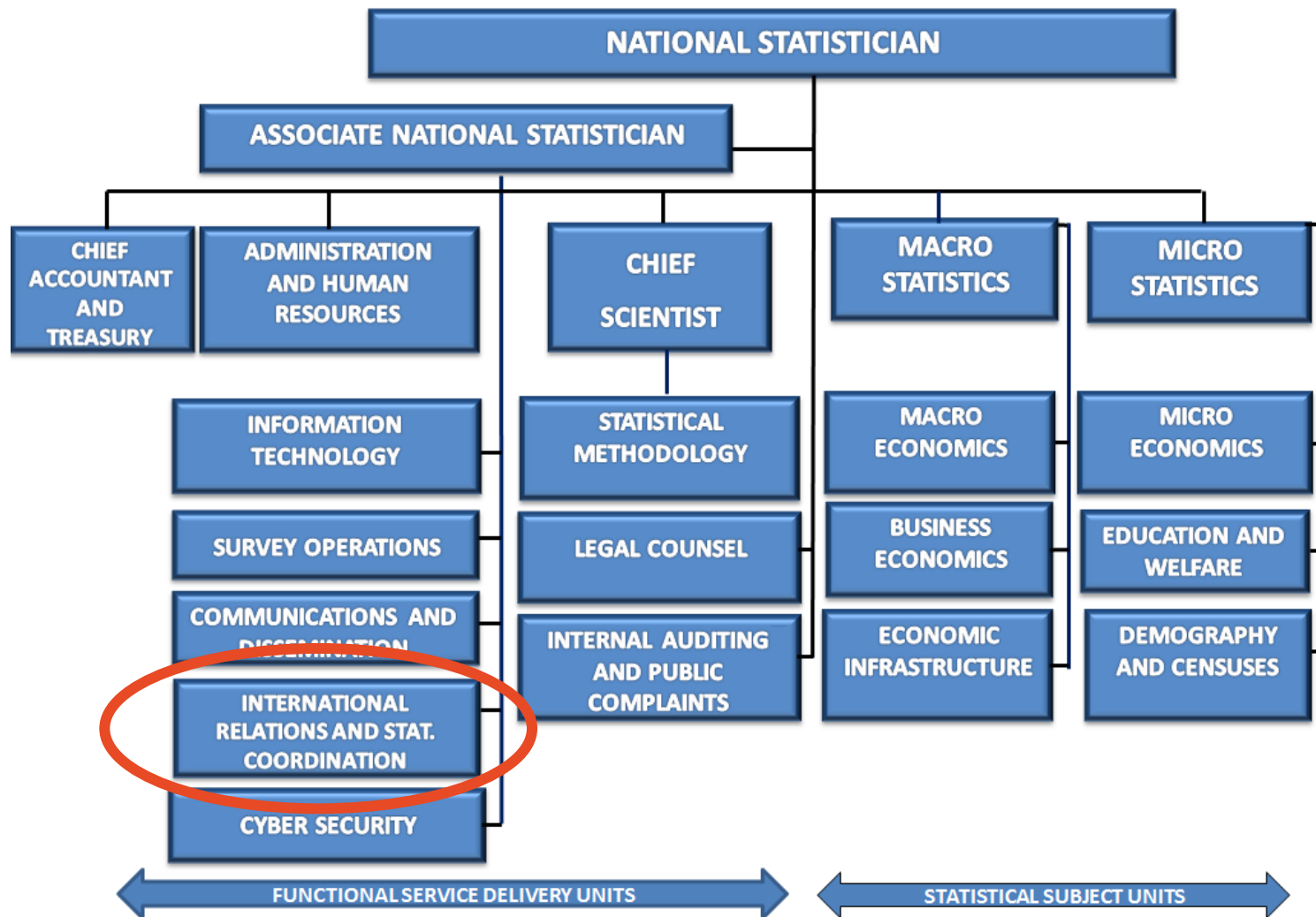הלשכה המרכזית לסטטיסטיקה
Central Bureau of Statistics
