EU Twinning Project

Forwarding Armenian Statistics through Twinning

AM09/ENP-PCA/TP/04

MISSION REPORT

on

ICT SOCIETY STATISTICS

Activity F4.1: Analysis and data processing

Mission carried out by
Martin Lundø, Statistics Denmark

Armenia 7–11 May 2012

Final version

National Statistical Service Republic of Armenia		STATISTICS DENMARK Statistics Denmark

Authors' contact information

Martin Lundø (Component Leader)
Sejrøgade 11
DK-2100 Copenhagen Ø
Denmark
Tel. +45 39173873
MLU@dst.dk

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List of Abbreviations

BC	Beneficiary Country
MS	Member State
MSE	Member State Experts
NSSRA	National Statistical Services of the Republic of Armenia
RTA	Resident Twinning Advisor
ToR	Terms of Reference

1. Executive Summary

NSSRA has performed a pilot survey of ICT usage in a randomly stratified sample of 100 enterprises, and 17 Armenian Ministries (only Ministry of Defence did not take part). The surveys were conducted via self-administered questionnaires.

The enterprise questionnaire follows EU standards. The institutions' questionnaire was made as a subset of the enterprise questionnaire with some additions.

Response rate was 100% in both groups. Data was captured and tabulated in MS Access database. 15-20 enterprises were re-contacted, which provided feedback on the contents.

MSE have received comprehensive data material from NSSRA in the form of anonymized xls datasets, suggested output tables for public dissemination and detailed tables of all variables for the enterprise survey.

The enterprise results should only be used for methodological analysis, due to big random variance. The institution part of the survey, on the other hand, consists of a close to total count of ministries use of ICT and may be used for statistical purposes for a broader group of users than the project stakeholders.

During the mission the following was agreed upon:
- The Pilot Study Report and a draft strategy of an ICT usage survey should be the final result of the component F as input to a future strategy.
- A roadmap for the ICT statistics component.

Steps before next mission: NSSRA will produce a draft Pilot Study Report (before 20 July 2012) and a preliminary analysis of possibilities for regionally distributed statistics (before F4.2, September).

2. General comments

This main part of the mission report was prepared by the MS Expert during the mission to NSSRA. The MS Experts would like to thank the individuals met during the mission much for providing valuable information about the current and future situation and for their kind support during the stay.

The overall purpose and mandatory result for component F, Information Society is firstly to roll out and publish results from a survey on ICT usage by enterprises and institutions before the Twinning project ends, and secondly to train NSSRA staff on issues related to statistics for the information society.

The planned activities and the expected output of the activity were achieved - cf. the ToR (Annex 1) and the programme (Annex 2).

The views and observations stated in this report are those of the MS Expert's and do not necessarily correspond to the views of Statistics Denmark.

3. Assessment and results

3.1 The enterprise survey

The questionnaire
The revised questionnaire follows EU standards. Necessary deviations in language and explanations are common in EU member states' national version of questionnaires in order to adjust for national conditions. Only minor deviations were necessary in the Armenian version. A change in the percentage categories of question b4 (download speed of the fastest internet connection) may have caused less comparability with EU results though.

The questionnaire is included in Annex 4.

Sample
100 enterprises were picked by a random, stratified sample in the business register. The strata used consisted of 4 industry groups (industry C D E, construction F, trade G, services H I J L N M 69-74 S 95.1) and 4 size classes (10-30, 31-50, 51-100 and 101 and more employees), all according to MSE recommendations.

Data collection
The data collection was performed via self-administered questionnaires (a change from the originally planned face-to-face interviews).

The questionnaire was handed out and collected by personal visit in February-March. Together with the questionnaire the respondents received glossary and contact information at NSSRA.

All 100 enterprises responded to the questionnaire, thus the response rate was 100%. No reminders were needed.

Only few enterprises – about 5 – contacted NSSRA for inquiries to the survey and questionnaire. About 15-20 enterprises were re-contacted due to item-non response or incoherent replies.

Data entry and tabulation
The questionnaires were typed directly into an Access database, which also were used for the data processing and tabulation. Microsoft Access is commonly used in NSSRA and can be scaled up for bigger surveys also.

Before the mission, the MS Expert received comprehensive and adequate results material in the form of
- Anonymized xls datasets
- Suggestions for output tables for public dissemination
- Detailed tables of all variables for the enterprise survey, broken down by industry, size-class and answer categories (incl. item non response).

3.1 The institution survey

The questionnaire
The institutions' questionnaire was made as a subset of the enterprise questionnaire with specific questions added on e-government services, inspired by the Lithuanian e-government survey.

The questionnaire is included in Annex 5.

Data collection
The institutions survey was done in a similar way to the enterprise survey. Also the institutions responded by self-administered questionnaires incl. glossary and explanations, delivered and collected by visits. There was only limited need for re-contacting the institutions.

17 institutions participated which constitutes almost a 95% coverage of the ministerial departments of Armenia. The questionnaire was handed out and collected by visit in February-March.

Data entry and tabulation

Data was processed in a similar way to the enterprise pilot survey.

4. Conclusions and recommendations on the ICT usage survey

4.1 Questionnaire

The enterprise questionnaire is in conformity with contents and structure of the EU model enterprise questionnaire (a subset of the 2011 version plus supplement from earlier versions of the model questionnaire).

