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*Steering Committee of the International Monitoring  
Operation on the Population and Housing Censuses in  
Bosnia and Herzegovina*

*Eight Assessment Report*

*18-22 March 2013*

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## List of acronyms

BiH	Bosnia and Herzegovina
BHAS	Agency for Statistics of Bosnia and Herzegovina
CoM	Council of Ministers of BiH
CMIS	Central Monitoring Information System
CSO	Civil Society Organisation
DB	District Brčko
EA	Enumeration area
FBiH	Federation of Bosnia and Herzegovina
FOS	Federal Office of Statistics (FBiH)
EI	Entity Instructor
EN	Enumerator
EUPHC 2	Technical assistance to Population and Housing Census Phase II
GIS	Geographic Information System
ICEI	Department for International Cooperation and External Information
IMO	International Monitoring Operation
IMO MG	International Monitoring Operation, Management Group
IMO SC	International Monitoring Operation, Steering Committee
IT	Information Technology
LFS	Labour force survey
MCC	Municipal Census Commission
MI	Municipal Instructor
PES	Post Enumeration Survey
Q	Question
RS	Republika Srpska
RSIS	Republic Srpska Institute for Statistics
SA	Statistical Area
SI	State Instructor
TA	Technical Assistance
TAP	Technical Assistance Project
TOR	Terms of Reference



## Introduction and Background

1. A Population and Housing Census shall take place in Bosnia and Herzegovina (BiH) in accordance with the Law on the Census of the Population, Households and Dwellings in Bosnia and Herzegovina in 2013 as adopted by the Parliamentary Assembly of Bosnia and Herzegovina on 3 February 2012. The Council of Ministers of Bosnia and Herzegovina has invited the European Commission to organise the international monitoring of the Census. Therefore, the European Commission, the Council of Europe and the Council of Ministers of Bosnia and Herzegovina signed on 18 April 2012 a Memorandum of Understanding to agree upon the following:

- The general objective of the International Monitoring Operation (IMO) of the Population and Housing Census in Bosnia and Herzegovina is to monitor the compliance of the whole Census exercise, from the preparation to the data dissemination, with:
- International standards on population and housing censuses as defined by UNECE and Eurostat, and as adopted by the Conference of European Statisticians as Recommendations for the 2010 Censuses of Population and Housing;
- Regulation (EC) No 763/2008 on population and housing censuses, and its implementing measures;
- The Fundamental Principles of Official Statistics, adopted by the UN Statistical Commission, as well as the European Statistics Code of Practice, promulgated by the European Commission;
- Standards on data protection and confidentiality, as provided for in the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data of the Council of Europe, and the relevant European Union regulations in force.

2. The Operation will be carried out by a Committee of International Organisations, the Management Group (IMO MG) assisted by a Senior Census Expert, experts in population censuses, one or more experts in information technology and persons monitoring the census enumeration in the field.

3. The Senior Census Expert, the Census Experts and the IT Experts will assess the compliance of the Census in Bosnia and Herzegovina with the requirements listed in the Memorandum of Understanding, but they will not provide technical assistance.

4. Under the guidance of the Committee and the Senior Census Expert, the Census Experts shall:

- Examine the technical preparation of the Census including the pilot Census and post-enumeration survey, in particular the drafting of questionnaires and manuals;
- Monitor the collection, processing and dissemination of Census data, verifying the accordance with the requirements defined above;
- Control the fair and proper computation at all levels and whether the confidential nature of the individual data is fully guaranteed;
- Investigate any other matter with relevance for the Census.

5. The Management Group has designated Mr. Jean-Michel Durr as Senior Census Expert and Mr. Roberto Bianchini, Mr. Bent Noerby Bonde, Ms. Meryem Demirci, Ms. Kateri-

na Kostadinova-Daskalovska, and Mr. Guido Pieraccini as experts in population censuses. The Senior Census Expert and the Experts in population censuses form the IMO Steering Committee (IMO SC) of international experts.

6. The first mission of the IMO SC was conducted from 23 to 26 April 2012. The objective of this mission was to assess the preparations for the population and housing census in their main components, including the preparation of the pilot census. The report of the SC was sent by the Senior Census Manager on May 12 to the IMO MG.

7. The second mission was conducted from 26 to 29 of June 2012. The objective of this mission was to assess the progress made since the first mission in preparations for the population and housing census, including the preparation of the pilot census.

8. The third mission took place on 17 and 18 of September 2012 and was conducted by two members of the SC, Mr. Durr and Ms. Katerina Kostadinova-Daskalovska. The objective of the mission was to assess the implementation of recommendations made in previous reports and to assess the preparation of the pilot census, planned for October 15-29.

