







EU Twinning Project IS12/ENP-APFI/08

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 E3-E4. Workshop on user satisfaction and Adapted ESTP training course

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List of Abbreviations

BC	Beneficiary Country (Israel)
BoI	Bank of Israel
CBS	Central Bureau of Statistics (Israel)
CMS	Content Management System
CoP	Code of Practice
DDI	Data Dissemination Initiative
MS	Member State
NSI	National Statistical Institute
QAF	Quality Assurance Framework
UX	User Experience

1. General comments

The mission was the third and the fourth activity in component E, Dissemination and Website. The first activity was a study visit to Statistics Denmark in May 2013. The second was in June 2013 and covered visits from the Danish experts to the CBS and the Central Bank of Israel. During the second activity, requirements to a dissemination strategy was discussed, and the web site modernization project was presented to the MS side. The next activities are scheduled for late summer or autumn 2014.

The E3-E4 mission covered the European training on dissemination and a work shop on user satisfaction.

The Danish consultants would like to thank the Israeli side at the ICBS for their strong commitment to the project and for their open-mindedness resulting in both interesting and challenging discussions. Also a representative from the Bank of Israel participated in the workshop on user satisfaction.

Since the original planning of the activities in the Twinning project it was decided to shorten some of the planned activities in component E in order to accommodate a mission dedicated to the handling of metadata issues. As statistics can be difficult to comprehend for users, the availability of metadata (or data on data) greatly facilitates the use and understanding of statistics.

The CBS is in the middle of starting a complete renewal of www.cbs.gov.il. The renewal will include both the information architecture / website navigation, the technical infrastructure and the organization of work / work share between IT, Dissemination and subject matter divisions. A new structure of the topics (subject areas) is also required to improve usability, user orientation and clarity on the new website.

2. Assessment and results

The first part of the mission was used to conduct a tailor made and compressed version of the ESTP (European Statistical Training program) course on dissemination. The focus in this course is mainly on electronic / web dissemination, and in that way the training course supports the implementation of a new website at the CBS. Staff from the methodology division participated in this workshop.

The last day of the mission was dedicated to a workshop on user satisfaction.

Discussions on external expectations to dissemination

Dissemination is not directly covered by EU or international legislation, but rather through a number of expectations defined in the Code Of Practice (CoP) and the Quality Assurance Framework (QAF). As part of the adapted ESTP syllabus, the CBS and the MS Experts worked their way through the principles relevant to dissemination and their relevant indicators.

Although these issues are just recommendations, they provide a structured way of thinking about dissemination activities and a check list of best practices, thereby provide a documentation that all considerations have been covered in a systematics way.

It's the opinion of the MS Experts that the CBS is undertaking most if not all the activities that an NSI can be expected to do in order to be compliant with EU expectations in the area of dissemination. However, the MS Experts believe that it would be not only useful but of great value to the CBS if these activities were described in detail and codified in written procedures, and then approved by senior management.

Measures of timeliness and punctuality

Indicator no. 13 of the Code of Practice deals with timeliness and punctuality. From the discussions with the ICBS it was clear that these issues get a lot of attention. However, information on timeliness and punctuality is not constantly measured and reported in a structured way. In other NSIs, this is usually done through the IT workflows supporting the dissemination calendar and the website dissemination. It is expected that the system behind the coming version of www.cbs.gov.il will give better possibilities for this 1.

п				
Indicator 13.1:4				
Timeliness-meets-European-a	Timeliness-meets-European-and-other-international-release-standards¤			
1.·Compliance·with·	п	п	п	
international·standards·on·				
timeliness¤				
2.·Publication·of·a·release·	п	п	п	
calendar.¶				
¤				
2 A procedure to monitor and	п	n n	T I	
3.·A·procedure·to·monitor·and· follow-up·divergences·from·	J.A.	3-4	<i>p</i> -4	
timeliness-targets.¶				
n				
4.·Quality·indicator(s)·on·	п	п	п	
timeliness.¶				
¤				
5.·Analysis·and·assessment·of·	п	п	п	
quality·indicator(s)·on·				
timeliness¶				