For institutions a similar questionnaire has been applied with necessary changes and amendments with relevance to e-government (see survey questionnaires in Annex 5).

4. 2 Data collection

The MS Expert assessment is that the originally planned face-to-face interviews might have provided more direct feedback from the respondents. However, the comprehensive re-contact with enterprises provided information about problematic questions seen from the enterprises' point of view. Also data collection by postal questionnaires is the most common way to collect data in the EU member states, thus providing an extra experience compared to the face-to-face interviews which are more common in Armenia.

4.3 Pilot Study Report

The Pilot Study Report will be the final result of the component F together with a draft strategy of an ICT usage survey and should provide valuable input to a strategy for future ICT usage surveys.

The report should present the results from the pilot surveys including methodological experiences and considerations for a future survey.

The target group of the publication is supposed to be the stakeholders of the EU Twinning project.

The suggested structure of the Pilot Study Report (see Annex 10) was presented and accepted by NSSRA during the mission.

Use of results
It should be made explicitly clear in the publication that the enterprise results are only for methodological analysis because the small sample has too big random variance to be used as statistical results.

However, the institution part of the survey consists of a close to total count of ministries use of ICT. It can thus be investigated whether these results could have interest for a broader group of users than the project stakeholders.

During the mission an introduction was given to Statistics Denmark's publication on ICT usage in enterprises (structure, design, specific tables and charts).

Suggested structure
The MS Expert presented a suggestion for contents of the Pilot Study Report. The questions that report should aim to answer are suggested in the following (see also Annex 10 for complete structure of the report).

1.   Background (1-2 pages?)
What is the background and purpose of the survey?

2.   Methodology (3-4 pages?)
What was measured and how was the survey conducted?

3.   Experiences from pilot studies (3-6 pages?)
What was the general experience and impressions from the pilots? What problems were encountered seen from the perspective of NSSRA as well from the respondents? Were the questions well understood by respondents? Which indicators were problematic to understand? Which data were difficult to procure and report for respondents?

4.   Analysis of ICT usage in Armenia (4-8 pages?)
What conclusions could be made from the results? How can the pilot results be presented as inspiration for a full-scale survey? Could institutions' results be used directly as they are?

5.   From pilot studies to regular surveys (1-2 pages?)
What elements need to be presented for stakeholders before deciding a strategy for future measurement? What steps need to be taken to perform a full-scale survey of enterprises or institutions? Who would be the main users? What could be the contents? How could data be disseminated?

6. Annexes
Necessary documentation of the pilots.

4. 2 Strategy for future ICT usage surveys
The MS Expert recommends that the final result of component F will be a strategy for future ICT usage surveys. Possible elements will be presented for stakeholders in the Pilot Study Report. The stakeholders will have the possibility to comment on a joint workshop during the last mission F6, which will provide input for the strategy.

5. Action before next activities

5.1 Roadmap
The MS Expert presented a suggestion for an updated roadmap for the ICT Statistics component which were discussed during the mission and agreed by NSSRA.

The plan focuses on the two last missions and the actions that need to be taken by NSSRA before and between them:
F4.2 Optimization of sampling
F6. Review mission

The Pilot Study Report will be work in progress, and will be finalized before the review mission. The report should provide input for the discussion of a 3 years strategy for the development of the ICT surveys in Armenia.

An extra study visit in August 2012, under the Twinning project's component A will use the ICT usage survey as case on small area estimations. Activity F4.2 on the sampling will thus be able to benefit from the conclusions at the study visit.

5.2 Overview of actions to be taken
- Until mid-July 2012: Focus on pilot study report
  - in particular chapters on experiences from the pilot studies and the analysis.
- Incorporate possible comments from MS Experts in draft pilot study report (before F4.2, September)
- NSSRA preliminary analysis of possibilities for regionally distributed statistics (before F4.2, September)
  - Involve Methodological Division and Business Register Division and the experience from the extra study visit
  - Outline possible alternative sampling models
- Finish the Pilot Study Report in order to send out to stakeholders before 23 October
- Invitation to stakeholders for final workshop during F6 in November 2012.

6. Annexes

Annex 1: Terms of Reference (F4.1); 7 – 11 May 2012

Component A   Quality Management
Component B   Business Register, Structural Business Survey, and Respondent Burden
Component C   Improvement of the Exhaustiveness of GDP
Component D   Agricultural Census
Component E   Harmonized Consumer Price Index
Component F   ICT Society

Mandatory results of the component:
The mandatory results of component F is: "Enterprise and institution ICT pilot studies rolled out and fully executed; data published" *("pilot studies" replacing "surveys" from the contract text).*

Activity F4.1   Analysis and data processing

1. Purpose of activity
The purpose of the activity is to discuss best practices in terms of analysis, data processing and dissemination of ICT statistics, and thereby to prepare for the upcoming presentation and dissemination of the results from the pilot studies on ICT usage in Armenian enterprises and institutions.

2. Expected output of the activity
The expected outputs of the activity are:
o   Evaluation of the quality of the collected data material;
o   Evaluation of the database and the analytical and table-generating tools;
o   Preliminary evaluation of the ICT usage questionnaires and interviewer instructions in a future full-scale survey perspective;
o   Discussion of dissemination strategy: how, what, and when to publish the results from the pilot studies, and of the external stakeholders role in this process;
o   Decision on what indicators to present in the first publication.

