



הלשכה המרכזית לסטטיסטיקה
Central Bureau of Statistics
دائرة الإحصاء المركزية

רכיב B הנגשת נתוני פרט לחוקרים

בכא באאז נמאן!

Component B: Micro Data services to researchers

רכיב B – הנגשת נתוני פרט לחוקרים

Mandatory result

- *Setting up an overall program for providing researchers with access to micro-data, based on the analysis of the current situation and a designated strategic plan (February 2018)*

תפוקה מחייבת של הרכיב

- הגדרת תוכנית כוללת למתן גישה לחוקרים אל נתוני מיקרו, זאת בהתבסס על המצב הקיים ועל התוכנית אסטרטגית של הלמ"ס (פברואר 2018)

דרישות חוזה לרכיב B

- **IB1:** *Report and analysis of the current situation adopted (and identification of gaps to be bridged) (August 2016);*
- **IB2:** *Strategic Plan elaborated for providing researchers with access to micro-data (February 2017);*
- **IB3:** *Organizational and technological implementation plan, including data security (August 2017);*
- **IB4:** *Formal organizational structure proposed (August 2017);*
- **IB5:** *Training program defined for the staff (November 2017);*
- **IB6:** *Policies and procedures adopted to manage each interface (e.g. data providers, research institutes, researchers, thematic units...) (October 2017);*
- **IB7:** *Proposal for legislation submitted to the ICBS top management (February 2018);*
- **IB1:** הכנת דוח ניתוח המצב הקיים – תוך זיהוי פערים לתיקון (אוגוסט 2016)
- **IB2:** ניסוח תכנית אסטרטגית להנגשת נתוני פרט לחוקרים (פברואר 2017)
- **IB3:** ניסוח תכנית עבודה ארגונית וטכנולוגית, כולל אבטחת מידע (אוגוסט 2017)
- **IB4:** הצעה למבנה ארגוני פורמלי (אוגוסט 2017)
- **IB5:** קביעת תכנית הכשרה לצוות כ"א (נובמבר 2017)
- **IB6:** אישור מדיניות ונהלים לניהול כלל הממשקים (עם ספקי נתונים, מוסדות מחקר, חוקרים, יחידות נושאיות, ושאר הגורמים הפנימיים והחיצוניים המעורבים) (אוקטובר 2017)
- **IB7:** הצעה לשינוי החוק מוצעת לאישור הנהלת הלמ"ס (פברואר 2018)



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Micro Data services to researchers: Current Status, Goals and Objectives

בכא ראם א נמאן!

Products ICBS Provides for Users

- ICBS produces information in various and varied subjects.
- The products are oriented and specified according to target audiences.
- Information found on ICBS website:
 - Summarized data in various levels for users who aren't experts in data usage (tables, charts, maps, general explanations, press releases etc...)
 - Table generators and databases that can be used to summarize data according to need.
- Summarized files that are defined according to users' needs and who are produced upon request.
- Unrecognizable record files that are accessible in different ways:

Unrecognizable Individual Record Files

PUF :

- An individual record file with a small chance of identifying entity.
- Current policy states that every survey must have a standard file with a confidentiality level of PUF.
- PUF files are available to the public by purchasing the file and signing a usage agreement.
- PUF files are available in different subjects such as Social Surveys, Household Expenses Surveys, Car Accidents etc...
- PUF files are available to students and researchers through the Hebrew University Database that has been active since 1970.

Unrecognizable Individual Record Files

MUC :

- Individual record file that has more data than a PUF file and that has a small chance of identifying entity.
- Current policy states that every survey must have a standard file with a confidentiality level of MUC.

There are currently two kinds of MUC files:

- MUC files who are pre-defined according to subject (Labor Market, Social survey, Census etc...)
- MUC files who are defined according to users requests (currently defined as research room files).

Unrecognizable Individual Record Files

MUC :

- The access to the unrecognizable individual record files is through the research rooms.
- These files are available to authorized researchers only after signing a usage agreement.
- Researchers can only work on the files in ICBS research rooms
- The usage of pre-prepared files (until 2008) are accessible in research rooms or through the database of Hebrew University

Access to Individual Record Files - Research Rooms:

Research Rooms:

- Research rooms offer researchers detailed individual records who are (almost) unrecognizable.
- Access to the research rooms are available only to researchers from Academic and Research Institutions who have been authorized by the Government Statistician.
- Access is provided after signing a usage agreement and upon defining the researchers as volunteer employees of ICBS.
- Currently the research rooms have special pre-prepared files who have been selected upon request (and who have a confidentiality level of research rooms) and standard MUC files.

