



**EU Twinning Project  
IS12/ENP-APFI/o8**

**Support to the Israeli Central Bureau of Statistics  
in the development of National Accounts, Education Statistics,  
Survey Methodology, ICBS Website and  
Coordination of Israel National Statistical System**

**Component E  
Dissemination and Website**

**Activity E.5  
Development of a Dissemination strategy**

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**Jerusalem**  
17-20 November 2014



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## External annexes to the report:

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| Annex E5.6  | Single Source and Data Cubes (Power Point)                      |
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## List of Abbreviations

|      |                               |
|------|-------------------------------|
| API  | Application Program Interface |
| CMS  | Content Management System     |
| CNMM | Common Nordic Metadata Model  |
| CoP  | Code of Practice              |
| MS   | Member State                  |

## 1. General comments

This activity was the eighth in component E -Dissemination and Website. It was implemented according to the Terms of Reference and the Agenda cf. Annexes E5.1 and E5.2.

The MS Experts would like to thank the Israeli side at the CBS for their strong commitment to the project and for their open-mindedness resulting in both interesting and challenging discussions.

The report does not necessarily reflect the views of Statistics Denmark or the EU, but are solely the MS experts' views and recommendations.

## 2. Assessment and results

According to the Terms of Reference and the agenda of the mission, the following items were dealt with during the meetings:

- MR 22:Dissemination strategy and policy – redrafting
- MR 23:Users' satisfaction with the web site
  - Plan / methodology
- MR 25:Follow up on Dissemination database
  - Roles and organisation of work
- Follow up on creation of cubes for data warehouse Common Nordic Metadata Model (CNMM)

The items are explained in further detail below.

### Dissemination policy - redrafting

The ICBS had drafted a dissemination strategy/policy based on the European Code of Practice. In particular, the MS experts find the following principles important:

- Equal access for all users
- Accessibility (including statistical literacy)
- Relevance according to user needs
- Timely and punctual data release
- Consistency and coherence (including international comparability)
- Confidentiality

During discussions with the Dissemination Committee it was agreed to integrate dissemination and communication into one strategy. The possibility to distinguish between what is actually done now (the Policy) and what is needed to do in the future to reach the common goals (the Strategy) was also discussed.

As input to the redrafting of the strategy it was suggested to structure it around *Who* (users), *What* (content) and *How* (Access).

To focus on the *users* who are the main reason for our activities.  
Define the different key users.

To contemplate the offered *content*, e.g. products and services offered.

Finally, the *accessibility* for different types of users. Accessibility includes the understanding, documentation, the presentation, the channels/media used etc.

## **Users' satisfaction**

ICBS makes regular user satisfaction surveys. It was discussed that a lot of different sources for collecting information from the users should be used systematically. The overall goal is to improve the service given to website users.

It was thus agreed that the ICBS should set up a plan detailing the initiatives and methods that the ICBS will use to monitor user satisfaction. To successfully monitor and improve user satisfaction benchmarks and success criteria should be agreed upon. It should also be discussed and agreed which of the benchmarks are for internal use in the dissemination unit, and which benchmarks should be circulated to the rest of the ICBS.

The purpose of monitoring user satisfaction is to improve dissemination based on knowledge on:

- Use..... Monitor *what* they use
- Usage..... *How* they use it
- Satisfaction.... How they *succeed* (general and specific products)
- Needs ..... What they *want* and do not get (today)

There are different methods and tools available to reveal the usefulness of the web site:

- Log files and web analytics / metrics help monitoring which parts of the web that are used and how the navigation is working (the use).
- The Hot line (telephone calls and emails) is a useful tool to get information about what the user can't find or tasks / interaction that they can't solve. This information can be used to improve the content, the clarity as well as the navigation and the structure of the content.
- User satisfaction survey can / should be regularly conducted to ask users about their experience of the website and / or specific statistical products. Interval and ordinal rank questions can be used in the questionnaires. Internally at the ICBS the wording survey should be used with some care as statisticians may attribute a specific meaning to the term including a controlled sampling frame.
- Focus group interviews for deeper investigation (information on how they work with data, what they need more, what they prioritize etc)
- Usability studies: how well does the site work? Can users find what they are looking for? Reveal navigation problems. Referring to different functions: search, user friendly interface (# of items presented, GUI...)
- Direct feedback
- Public Council for Statistics
- Courses and workshops (designated training for users) feedback
- Seminars feedback
- # of phone calls to be monitored
- # of email to be monitored

As stressed during the discussions, the *Code of Practice* and the *Quality Assurance Framework* assume that timeliness, punctuality and user satisfaction is systematically monitored and acted upon. This must therefore be reflected in the strategy and perhaps more importantly in the daily work routines for the dissemination unit.