3. Project Participants
Mr. Gagik Anayan, Member of State Council on Statistics (*BC Component Leader;*)
Ms. Anahit Harutyunyan, Head of Trade and Other Services Statistics Division;
Ms. Inga Baroyan, Main Specialist of Trade and Other Services Statistics Division;

Mr. Martin Lundø, Chief Adviser, Business Development Division, Statistics Denmark *(MS Component Leader);*

Annex 2: Programme for the mission

Time	Place	Event	Purpose / detail
Monday, 7 May Morning	Congress Hotel	Meeting with RTA	To discuss the programme of the week
Afternoon	NSSRA	Meeting with BC Component Leader	Current status. BC Component Leader on developments and internal follow up since F3 (November 2011).
	NSSRA	Meeting with Trade and Other Services division	• Overview: data, database, analytical and table generating • Interviewers reactions and feedback from enterprises
Tuesday, 8 May Morning	NSSRA	Meeting with Trade and Other Services division	• Analysis of data and its processing • Discussion of what indicators to publish • Preliminary discussion of consequences for the data processing when changing for full scale survey (to be continued in F4.2)
Afternoon	NSSRA	Meeting with Trade and Other Services division	Continuation of morning programme
	NSSRA	Meeting with BC Component Leader	Discussion of best practices related to dissemination of ICT statistics based on MS Expert's experience
Wednesday, 9 May	NSSRA	Meeting with RTA	• Analysis of data • Preliminary recommendations regarding the questionnaire's use for future surveys • Preparation of draft tables and supplementary text for publication
Thursday, 10 May Morning	NSSRA	Meeting with Trade and Other Services division	Discussion based on MS Expert's preliminary recommendations regarding data processing and publishing
Afternoon	NSSRA	Meeting with BC Component Leader	• Presentation of results so far • Discussion of publishing strategy and involvement of external stakeholders
Friday, 11 May Morning	NSSRA	Ad-hoc meetings	Work on the mission report, and preparations for debriefing.
Afternoon	NSSRA	Debriefing with BC Project Leader	Conclusions and recommendations. Consequences for the next mission and implied work programme for BC Experts

Annex 3: Persons met

List of all the people met during the mission.
<mark>To be updated</mark>

Gagik Ananyan	Member of State Council on Statistics
Anahit Safyan, Division Head	International statistical cooperation division
Hasmik Egiazaryan, Leading specialist	International statistical cooperation division
Ruzanna Shaboyan, 1st category specialist	International statistical cooperation division
Anahit Harutyunyan, Division Head	Trade and Other services division
Inga Baroyan, Main specialist	Trade and Other services division
Arevik Saghumyan, Leading specialist	Trade and Other services division
Gayane Vardanyan, 1st category specialist	Trade and other services division
Anahit Araqelyan,1st category specialist	Trade and Other services division
Anna Antonyan, 1st category specialist	Trade and Other services division
Heghine Babayan, Main specialist	Trade and Other services division
Armine Shaboyan, Main Specialist	Methodology Division
Garik Khachatryan, Main specialist	Business Register Division
Laert Harutyunyan, Division Head	Business Register Division

Annex 4 Enterprise questionnaire

Final version of the questionnaire includes the changes suggested hearing of from Incubator and other national experts.

State Statistical Reporting Form

Adopted by State Statistical Counsel on 27/01/2012, Resolution 02

Reporting Form 1-ICT
(annual)
National Statistical Service

ICT and E-Commerce use un enterprises in 2012

Presented according to the Law on "State Statistics " dated 04/04/200 N48
Submission date ` before 15th of March
Submitted by_____   (Enterprise name and type)   Address _____   I____I____I____I____I   (activity implementation address)   (zip code)   Region   _____   I____I____I   To be filled by NSS RA)   Community / Administrative region _____   I____I____I____I   To be filled by NSS RA)   De Facto main activity type _____   _____ I   I   I   I   I   I   (to be flled by NSS RA)   State register registration number   I____I____I____I____I____I____I____I____I____I____I____I   Identification number   I____I____I____I____I____I____I____I____I   Tax payer registration number   I____I____I____I____I____I____I____I____I   Telephone number _____   e-mail   _____@_____
The confidentiality of data is gauranted by the law
Violation of state statistics law by the data providers as well as by official bodies who compile the statistics causes to responsibility according to the law

Module A

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		Yes	NO
	Use of computers and computer networks in January 2012		
A1.	**Did your enterprise use computers?** Computers include Personal Computers, portable computers (e.g. laptops, notebooks, nettops), personal digital assistants (PDA)	☐	☐ → Go to X1
A2.	**Number of employees using computer** Computers include Personal Computers, portable computers (e.g. laptops, notebooks, nettops), personal digital assistants (PDA)	or	_____ *number* _____ *%*
A3.	**Did your enterprise have internal computer network ?** (e.g.` LAN)	☐	☐
A4.	**Does your enterprise have internal Intranet?**	☐	☐
A5.	**Do the persons employed have access to personal human resources services electronically?** e.g. working time recording system, request annual leave, view or download payslips, or other services	☐	☐