Indicator·13.4:¶ Divergence·from·the·dissemination·time·schedule·is·publicized·in·advance, explained·and·a·new·release·date·set.¤			
1.·Publication·of·a·release· calendar.¶ ¤	д	п	п
2.·A·procedure·to·monitor·and- assess·punctuality¤	д	д	п
3. Publication of divergences from the pre-announced time, the reasons for divergence and a new release time.	п	п	п
4.·A·procedure-to-calculate, monitor-and-disseminate- quality-indicators-on- punctuality.¶	д	п	п

It is the MS Experts' opinion that the dissemination strategy which is currently being drafted shall contain specific and measurable goals or commitments with respect to timeliness and punctuality.

The relevant CoP parts are included in annex E4.4.

¹ It was not clear if it was an expectation or a direct contractual requirement

Measures of Internet usages

The full ESTP syllabus includes a discussion on web metrics, but it was left out of the adapted program. However, it was briefly touched during the discussions of user satisfaction. The plan is for the new system to use the open source system Piwick² for web analytics. The use of this system circumvents the data and privacy protection issues associated with Google Analytics and other proprietary systems. Information-wise, the Piwick system is comparable to Google Analytics.

From a dissemination point of view is important to measure website usages regularly. The MS Experts believe that this monitoring is best and naturally done by dissemination. The information monitored by these systems is primarily intended for website improvements³. ICBS is focused on distinguishing between visits and visitors. This is technically possible although various legislation regarding cookies and privacy protection is making it increasingly difficult.

It is the MS Experts' opinion that focus should be on generating reliable information on the usages of different browsers / platforms. If users are increasingly using mobile devices it's a problem if the website does not appear as intended on tablets and mobile phones. Also this type of information is important for deciding on different solutions for visualization.

As the site is not only bilingual but having to different layouts (either left to right or right to left: English - Hebrew) it is important to know the distribution of users between the two sites.

It is also important to measure the use of search in relation to the site. Not only how much it is used, but also how well it functions.

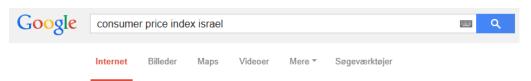
Measures of search

When talking about search we must remember to distinguish between the behavior of our own website search system and the behavior of google when users search for statistics on the internet. Below are two screen dumps showing first googles result and secondly the result provided by the CBS on site search engine.

CPI Israel through Google

² Piwick generally integrates with leading content management systems like Drupal and Joomla

³ Use of internet band width and server loading is monitored by different tools at the IT department and / or the internet service provider, and is not relevant to the dissemination department



Ca. 6.960.000 resultater (0,30 sekunder)

CPI Israel - Global Rates

www.global-rates.com/.../consumer-prices/cpi/israel.a... ▼ Oversæt denne side When we talk about the rate of inflation in Israel, this often refers to the rate of inflation based on the consumer price index, or CPI for short. The Israeli CPI shows ..

The Central Bureau of Statistics (Israel)-Israel's Economy-Pr...

www1.cbs.gov.il/reader/cw_usr_view_SHTML?ID... ▼ Oversæt denne side Labour and Wages. Israel's Economy ... Price indices of February 2014, Index, % change, Chart, Annual chart. Consumer Price Index - General (Base: Average ...

Historic inflation Israel - historic CPI inflation Israel

www.inflation.eu/.../israel/.../cpi-inflation-israel.aspx ▼ Oversæt denne side Historic inflation Israel (CPI) - This page features an overview of the historic Israeli inflation: CPI Israel. The inflation rate is based upon the consumer price index

CPI inflation Israel 2013

www.inflation.eu/.../israel/.../cpi-inflation-israel-2013.... ▼ Oversæt denne side Inflation Israel 2013 (CPI) - The inflation chart and table below feature an overview of the Israeli inflation in 2013: CPI Israel 2013. The inflation rate is based ...



Tools like Google Analytics and Piwick will tell the webmaster:

- How many users that are using the built-in search engine instead of navigating through the website's navigational structure?
- How many users that are arriving at a specific sub-page of the website using an external search engine?
- The difference between these two types of information is shown in the two screen dumps above.