## **Cubes for data warehouse**

During this activity a follow up was done to the work / discussions undertaken during activity E6.1. The main findings are summarized below:

- Cubes are data presented in multidimensional cross tables. Data input to the cubes are available in a format that can easily be turned / aggregated into cubes to be used in a "stand alone" databank and as data sources for web site content

- A cube containing education statistics was successfully created based on ISOPED data – with 4 dimension and time during activity E.5. The exercise show that cubes according to the CNMM standard can easily be generated from ICBS micro data
- When presented in PX-web, the presentation software that reads the cubes from the data storage presents it in a way where the external user can select parts or all content of the cube. It can be presented in tables, time series, graphs – and in the future also on maps.-
- Cubes should be build using common sets of structural metadata thereby ensuring consistency in variables and concepts. The ICBS has already begun the process of metadata harmonisation.

>> PX-Web CBS - CBS >> Education >> Enrolled students 2003 - 2011

1 Choose table      2 Choose variable      3 Show table

### Students in Israel after Sex, Grade, Population Group, Supervision og Time

Select variable    About table

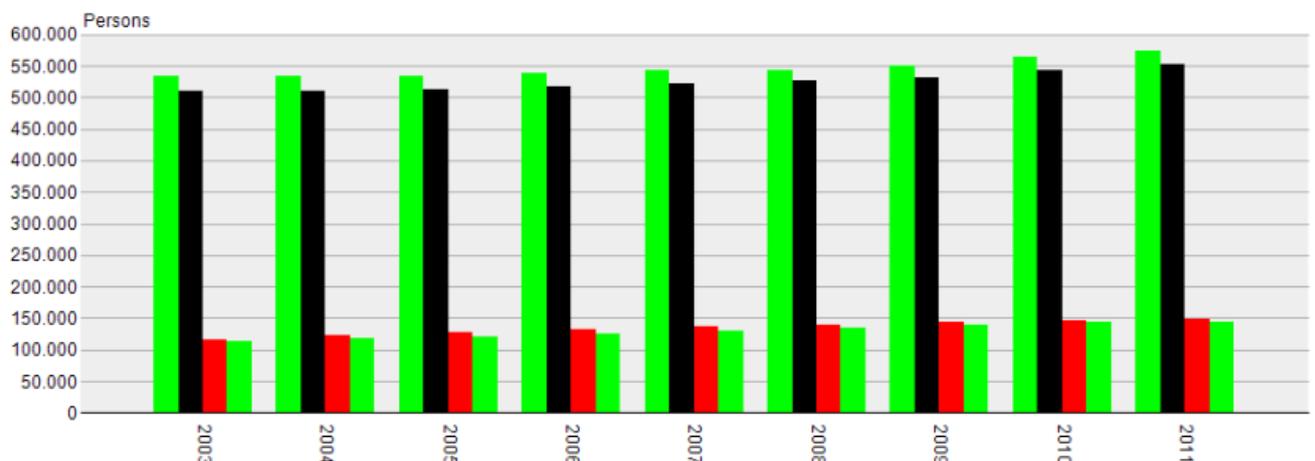
Mark your selections and choose between table on screen and file format. Markeringstips  
For variables marked \* you need to select at least one value

| Sex   | Grade   | Population Group  | Supervision   | Time *  |
|---|---|---|---|---|
| <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| I alt 2 Vælg 0  | I alt 15 Vælg 0   | I alt 8 Vælg 0  | I alt 4 Vælg 0  | I alt 9 Vælg 0  |
| Male<br>Female  | 1st Grade<br>2nd Grade<br>3rd Grade<br>4th Grade<br>5th Grade<br>6th Grade  | Jewish<br>Arab<br>Druze<br>Bedouin<br>Circassian<br>Samaritan   | State<br>State Religious<br>Ultra Orthodox / other<br>Not Known   | 2011<br>2010<br>2009<br>2008<br>2007<br>2006  |
| Søg <input type="text"/> <input type="button" value="▶"/>   |
| <input type="checkbox"/> Beginning of row   |

Number of selected data cells are: 0 (maximum number allowed is 100.000)  
Presentation on screen is limited to 1.000 rows and 30 columns