	Module B . Access to Internet in January 2012		

	Section 1. Access to Internet in January 2012		
		Yes	No
B1.	**Does your enterprise have access to Internet?**	☐	☐ → Go to C1
B2.	**Number of employees who have access to Internet**	or	_____ *number* _____ *%*
B3.	**Does your enterprise have the following types of external connection to the Internet ?**		
	1) Traditional Modem (dial-up access over normal telephone line)	☐	☐
	2) ISDN connection	☐	☐
	3) DSL (xDSL, ADSL, SDSL,VDSL etc) connection	☐	☐
	4) Other fixed Internet connection, e.g. cable, leased line (e.g. E1 or E3 at level 1 and ATM at level 2), Frame Relay, Metro-Ethernet, PLC - Powerline communication, etc, fixed wireless connections	☐	☐
	5) **Mobile broadband** connection (via at least 3G modem or handset) using e.g. WiMAX, UMTS, CDMA2000 1xEVDO, HSDPA	☐	☐
	6) Other **mobile** connection using e.g. analogue mobile phone, 2G, GSM, GPRS, EDGE	☐	☐
B4.	**What was the maximum contracted download speed of the**		

	fastest Internet connection of your enterprise? (tick only one)		
	1) Less than 2.0 Mbit/s		
	2) From 2.1 Mbit/s up to 10.0Mbit/s		
	3) From 10.1 Mbit/s– up to 30.0 Mbit/s		
	4) From 30.1 Mbit/s- up to 100.0 Mbit/s		
	5) 100.1 Mbit/s and more		
B5.	**How many persons employed were provided with a portable device with at least 3G technology for accessing the Internet?** e.g. via portable computer with modem or via handset, with at least 3G technology using e.g. UMTS, CDMA2000 1xEVDO, HSDPA, **while excluding GPRS**	_____ *number* or _____ *%*	

		Yes	NO
B6.	**Does your enterprise have a Website?**	☐	☐ → Go to B8
B7.	**Did your Website have any of the following facilities in January 2012**		
	1) Online ordering or reservation or booking, e.g. shopping cart	☐	☐
	2) A privacy policy statement, a privacy seal or certification related to website safety	☐	☐
	3) Product catalogues or price lists	☐	☐
	4) Possibility for visitors to customise or design the products	☐	☐
	5) Advertisement of open job positions or online job application	☐	☐
	6) Other online facility ---	☐	☐

	Section 2. Use of the Internet in contact with public authorities in 2011		

		Yes	No
B8.	**did your enterprise use the Internet to contact with public authorities**	☐	☐ → Go to B9
	1) obtain information from public authorities' websites or home pages?	☐	☐
	2) obtain reporting forms from public authorities' websites or home pages? e.g. tax declaration, statistical reporting form, etc	☐	☐
	3) return filled in reporting forms electronically,	☐	☐
	4) other purpose(please indicate) ---	☐	☐
B9.	**Do you consider any of the following reasons as limiting your electronic interaction with public authorities?**		
	1) Concerns related to data confidentiality and security	☐	☐
	2) Electronic procedures are too complicated and/or too time consuming	☐	☐

		YES	No
	3) No information about of electronic procedures	☐	☐
	4) Other reason (please indicate) --------------------------------- ---	☐	☐

Section 3. Internet usage for interaction with public authorities for el-procurement in 2011.

Public electronic Procurement refers to the use of the Internet by enterprises to offer goods or services to public authorities at national level or in other EU countries. The eProcurement process is based on a number of stages from the notification process (online availability of procurement notices and tender specifications) through **tendering**, awarding, to payment.

eTendering is the stage of an eProcurement process dealing with the preparation and submission of tenders or proposals online; this includes bids submitted through open, restricted, or negotiated procedures, as well as Framework Agreements and Dynamic Purchasing Systems (DPS).
Submission of bids by e-mail is excluded.

		YES	No
B10.	**Did your enterprise use the Internet for accessing tender documents and specifications in electronic procurement systems of public authorities?**	☐	☐
B11.	**During 2011, did your enterprise use the Internet for offering goods or services in public authorities' electronic procurement systems (eTendering)?**	☐	☐
	1) RA	☐	☐
	2) In other countries	☐	☐
B12.	**does your enterprise use electronic signature in any message sent?** **(, i.e. using encryption methods that assure the authenticity and integrity of the message (uniquely linked to and capable of identifying the signatory and where any subsequent change to the message is detectable)**	☐	☐

Module C
Sending/receiving of messages suitable for automatic processing to/from systems outside the enterprise in January 2012

Electronic transmission of data suitable for automatic processing means:
– **sending and/or receiving of messages** (e.g. orders, invoices, payment transactions, product descriptions, transport documents, tax declarations)
– in an **agreed or standard format** which **allows their automatic processing**,
e.g. EDI, EDIFACT, ODETTE, TRADACOMS, XML , xCBL, cXML, ebXML
– to or from other enterprises, public authorities or financial institutions
– without the individual message being typed manually
– via any computer network

		Yes	No
C1.	**did your enterprise send or receive electronically such information in a format that allowed its automatic processing?**	☐	☐ →Go to D1

	C2. **Did your enterprise send or receive electronically such information for the following purposes?**		
	1) Sending payment instructions to financial institutions	☐	☐
	2) Sending or receiving product information (e.g. catalogues, price lists)	☐	☐
	3) Sending or receiving transport documents (e.g. consignment notes)	☐	☐
	4) Sending or receiving data to/from public authorities (e.g. tax returns, statistical data, import or export declarations)	☐	☐
	5) other (please indicate)_____ --	☐	☐