9. The fourth mission took place between 10 and 29 of October 2012 and was conducted successively by the members of the SC (5 days each, except the senior expert from 10 to 19 of October). The objective of the mission was to observe the conduct of the pilot census in the field. In addition, a team of four observers, composed of Lidija Naumovska, Gabor Rosza, Jean-Paul Sardon and Per Schöning was present during the whole period of the pilot census. Each of them covered several municipalities, in order to observe the pilot census field operations in all the 60 enumeration areas (EAs) sampled in the pilot.

10. The fifth mission took place from 19 to 21 of November 2012 (3 days) and was conducted by one member of the SC, Ms. Katerina Kostadinova-Daskalovska. The objective of the mission was to observe the conduct of the Post enumeration survey (PES) of the Pilot census in the field. The expert covered all 6 EAs (in 6 municipalities) sampled in PES sample in order to observe the PES field operations.

11. The sixth mission took place from 10 to 13 of December 2012 and was conducted by four members of the SC: Mr. Roberto Bianchini, Mr. Bent Noerby Bonde, Ms. Katerina Kostadinova-Daskalovska and Mr. Guido Pieraccini. The objective of the mission was to hear from the Statistical Institutions about the lessons learned from the Pilot Census and to assess whether the preparations are on level that could allow conducting a census in April 2013.

12. The seventh mission took place from 12 to 15 February 2013 and was conducted by one member of the SC, Mr. Roberto Bianchini. The objective of the mission was to assess the situation on the progress of preparation and implementation of the IMO recommendations in the new context of the postponement of the census, with a focus on the achievement of the deadlines regarding cartographic preparations. A second objective was to collect information and materials for a more detailed assessment on the progress of census preparatory activities to be made by all members of the SC in March 2013.

13. The eighth and present mission was conducted by the complete SC from 18 to 22 March 2013. The objective of the mission was to assess in detail progress made in the preparations with regard to the milestones given after the fourth mission in December 2012, when the SC recommended to postpone the census to October 2013.

14. The present assessment is based on the information reported during mission meetings, and on some direct observations of the mission. As a consequence, the comments and rec-

ommendations presented below are based on the understanding of the experts, and may not reflect the real situation. This report was prepared by the members of the Steering Committee on the basis of the individual reports of the observers as well as their own observations. The report was finalised by the Senior Census Expert.

15. The experts wish to express their gratitude to the directors and staff of the Agency for Statistics of Bosnia and Herzegovina (BHAS), the Statistical Institutes of the Federation of Bosnia and Herzegovina and Republika Srpska for their availability and collaboration, and to the staff of Council of Europe for the perfect organisation of the mission.

## Executive Summary

16. The focus of the mission was to assess the situation on the progress of census preparation and implementation of the IMO recommendations. Recommendations given in the previous SC reports were a guideline for the discussions, focusing on the problematic areas, and the annex 2 to the last SC report was taken as reference to measure the progress.

17. In general terms, whereas advancements were made by the three statistical institutions in census preparations, especially in the area of methodology and data processing, too many milestones have not been reached, mostly because some of the issues already pointed out in previous reports of the SC are still unsolved.

18. On the basis of the discussions held during the mission with the Statistical Institutions, the main findings are:

- a) The budget has not yet been officially adopted. After the mission, the three directors came to an agreement on a draft budget to be proposed to the Council of Ministers for adoption on April 3. Any further delay would hinder the preparation of the census;
- b) Questionnaires are not yet finalised. Decision shall be taken by the Council of Ministers no later than beginning of April in order to enable further preparation of the census for October 2013. The SC reiterates its recommendation for strictly open questions regarding ethnicity, religion and mother tongue and to keep and later disseminate all the answers given, without any coding or aggregation;
- c) Coordination and cooperation among statistical institutions is still problematic. While coordination is clearly the responsibility of the State Agency for Statistics, it cannot be efficient without complete cooperation among the three directors;
- d) Preparations for cartographic work have significantly progressed and are almost finalised in FBiH and District Brcko. In RS, the preparatory cartographic work was completed for about 70 per cent. The RS Geodetic Administration and RSIS are encouraged to quickly investigate other options to prepare census maps for all the part of the territory not covered by updated orthophotos, in the event that they will not be available by June 2013;
- e) Republika Srpska has not yet amended its census law to ensure full compliance with the BiH Census Law and overcome any different interpretations of the Census Law. This is necessary to ensure harmonized implementation of the census in both entities and thus provide results that could be considered as comparable by the SC;