دائرة الإحصاء المركزية
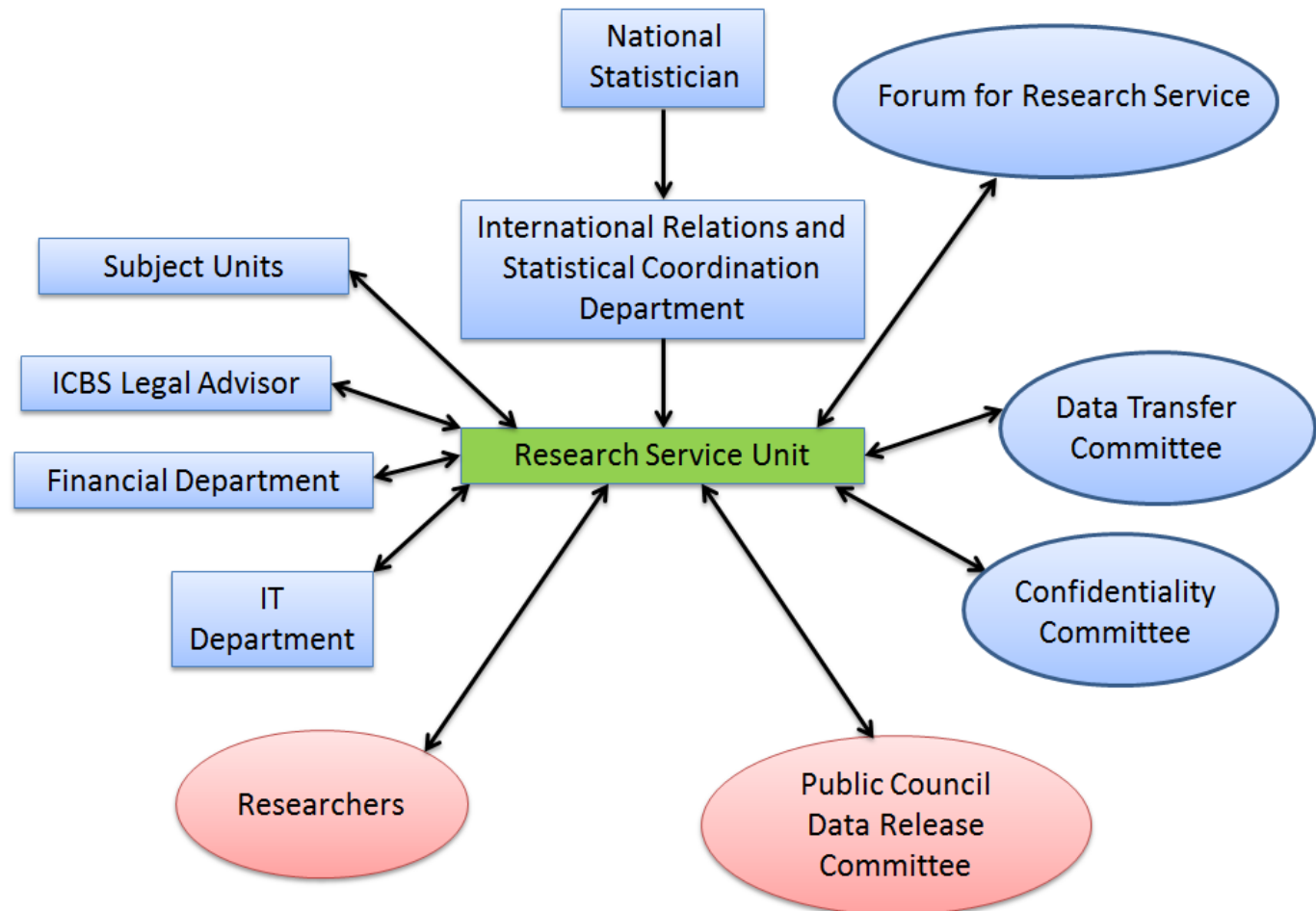
Israel Central Bureau of Statistics