Information on the words entered into the "built-in" search engine is also useful for the webmaster as it tells her what users expect to find on the CBS website, and which vocabulary these users use to describe the information they are looking for. Especially zero searches⁴ are relevant-information when improving the web site. It is important for the ICBS that the "built-in" search engine on the new website can provide this type of information, and that it together with the CMS (Content Management System) has tools for solving zero searches and optimizing search results.

Hands on training - Card sorting

Card sorting is a well-known low-tech method for defining navigational architecture and naming the different entry points of the web site. The method was demonstrated using a fictive, but NSI representative website. The MS Experts recommend that the method is used to test and improve the navigational structure of the re-launched ICBS website. The method can improve the understanding of how various user groups cognitively perceives and order information.

Hands on training - Thinking aloud

"Thinking aloud" is another low-tech method for getting user input for the design of websites, IT applications, and other types of man machine interfaces. The method was presented and then tested in real life by a CBS staff member, using the website of Statistics Denmark. Videos showing this type of testing from other EU websites was shown and discussed. The MS Experts believe that this method is extremely good value for money and therefore again should be used to assist the development of the new CBS website.

It's important to recognize that the method is extremely efficient for improving interaction designs. The method is very efficient and used with great success by the IT / Web design communities, but it will not stack up to methodological scrutiny by sampling experts. But still it's very useful and it should not be ignore because the tests persons are not randomly sampled.

Best practices in visualization

A number of international examples of best practices in the field of visualization were shown, and problems with browser support were briefly touched upon. It is our opinion that it is not cost efficient to do anything regarding visualization with the present web site, but that visualization tools should be included in the new website. There are a number of tools developed by other NSI's that can be used. One of the main conclusions in this area is that it is important to be aware of the technology choices and the technologies available to the users and their browsing platforms.

Overview of aggregated output databases

Various international solutions for output databases for dissemination were briefed to the CBS. It was discussed if the CoP / QAF reference to self-tabulation possibilities could be met

⁴ Zero searches are usually words / concepts that users expect the NSI to know about but that we either have different terminology for or that are not part of our production.

using aggregated databases. It is the opinion of the experts that confidentiality issues cannot be solved using *on-the-fly* aggregation of micro data. Certain solutions are available for restricted access to micro data for researchers, but these are not relevant in the field of dissemination.

The pre-aggregated cubes found in the most common systems are large enough to be considered as "self-tabulation". As an example foreign trade will often run to a cube of close to 10,000 commodities, by imports and exports by countries (nearly 300 countries), and by 2 or 3 indicators (money, weight, other units). These amounts of data can clearly not be digested without selection and refinement, and therefore qualifies as "self-tabulation" in our opinion.

From the discussions, it was not clear if and how plans exists for integration such systems in to the new website⁵.

Open data and API's

The European requirements and expectations regarding open data were discussed. API's⁶ are seen as *machine-to-machine* interfaces to the products of the statistical office. A useful API will usually assume the running of an aggregated output database. An extension to the JSON⁷ called Jasonstat is currently the most used method for accessing statistical data through API's.

Social Media

Danish and other international experience regarding social media presences was briefly discussed. In purely technical terms, social media presence is not so difficult, however, the need to interact rapidly with users is a significant organizational challenge. OECD is considered a *best practice* example as they are constantly present in all the major social platforms. Currently it seems that there is no agreed upon indicator of success in regards to social media. And perhaps, one should not look for a measureable return of investment but instead just conclude that NSIs need to be present also in the social media.

Work shop on user satisfaction

The representative from the Central Bank of Israel and staff from the CBS Methodological Division participated in the discussions on measurements of user satisfaction. The MS Experts highlighted a number of methods. It was strongly recommend that some measures are taken from the present website, and that the same measures are again taken on the relaunched CBS website in order to compare the user satisfaction of the old and the new web sites.

Although the CoP assumes / requires that user satisfaction is systematically measured, the MS Experts would like to stress that users should only be asked to provide feed-back if there is genuine willingness and resources to follow up and make changes.

As there is no control over the population who decides to participate in web-based questionnaires, it is important to monitor the actual website behavior using tools like Google Analytics or Piwick. Using such tools we can figure out which information our users are looking for and if they manage to find the information they are looking for. The possibility of addressing questionnaires (mail or web form) to specific user groups was also discussed. Focus groups can also provide valuable input on users expectations.

