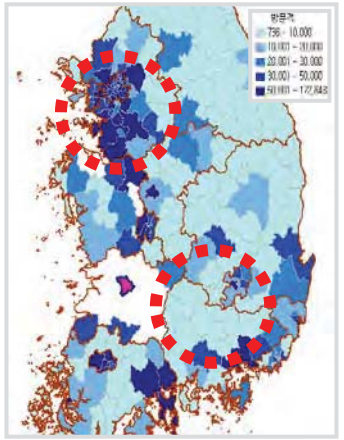
2016	2017	2018
10 models	20 models	30 models

The Case of Big Data Project

Vitalization of Local Tourism

Analysis of floating population/commercial area/IoT data of Jeonju Hanok Maeul

▸ **Establish customized tourism policy**



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IV. Wrap Up

Realization of Data based Creative Economy

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V. Future of OGP in Asia Pacific

Propose for the future of Open Government Partnership in Asia Pacific

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* To share opening policy on open data

* To share best practices of open data and promote cooperation between enterprises

* Developing an agenda for open data disclosure and use of Asia Pacific

* Setting up an Asia Pacifc open data portal

Share and use open data between Asia Pacific countries

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Thank you !

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