It's All in the Numbers

Introduction to the ICBS

Formal organization of the Research services

How are Data Collected?

Administrative Files

Surveys

Administrative Files

The CBS receives administrative files from state institutions:

- National Insurance Institute
- Local Authorities
- Israel Police

- Ministry of the Interior
- Universities
- And more….

The CBS processes and publishes the data that is obtained from these files as statistical summaries

Surveys

Household Surveys

- Household Expenditure
- Labour Force Survey
- Social Survey
- Population Census
- And more

Business Surveys

- Price Indices
- Manufacturing Indices
- Construction Surveys
- Job Vacancy Survey
- And more

CBS surveys are conducted face to face, by telephone, on the Internet, by post and by fax

Users of CBS Data

- The governmental sector and local authorities

- Research institutes

- Private and public companies

- The media

- International organizations

- Students and pupils

- The public at large

הלשכה המרכזית לסטטיסטיקה
Central Bureau of Statistics
دائرة الإحصاء المركزية

Research Services

הכל רמץ נתון!

Background

- Work in the ICBS research rooms started about 20 years ago.

- Providing data to researchers has never been defined as a main activity of the ICBS.

- Dealing with requests from researchers is considered extra work for ICBS subject unit employees and isn't part of their yearly work plan.

Microdata provided

PUF files
(Public use microdata files)

- 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 to researchers through the Hebrew University Database that has been active since 1970.

MUC files
(Microdata Under Contract /Scientific-use files)

- 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).

MUC files
(Microdata Under Contract /Scientific-use files)

- The assess 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 Hebrew University database.

'Research room' files
(secure-use files)

- Research rooms offer researches 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.

הלשכה המרכזית לסטטיסטיקה

Working with de-indentified microdata

- Until lately, MUC files were provided to researchers on CDs.

- This was followed by a remote access system that worked for two years but crashed in 2014.

- Today, due to data security and confidentiality reasons, the researchers work on MUC and RR (research room) files only in research rooms.

Research Rooms

- ICBS provides research rooms in Jerusalem, Haifa and Tel Aviv

- There is an additional research room in the Bank of Israel.

- Additional research rooms under establishment

- The files requested by researchers are installed on one computer, in a specified location (they are not on any network).

- Each research project has a designated research library and every researcher has access solely to their library.

Numbers

Research projects

- 55 research project (37 in Jerusalem, 8 in Haifa and 10 in the Bank of Israel).
- About 40 more research projects are in different stages of progress and file preparation.

Researchers

- 100 researchers working on the 55 research projects.
- 2-3 researcher working on each research project. Occasionally more.

Institutions

- 25 different institutions - Academic Institutions, research institutions, government offices

הלשכה המרכזית לסטטיסטיקה

Numbers

- Most requested datasets are ……

- Ratio/need between request for RR and MUC…..

- Ratio/need between survey data and administrative data…….

Current Situation - workflow

- The researcher defines the research files needed - together with the relevant subject units.

- The researcher goes through lengthy and complex bureaucratic procedures.

- Every request for research undergoes an authorization process and preparation, depending on the type of the file.

- The prepared files are transferred to a specific research room.

Current Situation - workflow

- The person in charge is responsibility for:
  - Coordination
  - Counseling and assisting in selecting data
  - Collection and preparation of data
  - Collect and compile associated documentation

- No data catalogue is available for internal or external use

- No data repository exists in the ICBS today

Current workflow for creation of research datasets:

- A staff member from an ICBS subject matter

  unit is appointed to be the person in charge
    - Responsibility: coordinate, collect and prepare data as well as collect the associated documentation