Research Rooms

- ICBS provides research rooms in Jerusalem, Haifa and Tel Aviv (starting next week).
- There is an additional research room in the Bank of Israel.
- There are plans to create an additional research room in the Interdisciplinary Center in Herzliya (IDB Herzliya) who will work similarly to the TLV and Haifa research rooms.
- The files requested by researchers are installed on one computer, in a specified location (they are not on any network).
- Every research has a designated research library and every researcher has access solely to their library.

Research Rooms

- Research in the ICBS research rooms is done on stand alone departmentalized computers. Every research is loaded to a specific computer where the researcher can only access their research.
- Research in the Bank of Israel's research room is done on a computer terminal. The researcher works on the computer and the files are saved on the ICBS servers.

Research Rooms

- In the research rooms in ICBS and in the Bank of Israel, researchers can work on the files but not print any outputs or remove any data.
- In order to receive the data and files the researchers have prepared, they must move them to the ICBS computers and await their approval by ICBS and in certain occasions, the confidentiality committee.

Research Rooms

- Work in the search rooms is based on an annually renewed contract.
- Most researchers need access to the research room for longer than a year and usually renew their contract.

Numbers

Working Stations

In the research rooms have 13 computers.

Jerusalem: 9 Stations , Haifa: 2 stations, Tel Aviv: 2 stations

Researches

- There are currently 55 researches taking place in ICBS research rooms (37 in Jerusalem, 8 in Haifa and 10 in the Bank of Israel).
- About 40 more researches are in different stages of progress and file preparation.

Researchers

- There are about 100 researchers and staff working on the 55 researches.
- There are 2-3 staff members per research. Occasionally there are more.

Institutions

- There are 25 different institutions who use the research rooms (Academic Institutions, research institutions, government offices such as the Bank of Israel, the National Insurance Institute of Israel, the Ministry of Economy and Industry...)

Software

- SPSS
- STATA
- R
- SAS
- MATLAB
- OFFICE

Pricing

- Standard PUF and MUC files cost 100 NIS
- The cost of files that are provided upon request are calculated by the number of work days invested and the cost of the employee who prepares them - they cost between 1,500 -60,000 NIS
- The cost of using a research room is 3,100 NIS a year.
- The National Bank of Israel pays only for files because they have financed establishing a research room and the computers in it.

Remote Access System

- Since 2009 and until two years ago, ICBS has activated the remote working system with MUC files (using the XP operating system).
- The system was designed to assist the users, maintain data/information security and expand the number of eligible researchers who can work on MUC files.
- 28 researchers worked on the system, mainly on processing different data from the Census, labor force survey, car accidents, social science surveys
- Labor cost on the system was 4,800 NIS a year- 400 NIS a month

Joint Participants

- Government Statistician- acknowledges the research institutions.
- Associate Government Statistician- approves connection of research to ICBS.
- Legal Advisor- approves fulfillment of prerequisite conditions, and is a partner in the process if there are any changes in the research or the research team.
- Confidentiality Committee- approve the files and the research variable.
- The Committee for transferring information between Organizations- Approve applications to receive data for research (application A) and assist addressing governmental institution who have provided data for research.

Joint Participants

- The department for International Relations and Statistical Coordination- in charge of data accessibility to researchers and daily operation.
- IT- Computer installment, researches, users, daily operating the research rooms and assisting researchers during their research, handling malfunctions and problems.
- Subject unit - Prepare files per research requests.
- Accounting- collection of payments etc'
- Information security
- Security
- HR

Vision for the Future

- Expanding usage of ICBS data for research.
- Expanding the use of unrecognized Individual Record Files on different levels:
 - Remote access to unrecognized Individual Record Files in the MUC security level.
 - Expanding the usage of research rooms
 - Improving the services provided for researchers (shortening and improving processes etc...)
 - Computerizing tracking the work of researchers and more...

Problems/Difficulties

- The data provided to users today is slim and unusable and unfriendly.
- The difficulties lie in all stages of the process:
 - The process of receiving confirmation for the research is long and cumbersome.
 - The process in acquiring the files for research is long as a result of the combination of the daily work and working on research files.
 - Receiving outputs.
 - Computerization (each file is placed on a single computer and many times there is an overload of the system and inflexibility).
 - Documentation of the work and keeping track of the different work processes.
 - Different factors who are involved in the process

Thank You



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