Table - Layout 1    Fortsæt/videre

### Students in Israel after Population Group, Sex og Time



### 3. Conclusions and recommendations

#### Dissemination strategy:

- The dissemination strategy shall support the general goals of ICBS
- It shall be made clear it builds on the principles of the Code of Practice (related to dissemination).
- The corner stone of the dissemination has to build on the *single source principle* meaning one source for all publicised statistics. This will secure consistency in data across the different products / platforms. This “single” source shall be an aggregated (but detailed) output database
- Include in the strategy some examples of concrete initiatives to be taken e.g. initiatives where it can be measured when the goal is reached.
- Prioritise what is to be done the first year

#### User satisfaction

- Choose different methods of collecting information of how well you perform according to the users
- Log files and web analytics- monthly reports
- Hot line (telephone and e-mail inquiries)- semi annual reports
- User satisfaction and usability/usage should be systematically monitored. -In principle at times of change, Old website – Jan 2015-March 2015, shorter version of the existing questionnaire. The same questionnaire on the new website October-December 2015. This will establish a benchmark for internet dissemination and help compare the new site to the old site
- Focus groups (referring to each group at a time)- Every two years -According to emerging interest

#### Data warehouse cubes

- “Single source” concept is needed in the future
- Web site content should be based on aggregated cubes ONLY
- Cubes should be stored / disseminated through standard data model / standard tool – “Steal and / or Buy with Pride”
- If home grown table tool is preferred a standard cube model like CNMM should still be used
- Localizing a tool like PX-Web and/ or the PX-Web API is cheaper / simpler than building a tool from scratch and will also ensure long term sustainability
- Public website should NOT include facilities for aggregating micro data
- We consider “cubes” as the only “safe” solution in terms of confidentiality but also from a performance perspective cubes are preferable

#### Organisation of the work / future work

- It is recommended that the result of the cube demonstrations should be demonstrated at the closing event of the Twinning project. That data in the education file as well as an International trade cube should be shown.
- A pilot project on Cubes should be conducted by the ICBS. The project should run for about 6 months and be initiated as soon as possible. A road map / description of a cube project as discussed is presented below
- As stated by Knudsen, cf. report from the E6.1 activity – the pilot project is to create the basis for the strategic goals below:
  - Having all data in aggregate output database (cubes) by 2016
  - Web site content and other products based on aggregated output database by 2020 (including SDDS; SDMX and international data transfers being done automatically)

- Metadata and data access to micro data for researcher's should in our opinion not be seen as part of dissemination. Both subjects belongs to dedicated units in the organizational chart
- Aggregated output databases requires special skills / dedicated staff and is NOT a part of the IT organization – but has strong links to dissemination and IT

### **Cube Project:**

- A comprehensive test of CNMM and PX-Web should be done. Staff with an understanding of database technology and metadata to test the CNMM should be assigned to this test/ pilot project.
- The necessary technical requirements shall be put in place. This covers: Internet Information Server (IIS), MS-SQL Server, and PX-Web installed on a standalone computer (due to security issues raised by ICBS)
- Evaluate the pilot test, results / benefits: Support the recommended “Pilot” – get understanding of cube benefits and the required organizational set up

### **Road map for the cube project**

- Management decision and definition of purpose
  - Set a goal: Launch with 25-35 cubes
  - Evaluate the processes, including input to design guidelines
  - Estimate the costs
- Road map including time table (mile stones)
  - Month 1: Pilot project leader/coordinator and implementation team
    - Dissemination (2), IT (1), metadata (1), methodology (1), subject matter units (3)
  - Month 1: Choosing the topics
    - Depending on different (micro) data characteristics (all subjects covered or, recommended, a few in depth)
  - Month 2-4: Choosing cubes – designing and building the cubes including structural metadata
    - Most popular cubes from the chosen topics?
    - Most frequently updated cubes? – including example of monthly updating
    - Confidentiality committee's approval
    - Updating procedure to be tested (already existing data being updated)
- Month 5: User meetings
  - Meetings with externals to present and get feedback regarding relevance, user-friendliness and accessibility, clarity – discussion of the product
  - Invite key users of the produced cubes
- Month 5-6: Evaluate
  - Management information session and decision
  - Internal information meeting (depending on management decision)
  - Planning the full-scale implementation (roll-out) (depending on management decision)
    - Road map, including staffing and developing of tools etc.