	Module D **Submission of documents (invoices) electronically in January 2012**

		Yes	**No**
D1.	**Did your enterprise send electronic documents (invoices)**	☐	☐ → Go to D2
	1) e-invoices in a standard structure suitable for automatic processing? e.g. EDI, UBL, XML, etc	☐	☐
	2) Electronic invoices **not** suitable for automatic processing e.g. emails, email attachment in PDF format	☐	☐
D2.	Ձեր կազմակերպությունը ստացել է արդյո՞ք էլեկտրոնային հաշիվներ ստանդարտ կառուցվածքով՝ հարմար ավտոմատ մշակման համար օրինակ՝ EDI, UBL, XML և այլն	☐	☐

	Module E **Automatic share of information within the enterprise in January 2012**

		Yes	**No**
E1.	Did your enterprise receive sales order or if other information **was the relevant information about it shared electronically and automatically with the software used for the following functions?**		
	1) Your management of inventory levels	☐	☐
	2) Your accounting	☐	☐
	3) Your production or services management	☐	☐
	4) Your distribution management	☐	☐

E2.	**Did your enterprise send a purchase order (either electronically or not), was the relevant information about it shared electronically and automatically with the software used for the following functions?**		
	1) Your management of inventory levels	☐	☐
	2) Your accounting	☐	☐

Module F
Ecommerce transactions (sales and purchase)in 2011

An **e-commerce transaction** is the sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online.
e-commerce transactions **exclude** orders made by manually typed e-mail messages

Section 1. WEB sales

		Yes	No
F1.	**During 2011, did your enterprise *receive* orders for products or services placed via a website?**	☐	☐ → Go to F4
F2.	**did your enterprise *receive* orders placed via a website by customers located in the following geographic areas**		
	1) RA	☐	☐
	2) CIS countries	☐	☐
	3) Other countries	☐	☐
F3.	**Please state the value of the turnover resulting from orders *received* that were placed via a website (in monetary terms, excluding VAT**	_____ *thousand drams* or _____ *%*	

Section 2 EDI-type sales

EDI-type sales are sales made via EDI-type messages. EDI (electronic data interchange) is used here as a generic term for sending or receiving business information in an agreed format which allows its automatic processing (e.g: EDIFACT, UBL, XML, …).

		Yes	No
F4.	**Did your enterprise *receive* orders for products or services placed via EDI-type messages?**	☐	☐ → Go to F7
F5.	**Did your enterprise *receive* orders placed via EDI-type messages by customers located in the following geographic areas**		

		Yes	No
	1) RA	☐	☐
	2) CIS countries	☐	☐
	3) Other countries	☐	☐

F6.	**Please state the value of the turnover resulting from orders** *received* **that were placed via EDI-type messages (in monetary terms, excluding VAT**	_____ *thousand drams* or _____ *%*

Section 3. E-commerce Purchases			
		Yes	**No**
F7.	**did your enterprise send orders for products or services via computer networks?** (via a website or EDI-type systems, and excluding manually typed e-mails)	☐	☐ → Go to G1
F8.	**Did your enterprise *place* orders via a website or EDI-type messages to suppliers located in the following geographic areas**		
	1) RA	☐	☐
	2) CIS countries	☐	☐
	3) other countries	☐	☐
F9.	**Please state the value of the purchases resulted from orders** *placed* **electronically (in monetary terms, excluding VAT**	_____ *%*	

Module G Main indicators of enterprise activity in 2011		
G1.	Average monthly number of employees used for calculation of salaries	_____ *employees*
G2.	**Total turnover (without VAT)**	_____*thousand drams*

7.
8. **Director**
12.

9.

13. (Name, Surname)

10. 11.

14. 15. (Signature)

16. Filled by (chief accountant or
17. authorized person)
21.
25.

18.

22. (Name Surname)
26.

19. 20.

23. 24. (Signature)
27. 28. << _ _ >>_____
____20___թ.

Thank you!

Trade and Other Services Division ☎ 58-76-23, e-mail: info@armstat.am

Annex 5 Institution questionnaire

Final version of the questionnaire includes the changes suggested hearing of from Incubator and other national experts.

Adopted by State Statistical Counsel on 27/01/2012, Resolution 02

Reporting Form   2-ICT
(annual)
National Statistical Service of Armenia
State Statistical Reporting Form
ICT Usage in Institutions in 2012

Presented according to the Law on "State Statistics " dated 04/04/200 N48
Submission date ` before 15th of March
Submitted by _____ (institution name and type) Address _____ I____I____I____I____I (activity implementation adress)   (zip code) Region _____ I____I____I To be filled by NSS RA) Community / Administrative Region _____ I____I____I____I (To be filled by NSS RA) De Facto main Activity type_____ _____ I____I I____I____I____I (To be filled by NSS RA)   State register registration number I____I____I____I____I____I____I____I____I____I____I____I Identification number   I____I____I____I____I____I____I____I____I Tax payer registration number I____I____I____I____I____I____I____I____I Telephone Number _____ e-mail   _____@_____
The confidentiality of data is gauranted by the law
Violation of state statistics law by the data providers as well as by official bodies who compile the statistics causes to responsibility according to the law