- No data catalogue is available for internal or

  external use and no data repository exists in

  the ICBS today

Current catalogue and documentation available for researchers

- *Classification*

  http://www.cbs.gov.il/classifications.htm

- *Dictionary of Terminology*

  http://www.cbs.gov.il/reader/Milon/Milon_E.html?OnlyFinal=1

- *List of Israel Social Science Data Center (ISDC) at Hebrew University of Jerusalem*

  http://isdc.huji.ac.il/ehold4.shtml

Current catalogue and documentation available for researchers

- *Publications and Products Catalogue*

  http://www.cbs.gov.il/reader/publications/bysubject_e_new.htm#6

- *Statistical Abstract of Israel*

  http://www.cbs.gov.il/reader/shnatonenew_site.htm

On-going development projects

- **SIMS**

- The new webpage with a hierarchical structure

- Level 1

  - Individual and Society
  - Economy
  - Environment and Infrastructure
  - Government and Local Authorities
  - Cross sectorial topics

The Twinning project

MR2: 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

- **IB1:** Report and analysis of the current situation adopted (and identification of gaps to be bridged) by 2th project quarter;
- **IB2:** Strategic Plan elaborated for providing researchers with access to micro-data by 5th project quarter;
- **IB3:** Organizational and technological implementation plan, including data security, proposed by 7th project quarter;
- **IB4:** Formal organizational structure proposed to by 6th project quarter;
- **IB5:** An administrative management system adopted by 7th project quarter;

IB6: Policy, structure and content of data catalogue outlined by the 8th quarter;

- **IB7:** Guidelines for output approved by the Confidentiality Committee by 9th project quarter
- **IB8:** Proposal for legislation submitted to the ICBS top management by 10th project quarter;
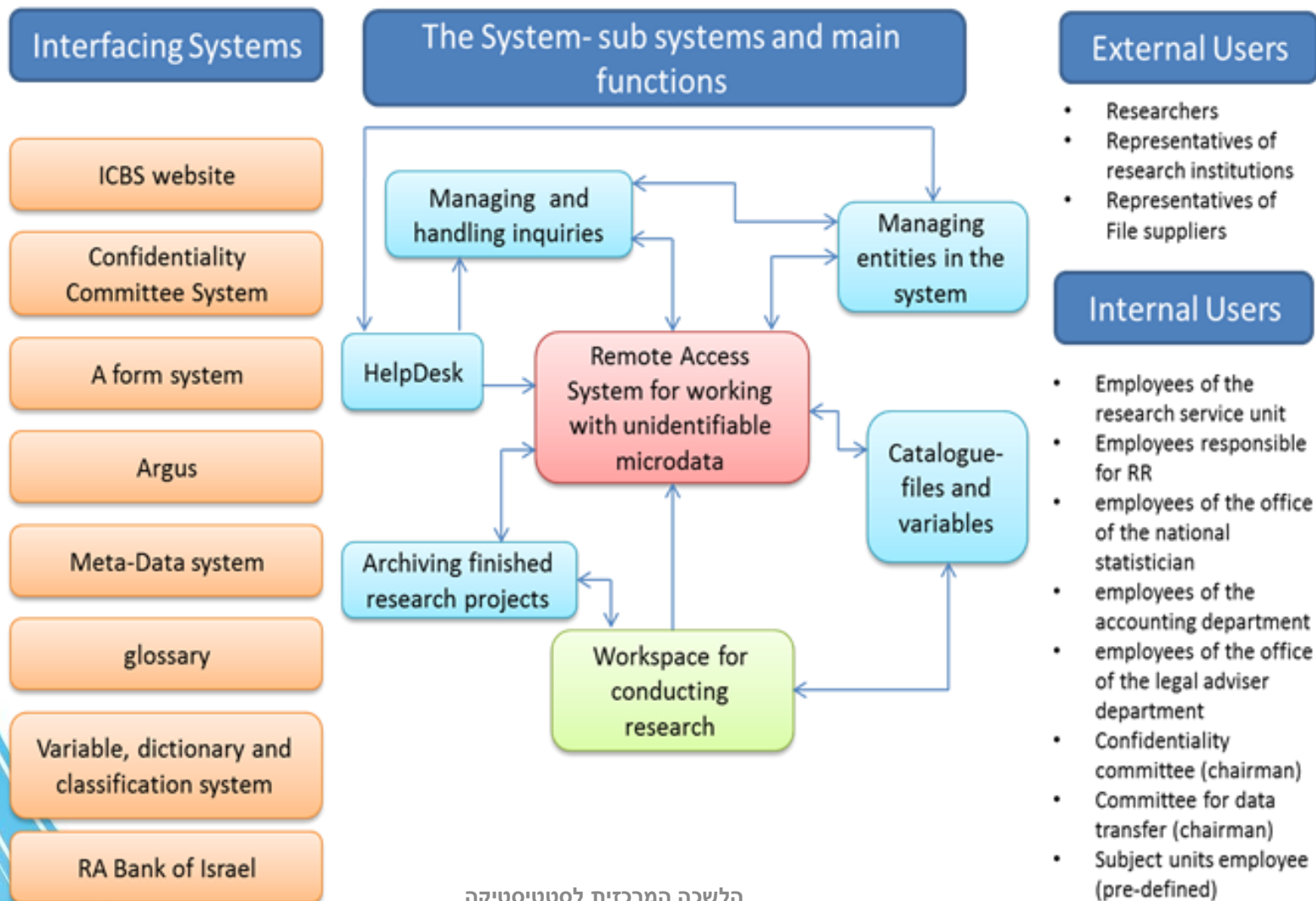
Strategic Goal