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⁵ The Twinning projects work plan includes an activity designated to the discussions of possibilities for including a aggregated output database to the web site.

⁶ Application programming interface

⁷ Java Script Object Notation

3. Conclusions and recommendations

The discussions were open-minded and informative. A number of the recommendations below are repeated from the E.2 mission report:

- An approved dissemination strategy based on international requirements should be developed
- Goals for timeliness and punctuality should be clearly stated in the strategy, constantly monitored and reported to the management of the CBS
- It is recommended to compare to what degree and how the product and services offered by the CBS fulfil the intensions of the principles in The European Code of Practice in particular the principle 15 on outputs.
- It is recommended that users are involved before as well as during the evaluation process in relation to CoP in order to give their evaluation as a supplement to a self-evaluation by the organisation. More methods were highlighted:
 - a. *Focus group* interviews should be carried out in order to get knowledge on how the users work with statistics, which products and services are needed and the level of quality expected.
 - b. A useful test to secure a match between statistician's terminology and users' terminology is to test the structure and naming of different parts of the web site. This can be done with the card sorting method. This method was demonstrated during the training course.
 - c. During the development of the website, usability tests should be established regarding navigation. Methods like *Think aloud, Eye tracking* and the *Usertesting.com* concepts were all demonstrated. Usertesting.com is recommended to be used together with 5 testers. CBS will have to define a number of tasks the testers should solve (e.g. 3-5 tasks) and define the criteria of success for each of them. A video will show how the testers managed to navigate the site trying to find the results. These are useful inputs to improvements of the navigation.
 - d. Follow up on the tests, setting up a road map of what can be changed, and when.
- It is recommended to prepare a *user satisfaction survey* on the existing site and once the new web site is launched to repeat the survey to know if users appreciate the improvements. It should be considered to use information from web statistics tools, for example Google Analytics. This statistics show results from all users at the site, while a user satisfaction survey only shows results from the respondents to the survey (often around 5-7 per cent of all visitors).
- Metadata should be compiled and disseminated according to the relevant international standards.
- Relevant metadata must be available to users to use and understand all disseminated statistics.
- Compilation of metadata and associated systems should support the ICBS international reporting requirements.

Annex E4.1 Terms of Reference









EU Twinning Project IS12/ENP-APFI/08

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 E3-E4

Workshop on user satisfaction and Adapted ESTP training course

24-26 March 2014

Mandatory results and benchmarks related to activity E3-E4:

Mandatory result	Benchmark	
MR22. Drafting of an ICBS dissemination	Evaluation report drafted by 3 rd project	
and communication strategy document	quarter	
	Strategy drafted by 6 th project quarter	
MR23. Establishment of mechanisms for	Methodology of measuring and	
continuous monitoring of user satisfaction	monitoring users' satisfaction in the new	
with the website	website, drafted by 6 th project quarter	

Subject / purpose of activity E.3

The E3-E4 activity has two purposes:

- To discuss and conclude on the measuring user satisfaction and finding ways of improving it (E3; MR23)
- To introduce EU and UN requirements for NSIs in fulfilling their responsibility in disseminating official statistics and the best practice: what constitutes a high quality web site for official statistics (E4; MR22).

Expected output from activity E.3-E.4

The expected output is two-fold:

- A short mission report with recommendations on how ICBS best can measure the satisfaction of its on-line users;
- ICBS experts trained in EU and UN requirements in disseminating official statistics, and best practices regarding a high-quality website for official statistics.