	Module A **Use of computers and computer networks in January 2012**		
		YES	**NO**
A1.	**Did your institution use computers?** Computers include Personal Computers, portable computers (e.g. laptops, notebooks, nettops), personal digital assistants (PDA) or smartphones	☐	☐ → Go to X1
A2.	**Number of employees using computers** Computers include Personal Computers, portable computers (e.g. laptops, notebooks, nettops), personal digital assistants (PDA) or smartphones	or	_____ *employees* _____ *%*
A3.	**Did you have internal computer network (ex: Local Area Network)**	☐	☐
U.4.	**Does your institution have internal home page (Intranet)?**	☐	☐
A5.	**Did the persons employed have access to personal human resources services electronically?** e.g. working time recording system, request annual leave, view or download payslips, or other services	☐	☐
	Module B: **Access and use of the Internet** **Section 1. Access to Internet in January 2012**		
		Yes	**No**
B1.	**Did your institution have access to Internet?**	☐	☐ → Go to B5
B2.	**Number of employees with access to the Internet**	or	_____ *employees* _____ *%*
B3.	**Did your institution have the following types of external connection to the Internet?**		
	1) Traditional Modem (dial-up access over normal telephone line) or ISDN connection	☐	☐
	2)ISDN connection	☐	☐
	3)DSL (xDSL, ADSL, SDSL,VDSL, etc) connection	☐	☐
	4) Other fixed Internet connection, e.g. cable, fibre optic, leased line (e.g. E1 or E3 at level 1 and ATM at level 2), Frame Relay, Metro-Ethernet, PLC - Powerline communication, etc, fixed wireless connections	☐	☐
	5) **Mobile broadband** connection (via at least 3G modem or handset) using e.g. UMTS, CDMA2000 1xEVDO, HSDPA	☐	☐
	6) Other **mobile** connection using e.g. analogue mobile phone, GSM, GPRS, EDGE	☐	☐
B4.			

	What was the maximum contracted download speed of the fastest Internet connection of your institution? (tick only one)		
	1) up to 2.0 Mbit/s		
	2) 2.1 Mbit/s - 10.0 Mbit/s		
	3)10.1 Mbit/s – 30.0 Mbit/s		
	4)30.1 Mbit/s-100.0 Mbit/s		
	5)100.1 Mbit/s and more		

Section 2. E-services in January 2012

		Yes	No
B5.	How your institution provides public services		
	Direct communication (on visit) By traditional post Through a call centre By phone By mobile phone By Internet telephony (e.g. Skype) By e-mail Via a website Via Internet social networks (e.g. Facebook)	☐	☐
B6.	**Did your institution have a Website or Home Page?**	☐	☐ → Go to B9

B7.	What information is available on your institution's Web site
	   a) Structure and contacts of institution
	   b) Information about the institution's activity
	   c) Relevant news related to the institution's activity
	   d) Information about services
	   e) Consulting services via website		

B8.	Which e-services provided your institution on website
	   1. Offer a possibility to download forms
	   2. Offer a possibility to return filled out forms
	   3. Offer a possibility to perform administrative procedures electronically, without additional paperwork
	   4. Offer a possibility to comply procedure using previous registration of the user (without repeated data entry, automatically using the information already available)		

B9	**did your institution use electronic signature in any message sent? (i.e. using encryption methods that assure the authenticity and integrity of the message (uniquely linked to and capable of**	☐	☐

	identifying the signatory and where any subsequent change to the message is detectable)		
	Module X **Background information**		
X1.	**Average number of persons employed, during 2011**	_____ *employees*	

29.	31.	3: 33.
30. **Director**		
34.	35. (Name, Surname)	3(37. (Signature)
38. Filled by (chief accountant or	40.	4 42.
39. authorized person)		
43.	44. (Name Surname)	4: 46. (Signature)
47.	48.	4! 50. << _ _ >>_____ ____20___.

Thank you!

Trade and Other Services Division ☎ 58-76-23, e-mail: info@armstat.am

Annex 6: Other respondent material
Glossary and methodological explanations for enterprises

Glossary and methodological explanations for institutions

Annex 7: Sample and population of enterprises
Population, Yerevan
(distribution by Industry group and size class)

