# TWINNING CONTRACT AM/14/ENP/ST/15

# Strengthening of the National Statistical System of Armenia – Phase II



# STUDY VISIT REPORT

on

Water accounts

Activity 6.4: Study visit

Study visit to ISTAT, Italy

11-14 October 2016

Final version



National Statistical Service of the Republic of Armenia



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# **List of Abbreviations**

EU European Union

NSI National Statistical Institute (e.g. NSSRA)
NSS National Statistical System (of official statistics)
NSSRA National Statistical Service of the Republic of Armenia

### 1. General comments

This study visit report was prepared within the Twinning Project "Strengthening of the National Statistical System of Armenia – Phase II" and organized under component 6, activity 6.4.

The purpose of the study visit to Italian ISTAT was to gain knowledge on the Italian experience and the practical application related to water statistics management and water accounts, to draft description on how this knowledge can be used in NSSRA, to introduce the works implemented within the project, and to discuss the work to be done within the frames of further cooperation.

The staff of NSSRA would like to express its happiness for the possibility of having this visit, and they would like to thank the initiators and organizers of the study visit for organizing the practical and official meetings at the highest level.

The knowledge and practices received in ISTAT, the study of Italian experience in the area of water accounts, and the support provided by the experts and speakers, as well as their willingness to continue cooperation had a positive impact on the efficiency of the visit.

This views and observations stated in this report are those of the participating staff of NSSRA and do not necessarily correspond to the views of EU, NSSRA or ISTAT of Italy.

## 2. Results

At the first meeting the Italian experts introduced the structural changes in ISTAT started from April 2016. These changes resulted in reallocation of main functions and reformation of corresponding departments:

- Data collection, processing and dissemination
- Development of methodology
- Separate directorates of statistical production, namely social statistics and census, economic, regional and environmental statistics
- National accounts, which include environmental accounts.

In 20 administrative territorial units of Italy there are 21 regional entities where the division of territorial and environmental statistics consists of 3 units. Below are the units with the description of their functions:

- Environment, regional and regional entities register unit which includes:
  - Urban settlements statistics
  - Energy statistics
  - o Climate
  - Lands and land use
  - o Geographical analysis by GIS system
  - Administrative areas
- Regional and environmental networks unit which includes:
  - Transportation

- o Tourism
- o Cultural services
- Water services
- Agriculture and surveys unit which includes:
  - o Agricultural census

Since 1951 urban water census with three-year periodicity has been carried out. It covers round 3000 public companies connected to central water supply system. According to the recent survey the volume of abstracted water comprised 9.5 billion cubic meters, of which 8.4 was directed to central water supply plants, of which 5.2 billion cubic meters – to municipalities. A small amount of supplied water is free of charge, for example, in case of fountains the costs only cover maintenance services. 30% of abstraction is treated for drinkable use. 2-3% of population is not connected to the central water supply system. The losses comprise 35-70% in public water supply system having increased over the past years. The reasons of increased loss are incomplete registration, physical losses of water and unauthorized use of water. There are 18786 water treatment plants of different purposes in the country. 18162 of them are functioning.

The representative of the Water Resource Management Directorate under the Ministry of Environment, Protection of Land and Sea, Carlo Percopo was invited to the meeting. He introduced the EU Water Framework Directive (2000/60/CE) and the structure of water management in Italy. The directive has a regulating function in the area of surface and ground water protection and the objectives pursued in it are:

- Ensure "good quality" for all water bodies
- Protect surface and groundwater
- Manage water resources at river basin scale
- Put in place actions to limit pollutants, emissions according to the water quality standards
- Give to 'Water Services' the proper costs

The next speaker was Leonardo Gatta from Tiber River Basin Authority. The present borders of 141 river basin districts were established in 2003 and in 2006 a monitoring project was launched. The number of river water bodies in Italy is 82 000 stretching 900 000 km along the river network, of which 36 % - across the borders. River basin management plans are being developed once every 6 years. Those are tools for implementation of WFD. The latest river basin management plan started in 2016. Accordingly a report is submitted to the European Commission. In the process of implementing the management plan public participation is especially in focus since its objective is receiving good quality water.

#### The plan implements

- Pressure and impact assessment at river basin scale
- Monitoring programs

• Definition of management objectives and planning of measures.

Questions were asked on costs and expenditures of services provided by water companies. The tariff for water in Italy is 1 euro for 1 cubic meter which is lower compared to other European countries (in average – about 2 Euros). The discussions on this topic continued the next day of the visit.