- f) Schedule for completing the tender process for printing and logistics is very tight. The tender process shall be finished and the announcement shall be launched by mid-April;
- g) It is recommended that the Agency and the two entity statistical institutions immediately develop an action plan for outreach and communication and agrees on how to share the implementation. The draft communication and outreach strategy may serve as inspiration for the action plan;
- h) Preparations of data processing activities are in general well progressing. However, steps of data capture, coding and editing shall be clearly identified and backups of the database made after each of them. In addition, decisions should be taken soon on the access to individual data with personal information, and on the location of the servers for the replication of census data.

**19. In conclusion, the SC considers that the preparation of technical arrangements is generally progressing even though with some delay. Most particularly, certain milestones, such as budget and finalisation of the questionnaire are already in the critical zone and shall be unconditionally completed by beginning of April in order to ensure the conduct of the census in October 2013.**

## Assessment of the census preparation

### CENSUS BUDGET

Milestone	Date	Done?	Remarks	Nb. of weeks delay
Financial plan adopted (Art. 38 of the Census Law)	End Feb.	No	Final version agreed by directors expected on March 27, to be adopted by CoM on April 3.	2

20. The overall amount of the estimated minimum funds for the census operation in BiH indicated in the state census law was confirmed in the amendment to the law adopted by the Parliament. The only change referred to the reallocation of the budget for the year 2015 to the years 2015 and 2016, as a consequence of the postponement of six months of the general enumeration.

21. However, instead of providing funds to a central budget, entities have adopted a separate budget for this year, 13 million KM in RS, 17 million KM in FBiH and at state level 5 million KM for the BHAS. District Brcko will also receive 1.290 million KM, representing 3.5 % of the total budget.

22. In addition, the European Commission has signalled to the Council of Ministers its willingness to finance the Census through 7.5 million EUR grant to BiH Statistical Agency from IPA2009 funds. This would cover up to 35% of all Census-related spending and will be conditional upon a positive assessment of the IMO on the state of technical preparations,



which has to come in May. This grant could be used, for example, to finance field and data processing staff net costs.

23. The State Agency for Statistics has revised the draft budget to take into account inflation as well as requests from the entity statistical institutions. New requests came recently delaying the final adoption to March 27. Once approved by the three directors, the proposed budget will be sent to the CoM. A preparatory meeting will be held on April 2, and the CoM will examine the proposal on April 3. This will represent a 5 weeks delay from the planned date.

### **Recommendations**

24. Directors shall urgently agree on a draft budget by March 27 (*At the time of drafting this report, confirmation was given by the Director of BHAS that the three directors agreed on a budget*). The Agency is requested to send at this date the revised census budget adopted by Directors.

25. The Council of Ministers shall adopt the final census budget on April 3. Any further delay would hinder the preparation of the census.

### **CENSUS LAW IMPLEMENTATION**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Roles, duties and responsibilities of the three statistical institutions in the Census.	End Feb.	No	Still in discussion	2
Duties and responsibilities of the MCCs harmonized to the State Census Law in RS	End Feb.	No	Information was given orally by the Director of RSIS that RS Census law would be modified in order to clarify this point and align the responsibilities of MCCs on State census law.	2
Establishment, maintenance and ownership of “common data base” of Census data;	End Feb.	No	Still in discussion	2
Ethnic composition of the Census Commissions of the units of local self-government.	End Feb.	No	RS Census Law still not in compliance with State Census law.	2

26. The Council of Ministers of BiH adopted, on 23 January 2013, a Proposal of Law to amend the Law on “Census of Population, Households and Dwellings in Bosnia and Herzegovina in 2013”. The proposed amendment was adopted by the Parliament.

27. RS census law has not yet been amended accordingly. In addition, some provisions in the Census Law of RS remain not defined in the same way as in the BiH Census Law and

therefore are considered by BHAS and FOS as not fully in line with the state Census Law and thus are subject of disputes. Those provisions refer mainly to the following topics:

- The competencies of the MCCs (Art. 26 BiH census law): the RS Census Law, Article 7, includes: “Take over the census material from the instructors, organise and control the coverage and quality of the census material, and **if necessary, give orders that necessary additions and corrections are made**“. This last provision is not included in the State Law and may be interpreted in an extensive way, in contradiction with the methodology;
- The ethnic composition of the Census Commissions of the units of local self-government staff in Municipalities (Art. 26 of the State census law); In RS Census Law, Article 8, there is no provision, which is contained in the State Census Law (Article 26. paragraph 3) that "Ethnic composition of the Census Commission of the units of local self-government **shall include at least one representative of the constituent people and others.**";
- The establishment by the BHAS of a single register of census spatial units (Art. 20 BiH census law).