		4 ÉÙµ»ñ	îÐî ÷áñÓÝ³Ï³Ý Ñ»ï³½áïáõÃÛ³Ý Ñ³Ù³ñ ù³Õ³ù ºñ¨³ÝÇ Ï³½Ù³Ï»ñåáõÃÛáõÝÝ»ñÇ ù³Ý³ÏÁ				
			Nace rev. 2	*10-30*	*31-50*	*51-100*	*101 և ավելի*	Ընդամենը
²Ö¸Ù³ÕÙ²°ðàõÃÙàõ	Մշակող արդյունաբերություն		C	250	47	45	41	**383**
	Էլեկտրականության, գազի, գոլորշու և լավորակ օդի մատակարարում		D	8	1	0	4	**13**
	Ջրամատակարարում, կայուղի, թափոնների կառավարում և վերամշակում	I	E	2	2	2	10	**16**
ՇԻՆԱՐԱՐՈՒԹՅՈՒՆ		II	F	107	23	25	24	**179**
ՄԵԾԱԾԱԽ ԵՎ ՄԱՆՐԱԾԱԽ ԱՌԵՎՏՈՒՐ, ԱՎՏՈՄԵՔԵՆԱՆԵՐԻ ԵՎ ՄՈՏՈՑԻԿԼՆԵՐԻ ՆՈՐՈԳՈՒՄ		III	G	349	58	28	32	**467**
ՓՈԽԱԴՐՈՒՄՆԵՐ ԵՎ ՊԱՀԵՍՏԱՅԻՆ ՏՆՏԵՍՈՒԹՅՈՒՆ			H	148	27	26	19	**220**
ԿԱՑՈՒԹՅԱՆ ԵՎ ՀԱՆՐԱՅԻՆ ՍՆՆԴԻ ԿԱԶՄԱԿԵՐՊՈՒՄ			I	139	27	13	4	**183**
ՏԵՂԵԿԱՏՎՈՒԹՅՈՒՆ ԵՎ ԿԱՊ			J	72	25	19	11	**127**
ԱՆՇԱՐԺ ԳՈՒՅՔԻ ՀԵՏ ԿԱՊՎԱԾ ԳՈՐԾՈՒՆԵՈՒԹՅՈՒՆ			L	47	9	6	1	**63**
ՎԱՐՁԱՐԱՐԱԿԱՆ ԵՎ ՕԺԱՆԴԱԿ ԳՈՐԾՈՒՆԵՈՒԹՅՈՒՆ			N	54	15	8	12	**89**
ՄԱՍՆԱԳԻՏԱԿԱՆ, ԳԻՏԱԿԱՆ ԵՎ ՏԵԽՆԻԿԱԿԱՆ ԳՈՐԾՈՒՆԵՈՒԹՅՈՒՆ			M,69-74, µ³ó³éáõÃÛ³Ùµ 75	106	18	24	20	**168**
ՍՊԱՍԱՐԿՄԱՆ ԱՅԼ ԾԱՌԱՅՈՒԹՅՈՒՆՆԵՐԻՑ ՆÇ³ÛÝ համակարգիչների և կապի սարքավորանքի նորոգում		IV	S 95.1	1	0	0	0	**1**
			Ընդամենը	**1283**	**252**	**196**	**178**	**1909**

24

4 ËÙ»ñ	Nace rev. 2	10-30	31-50	51-100	101 և ավելի	Ընդամենը
Մշակող արդյունաբերություն	C	3	2	2	2	9
Էլեկտրականության, գազի, գոլորշու և լավորակ օդի մատակարարում	D	3	1	0	1	5
Ջրամատակարարում, կայուղի, թափոնների կառավարում և վերամշակում (I)	E	1	1	1	1	4
ՇԻՆԱՐԱՐՈՒԹՅՈՒՆ (II)	F	3	3	3	3	12
ՄԵԾԱԾԱԽ ԵՎ ՄԱՆՐԱԾԱԽ ԱՌԵՎՏՈՒՐ, ԱՎՏՈՄԵՔԵՆԱՆԵՐԻ ԵՎ ՄՈՏՈՑԻԿԼՆԵՐԻ ՆՈՐՈԳՈՒՄ (III)	G	4	3	3	3	13
ՓՈԽԱԴՐՈՒՄՆԵՐ ԵՎ ՊԱՀԵՍՏԱՅԻՆ ՏՆՏԵՍՈՒԹՅՈՒՆ	H	3	3	3	2	11
ԿԱՑՈՒԹՅԱՆ ԵՎ ՀԱՆՐԱՅԻՆ ՍՆՆԴԻ ԿԱԶՄԱԿԵՐՊՈՒՄ	I	3	3	3	1	10
ՏԵՂԵԿԱՏՎՈՒԹՅՈՒՆ ԵՎ ԿԱՊ	J	3	3	3	2	11
ԱՆՇԱՐԺ ԳՈՒՅՔԻ ՀԵՏ ԿԱՊՎԱԾ ԳՈՐԾՈՒՆԵՈՒԹՅՈՒՆ	L	3	1	1	1	6
ՎԱՐՉԱՐԱՐԱԿԱՆ ԵՎ ՕԺԱՆԴԱԿ ԳՈՐԾՈՒՆԵՈՒԹՅՈՒՆ	N	3	3	1	2	9
ՄԱՍՆԱԳԻՏԱԿԱՆ, ԳԻՏԱԿԱՆ ԵՎ ՏԵԽՆԻԿԱԿԱՆ ԳՈՐԾՈՒՆԵՈՒԹՅՈՒՆ	M,69-74, µ³ó³éáõÃÛ³Ùµ 75	3	2	2	2	9
ՍՊԱՍԱՐԿՄԱՆ ԱՅԼ ԾԱՌԱՅՈՒԹՅՈՒՆՆԵՐԻՑ ՄÇ³ÛÝ համակարգիչների և կահի սարքավորանքի նորոգում (IV)	S 95.1	1	0	0	0	1
Ընդամենը		33	25	22	20	100

Sample, enterprises

(distribution by Industry group and size class)

Annex 8: List of 17 participating institutions in pilot study

Annex 9: Suggested layout of detailed tables by MSE

MSE suggested the following table layout for documentation of the results before the mission. NSSRA produced subsequently tables for all variables of the enterprise pilot survey.