## Annex E5.1 Terms of Reference



### EU Twinning Project IS12/ENP-APFI/o8

Support to the Israeli Central Bureau of Statistics in the development of National Accounts, Education Statistics, Survey Methodology, ICBS Website and Coordination of Israel National Statistical System

#### Component E Dissemination and Website

##### Mandatory results of the component

- MR22: Drafting of an ICBS dissemination and communication strategy document
- MR23: Establishment of mechanisms for continuous monitoring of user satisfaction with the website
- MR24: Establishment of a plan for redesigning of the website, including an improved search function
- MR25: Establishment of rules for updating of the website, including linkage of the data warehouse to the website

##### Activity E.5

#### Development of dissemination strategy

#### Terms of Reference

##### **Subject / purpose of the E.5 activity**

Development of a dissemination strategy; setting priorities. Follow-up on methodology regarding the measurement of users' satisfaction with the website

##### **Expected output of the E.5 activity**

Mission report on recommendations for how to develop the dissemination strategy, and identification of priorities. Development of the methodology on users' satisfaction with the website.

##### **Activity participants**

Annegrete Wulff (DK), Head of Dissemination, Statistics Denmark  
Jesper Ellemose (DK), Chief Adviser, Statistics Denmark

## Annex E5.2 Programme, 17-20 November 2014

| Date         | Time         | Event   |
|--------------|--------------|---|
| Mon<br>17/11 | 09:00        | Welcoming remarks and acquaintance<br>Programme of the week   |
|              | 09:15        | <b>MR22: Dissemination strategy and policy</b> <ul style="list-style-type: none"> <li>The ICBS overall strategy, cf. component C, and the strategic objectives regarding dissemination.</li> <li>Is the separate strategy on dissemination more a dissemination policy; for whom is it written, and what purposes does it serve?</li> </ul>       |
|              | 10:30        | Coffee break  |
|              | 11:00        | Redrafting of the dissemination strategy/policy   |
|              | 12:15        | Lunch   |
|              | 13:30        | Redrafting of the dissemination strategy/policy ( <i>continued</i> )  |
|              | 15:30        | End of day 1  |
|              | Tue<br>18/11 | 09:00   |
| 10:30        |              | Coffee break  |
| 11:00        |              | Discussion: What constitutes a systematic plan, or methodology?   |
| 12:30        |              | Lunch   |
| 13:45        |              | Discussion: Drafting of the methodology, including the follow-up measures and periodically follow-up on the results of the actual user satisfaction measurement   |
| 15:30        |              | End of day 2  |
| Wed<br>19/11 | 09:00        | <b>MR25: Dissemination database and the single source principle</b> <ul style="list-style-type: none"> <li>Statistics Denmark: Presentation of the current organisation (division of labour) of the work processes in Statistics Denmark</li> <li>Discussion: to what extent is a similar organisation feasible and desirable in ICBS?</li> </ul> |
|              | 10:30        | Coffee break  |
|              | 11:00        | Statistics Denmark: Experiences from the process of involving the subject matter divisions in producing data cubes  |
|              | 12:15        | Lunch break   |
|              | 13:30        | Elements of ICBS work plan towards introducing cubes and the single source principle, including involvement of management   |
|              | 15:30        | End of day 3  |
| Thu<br>20/11 | 10:30        | Ad-hoc meetings and preparation for debriefing  |
|              | 12:00        | Debriefing  |
|              | 13:00        | End of meeting  |

## **Annex E5.3 Persons met**

Olivia Blum, Project Leader, International Relations and Statistical Cooperation Dept.  
Batia Attali, RTA Counterpart, International Relations and Statistical Cooperation Dept.  
Sigalit Mazei, Scientific Edition of Annual Abstract of Israel, International Relations and Statistical Cooperation Dept.  
Yael Nathan, Head of Dissemination Dept.  
Sari Paz, Content manager, Dissemination Dept.  
Mirit Cohen, Webmaster, Dissemination Dept.  
Shahar Katz, Head of IT Dept.  
Limor Louie, Metadata, IT Dept.  
Lydia Stafenitch, programmer, IT Dept.  
Haim Portnoy, Head of Education Statistics

## **AnnexE5.4 Relevant links**

### **PC-Axis web site**

Documentation and scripts for the DWH model:

[http://www.scb.se/sv\\_/PC-Axis/Documentation/SQL-Metadatabase/](http://www.scb.se/sv_/PC-Axis/Documentation/SQL-Metadatabase/)

Download link for PX-Web software (for data viewing):

[http://www.scb.se/sv\\_/PC-Axis/Programs/PX-Web/PX-Web-2014/](http://www.scb.se/sv_/PC-Axis/Programs/PX-Web/PX-Web-2014/)

### **DST links**

Main web page and statbank (DWH):

<http://www.dst.dk>

<http://www.statbank.dk>

<http://m.statbank.dk> (mobile version – for mobile browsers only)

API for DWH:

<http://api.statbank.dk> (documentations)

<http://api.statbank.dk/console> (helping tools for generating requests)

### **Twinning links**

<http://www.dst.dk/israel>