Annex E4.2 Programme 24-26 March 2014

Date	Place	Time	Event	
Mon	CBS	09:30	Welcome. Presentation of program	
24/3		09:45	Dissemination policy/strategy	
		10:15	Quality assurance on dissemination principles	
		10:45	User groups - discussions in groups by participants.	
			Different ways to see/analyze users; developing functionalities for	
			prioritized users.	
		12:00	Presentation of users and related products	
			Presentation by groups	
		12:30	Lunch break	
		13:30	Card sorting method	
		14:30	Card sorting exercise	
			Method for testing what the users experience (or expect) to find under the	
			labels (names) applied by ICBS in the site.	
		15:30	End of day 1	
Tue	CBS	09:30	Usability - presentation of various methods for usability	
25/3 10:00 Think aloud method in practice				
		10:30	Documentation and metadata	
		11:15	Archiving - presentation of archiving issues	
		12:00	Lunch break	
		13:00	Platforms for aggregated output databases - solutions	
		13:45	Open Data, API - programmatic extraction of data and reuse of data	
		14:30	Visualisations - presentation of visualisation methods / best	
			practices	
		16:30	End of day 2	
Wed	CBS	09:30	Measuring user satisfaction with the website	
26/3			 ICBS presentation - current status. 	
1. Old website and new website				
			2. On-going initiatives	
			 Statistics Denmark – measuring user satisfaction 	
			 Discussion and roadmap – what are the next steps for ICBS 	
			towards an improved measurement of users' satisfaction? (to be	
			followed up during the E6 mission)	
		12:30	Debriefing	
		12:45	End of meeting	

Annex E4.3 Persons met

Annex E4.4 Matrix of Code of Practice principles and indicators related to dissemination

Code of practice principle -	Indicator for compliance	Status / available documentation for compliance	Possible improvements to compliance
6. Impartiality and Objectivity – Statistical authorities develop, produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.	 6.1: Statistics are compiled on an objective basis determined by statistical considerations. 6.2: Choices of sources and statistical methods as well as decisions about the dissemination of statistics are informed by statistical considerations. 6.3: Errors discovered in published statistics are corrected at the earliest possible date and publicised. 6.4: Information on the methods and procedures used is publicly available. 6.5: Statistical release dates and times are pre-announced. 6.6: Advance notice is given on major revisions or changes in methodologies. 6.7: All users have equal access to statistical releases at the same time. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality. 6.8: Statistical releases and statements made in press conferences are objective and non-partisan 	Tor compnance	to compnance
11. Relevance European Statistics meet the needs of users	11.1: Processes are in place to consult users, monitor the relevance and utility of existing statistics in meeting their needs, and consider their emerging needs and priorities. 11.2: Priority needs are being met and reflected in the work programme. 11.3: User satisfaction is monitored on a regular basis and is systematically followed up.		

12 Tr: 1: 1	12.1 F: 1'		T T
13. Timeliness and	13.1: Timeliness meets European		
Punctuality -	and other international release		
European Statistics are	standards.		
released in a timely			
and punctual manner.	13.2: A standard daily time for the		
	release of statistics is made public.		
	refease of statistics is made public.		
	12 2. The manifed interest of statistics		
	13.3: The periodicity of statistics		
	takes into account user requirements		
	as much as possible.		
	13.4: Divergence from the		
	dissemination time schedule is		
	publicised in advance, explained		
	and a new release date set.		
	and a new release date set.		
	12.5 D 11 1 1 6		
	13.5: Preliminary results of		
	acceptable aggregate accuracy can		
	be released when considered useful.		
15. Accessibility and	15.1 Statistics and the		
clarity –	corresponding metadata are		
	presented and archived in a form		
European Statistics	-		
European Statistics	that facilitates proper interpretation		
should be presented in	and meaningful comparisons		
a clear and			
understandable form,	15.2 Dissemination services use		
disseminated in a	modern information and		
suitable and	communication technology and, if		
convenient manner,	appropriate, traditional hard copy		
available and	appropriate, traditional mare copy		
accessible on an	15.3 Custom-designed analyses are		
impartial basis with	provided when feasible and the		
supporting metadata	public is informed		
and guidance			
	15.4 Access to micro data can be		
	allowed for research purposes and is		
	subject to specific rules or protocols		
	J I		
	15.5 Metadata are documented		
	according to standardised metadata		
	systems		
	15.6 Users are kept informed on the		
	methodology of statistical processes		
	including the use of administrative		
	data.		
	15.7 Hears are kent informed about		
	15.7 Users are kept informed about		
	the quality of statistical outputs with		
	respect to the quality criteria for		
	European Statistics.		
		•	