Qualitative questions

		NACE 1	NACE 2	NACE 3	NACE 4	Total, all NACE	10-19	20-29	30-49	50-99	100+	Total, all size classes
Question 1	TOTAL	15	40	10	35	100	15	30	25	20	10	100
	Yes	7	20	4	21	52	8	19	11	7	7	52
	No	5	12	1	8	26	4	8	8	5	1	26
	Don't know	2	6	5	3	16	2	2	4	6	2	16
	Missing	1	2	0	3	6	1	1	2	2	0	6
Question 2	TOTAL	15	40	10	35	100	15	30	25	20	10	100
	Yes	6	18	4	27	55	10	21	11	9	4	55
	No	1	8	2	4	15	4	5	2	3	1	15
	Don't know	8	12	4	4	28	1	4	10	8	5	28
	Missing	0	2	0	0	2	0	0	2	0	0	2
Question 3	TOTAL	15	40	10	35	100	15	30	25	20	10	100
	Yes	10	28	7	24	69	9	23	17	14	6	69
	No	2	9	2	8	21	3	5	5	5	3	21
	Don't know	3	3	0	2	8	2	2	2	1	1	8
	Missing	0	0	1	1	2	1	0	1	0	0	2
...												
...												
Question N		15	40	10	35	100	15	30	25	20	10	100
	Yes	7	24	4	22	57	10	21	13	8	5	57
	No	2	9	2	3	16	4	2	4	4	2	16
	Don't know	4	6	2	10	22	1	5	6	8	2	22
	Missing	2	1	2	0	5	0	2	2	0	1	5

Quantivative questions

		NACE 1	NACE 2	NACE 3	NACE 4	Total, all NACE	10-19	20-29	30-49	50-99	100+	Total, all size classes
Question 1	TOTAL	15	40	10	35	100	15	30	25	20	10	100
	> average	2	20	7	31	60	4	19	11	16	10	60
	< average	9	14	2	3	28	8	9	10	1	0	28
	Don't know	2	3	1	0	6	1	1	2	2	0	6
	Missing	2	3	0	1	6	2	1	2	1	0	6
Question 2	TOTAL	15	40	10	35	100	15	30	25	20	10	100
	> average	6	18	4	27	55	10	21	11	9	4	55
	< average	1	8	2	4	15	4	5	2	3	1	15
	Don't know	8	12	4	4	28	1	4	10	8	5	28
	Missing	0	2	0	0	2	0	0	2	0	0	2
Question 3	TOTAL	15	40	10	35	100	15	30	25	20	10	100
	> average	10	28	7	24	69	9	23	17	14	6	69
	< average	2	9	2	8	21	3	5	5	5	3	21
	Don't know	3	3	0	2	8	2	2	2	1	1	8
	Missing	0	0	1	1	2	1	0	1	0	0	2
...												
...												
Question M		15	40	10	35	100	15	30	25	20	10	100
	> average	2	20	7	31	60	4	19	11	16	10	60
	< average	9	14	2	3	28	8	9	10	1	0	28
	Don't know	2	3	1	0	6	1	1	2	2	0	6
	Missing	2	3	0	1	6	2	1	2	1	0	6

Annex 10: Suggested structure of Pilot Study Report

(draft version 0.1)

1. Background *(1-2 pages?)*
    a. General introduction
    b. The Twinning project and EU regulations on ICT statistics
    c. Purpose of pilot studies on ICT usage in Armenia
2. Methodology *(3-4 pages?)*
    a. Population and sampling
    b. Overall introduction of questionnaires (questionnaires in annexes)
    c. Data collection method
3. Experiences from pilot studies (*3-6 pages?*)
    a. General impressions
    b. Problems related to non-response
    c. Respondent feedback – enterprises and institutions

Problem type 1

Problem type 2

…

4. Analysis of ICT usage in Armenia *(4-8 pages?)*
    a. Enterprises – selected tables and charts
    b. Institutions – selected tables and charts
5. From pilot studies to regular surveys *(1-2 pages?)*

Annexes
    a. Questionnaire, enterprises
    b. Questionnaire, institutions
    c. Instructions and explanations
    d. Detailed tables of indicators

Annex 11: Updated roadmap for the ICT Statistics component

	Time	Action
1	July 2012 (mid)	First draft of "Pilot Study Report on ICT usage in Armenian enterprises and institutions" (Armenian version of publication) prepared **by BC Experts**
2	July 2012 (end)	First draft of "Pilot Study Report on ICT usage in Armenian enterprises and institutions" (English version of publication) – to be sent **to MS Expert** for comments
3	27-31 August 2012	Enterprises' ICT usage survey **as case on** *small area estimations* for 2 BC Experts study visit to Statistics Denmark on methodological issues
4	7 September 2012	Written comments on draft "Pilot Study Report on ICT usage in Armenian enterprises and institutions" **from MS Experts**
5	14 September 2012	**BC Expert** 1-2 pages preliminary note to MS Experts on issues related to sampling and dissemination of a full-scale survey. The main focus should be on possible regionally distributed statistics on ICT usage. The translated note will be the starting point for the discussions, and possibly decisions, during the F4.2 mission.
6	21-28 Sept. 2012	**MS Expert mission to NSSRA**: *F4.2 Optimization of sampling* Final review of "Pilot Study Report" Full scale survey design.
7	23 October 2012	Dissemination of "Pilot Study Report" to stakeholders including invitation letter to workshop in November (during F.6), see point 8 below.
8	5-9 November 2012	**MS Expert mission to NSSRA**: *F.6 Review mission* 1. Workshop with stakeholders: NSSRA presentation of experiences from pilot studies and collection of users' feedback on the pilot studies and their input to future surveys and dissemination 2. Discussion and drafting of a 3 year strategy for the development of the ICT usage surveys in Armenia 3. Wrapping up the component

The mountains of Ararat, Masis (5,165 meters aove sea level) and Sis (3,896 meters).
(Photo: Martin Lundø)