In regard with the works performed in ISTAT within the frames of environmental accounts in general Aldo Femia made an expanded presentation. He introduced the environmental accounts, particularly the essence of water and air accounts, the current status of implemented works, present problems which are basically close to our conditions.

In 2007 in Italy they created NAMEA (National accounting matrix including environmental accounts) air accounts and accounting methodology. The details of methodology to some extend helped a better overview of accounting the monetary component of water accounts. The investment amortization is not included in costs but EU requirement is to include it in environmental expenditures. Starting from this year environmental accounts will be included in strategic planning. These accounts are about relations between economy and environment, what will be the impact of physical accounts on economic changes and vice versa.

The second day of the mission was devoted to details of water account compilation.

On the last day of the visit the Armenian and Italian experts focused on 8 tables on Physical Water Flow Accounts which were previously compiled and edited by the NSSRA based on Joint Questionnaire on Internal Waters (JQ-IW 1-8 tables), PWFA water supply and water use tables (Water Supply Table, T1 and Water Use Table, T2), as well as tables on emitted pollutants by types of activities previously prepared and sent to the Italian experts. The Armenian colleagues made a recommendation to make some changes in the structure of T1 table and it was decided that the Italian colleagues will discuss it and send their opinion before their next mission to Armenia.

## 3. Conclusions and recommendations

On the last day of the visit the Armenian and Italian experts discussed and agreed upon the work to be done till the next meeting.

The tables on Physical Water Flow Accounts compiled by NSSRA were approved.

The future work was defined. Particularly:

#### By the NSSRA:

• Adapt supply and use tables of Physical Water Flow Accounts with the latest Eurostat version (version 2015),

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• Recalculate the key indicators (key indicators – table 5), for which there is a methodology introduced in the previous version of Physical Water Flow Accounts (version 2014)

## By Italian ISTAT:

- Finalize the format and provide supply and use tables of Monetary Water Flow Accounts and introduce methodological peculiarities to the NSSRA,
- To provide physical tables of air emissions to the NSSRA.

The deadline: 15 November

# Annex 1. Program

# Agenda Study visit of the NSSRA working group to ISTAT on water statistics and water accounts 11-14 October 2016

Day 1 (Tuesday)		ISTAT, Italy, Rome, Via Cesare Balbo 16b		
11 October 2016		Room 405		
1	Welcome address and adoption of the agenda			
	10:30 – 11:00			
2	2 ISTAT presentation and main activities on environmental and territorial statistics			
	11:00 – 13:00			
	Lunch			
3	3 Twinning project			
	2 <sup>nd</sup> day (Wednesday) ISTAT, Italy, Rome, Via Cesare Balbo 16b			
	12 october 2016	Room 405		
1	Water management in Italy			
	Stakeholders meeting: River Basin District Authority, Ministry of environment			
	10:00 – 13:00			
	Lunch			
2	Twinning project			
	Review of NSSRA activities on Water Statistics and Water Accounts			
3				
3	Discussion			
	14:00 – 17:00			

3 <sup>rd</sup> day (Thursday)	ISTAT, Italy, Rome, Via Cesare Balbo 16b
13 october 2016	Room 405

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1	ISTAT Environmental accounts	
	10:00 – 13:00	
	Lunch	

Visit to some monuments of historic centre of Rome

4 <sup>rd</sup> day (Friday) 14 october 2016		ISTAT, Italy, Rome, Via Cesare Balbo 16b	
		Room 405	
	Twinning project		
1	1. Tables, methodology, and tasks of w accounts	ater flow component of water	
	10:00 – 13:00		
	Lunch		
2	Twinning project		
3	Condition and tables of statistical information on monetary component of water accounts		
	Preparation of the next mission in Armenia		
	14:00 – 17:00		

## **Annex 2: Persons met**

#### **NSSRA**

Mr Yurik POGHOSYAN, Member of the State Council of Statistics

Mrs Nelly BAGHDASARYAN, Head of NSSRA social sphere and nature protection statistics division

Mrs Naira MANDALYAN, Leading specialist, NSSRA social sphere and nature protection statistics division

Ms Ani HAMBARDZUMYAN, First category specialist, NSSRA social sphere and nature protection statistics division

### **Twinning project**

Ms Anush POGHOSYAN, interpreter

### **ISTAT**

Mr Stefano Tersigni, ISTAT Mrs Simona Ramberti, ISTAT Mrs Donatella Vignani, ISTAT Mr Aldo Femia, ISTAT

Mr Carlo Percopo, Ministry of environment, protection of land and sea, directorate of water resources management

Mr Leonardo Gatta, Tiber River Basin Authority