- Today, one of the strategic goals of ICBS is to improve and expand the services for providing data for researchers.

- As a result there is a lot of work being done in order to improve the technology, accessibility and work processes for providing data to researchers.

Research Service Unit

- The unit will be one central address for researchers, in order to submit research requests and more.

- The research unit, together with the researcher, will define the research request, will assist them through the work process, prepare necessary files and will assist them along the way.

- The unit employees are designated workers who know to handle researchers and research requests and will be able to better fulfill their needs.

The future technological infrastructures

Interfacing Systems
- ICBS website
- Confidentiality Committee System
- A form system
- Argus
- Meta-Data system
- glossary
- Variable, dictionary and classification system
- RA Bank of Israel

The System- sub systems and main functions
- Managing and handling inquiries
- Managing entities in the system
- HelpDesk
- Remote Access System for working with unidentifiable microdata
- Catalogue-files and variables
- Archiving finished research projects
- Workspace for conducting research

External Users
- Researchers
- Representatives of research institutions
- Representatives of File suppliers

Internal Users
- Employees of the research service unit
- Employees responsible for RR
- employees of the office of the national statistician
- employees of the accounting department
- employees of the office of the legal adviser department
- Confidentiality committee (chairman)
- Committee for data transfer (chairman)
- Subject units employee (pre-defined)

Vision and topics to address

- *Establishment of a data catalogues*
  - *Define content of the data library*
  - *Policy for publication of the data catalogues (intranet, research computers in the research rooms, internet, confidentiality and security measures)*
  - *Frequency of update*
  - *Organization of the work, responsibility and labor division*
  - *Service level agreements with subject units and IT*
  - *Resources and time frame*
  - *Benefits (internally and externally) and challenges*

Vision and topics to address

- ## *Documentation*
  - *Documentation –Need and requirement for:*
    - *Datasets (SIMS, existing documentation or customized for researchers)*
    - *Variables*
    - *Code list*
    - *Classification*
  - *Cooperation and service level agreement with subject units and IT*
  - *Cooperation with the research community*
  - *Resources and time frame*
  - *Benefits (internally and externally) and challenges*

Vision and topics to address

- ***Establishment of standardized data library/database***
    - *Policy for content and update*
    - *Harmonization and standardization*
    - *Confidentiality and security measures*
    - *Organization of the work, responsibility and labor division*
    - *Service level agreements with subject units and IT*
    - *How to integrate the work with the production process model (GSBPM)*
    - *Resources and time frame*
    - *Benefits (internally and externally) and challenges*