28. The SC had already pointed out these differences in its previous assessment reports.

### **Recommendations**

29. It is strongly recommended that Republika Srpska amend its census law to ensure full compliance with the BiH Census Law and overcome any different interpretations of the Census Law. This is considered by the SC as necessary to ensure harmonized implementation of the census in both entities and thus provide results that could be considered as comparable by the SC.

### **MANAGEMENT OF CENSUS PREPARATIONS**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Internal organisation for communication among BHAS and entity SI agreed	End Jan.	No	Coordination and cooperation among statistical institutions still problematic.	6

30. Despite visible efforts, coordination and cooperation are still problematic among the three statistical institutions. Meetings of the three directors are irregular depending on their availability, and willingness, to meet. In addition, these meetings have no strict agenda and no systematic review of the timetable and milestones.

31. The appointment of the Minister of Communication and Transports, Mr Damir Hadzic for the overall coordination of the census operation is considered as an important improvement. However, the Minister had meetings only with the Director of BHAS and did not meet the directors of the two other institutions, and the minutes of these meetings were not shared with them. This created legitimate frustration among the two directors of entity statistical in-

stitutions. Minister Hadzic expressed his willingness to meet also the two directors, with the condition that they would be willing to cooperate.

32. A videoconference system is about to be installed, enabling organise and conduct meetings easily and conveniently.

### **Recommendations**

33. Coordination and cooperation is key to prepare and conduct the census. The SC observes that lots of work is achieved by the technical staff of the three statistical institutions, but due to lack of cooperation and commonly agreed decision-making process among the directors, their work remains pending.

34. The SC once again strongly recommends to improve coordination and cooperation among statistical institutions. While coordination is clearly the responsibility of the State Agency for Statistics, it cannot be efficient without complete cooperation among the three directors.

35. The SC welcomes the proposal by Minister Hadzic to meet the three directors and urges them to fully cooperate.

36. Once the videoconference system is in place, regular and at least weekly meetings of the three directors shall be organised, with a pre-defined agenda, including systematic review of the timetable. Minutes of the meetings need to be prepared and shared with the census staff and directors.

### **CENSUS ORGANISATION**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Selection of the census field staff in accordance with article 26, point 4 and 5 (that will ensure the ethnic structure from 1991 and where is not possible at least 50 %);	End Feb.	Yes		
How to conduct the enumeration in the areas of the boundary line	End Feb.	No	RS Statistical Office expressed the opinion that delineation of the boundary line shall be determined before the census	2
How to conduct the enumeration of the BiH citizens working or residing abroad for more than 12 months in compliance with the Article 40-42 in the BiH Census Law.	End Feb.	No		2

37. BHAS had prepared a draft of the "Procedure of selection of all census bodies and census staff". The draft was considered and commented by the entity statistical institutions and then finalised. More precisely the following procedures were prepared:

- Procedures for the selection of the census commissions of the local self-management units, including cantonal census commissions;
- Procedures for the selection of state and entity instructors;
- Procedures for the selection of municipal instructors;
- Procedures for the selection of enumerators.

38. In addition were prepared:

- Criteria for the selection of members of census commissions, municipal instructors and enumerators;
- Form for appraisal of applicant for the municipal instructor or enumerator;
- Template for decision on establishment of cantonal census commission for census of population, households and dwellings;
- Template for decision on establishment of census commission of the municipality for the census of population, households and dwellings;
- Public invitation to apply for the municipal instructors and enumerators in the territory of the municipality;
- Ethnic structure of personnel (municipal instructors, enumerators and census commissions of the local self-management commissions) involved in the census operations on the basis of ethnic structure of the population according to the last Census conducted in 1991;
- Application form for participation in the census (prepared in Cyrillic and Latin alphabet).

39. All prepared procedures, forms and templates will be attached as annexes to the respective manuals for census organisation.

40. The procedures for the selection of the census field staff in accordance with article 26, point 4 and 5 (that will ensure the ethnic structure from 1991 and where is not possible at least 50 %) were accepted by the three institutions. But new issue was raised about the validity of the 1991 Census, which data should be used, preliminary or final results.

41. No procedure was prepared on how to conduct the enumeration in the areas of the boundary line. RS Statistical Office expressed the opinion that delineation of the boundary line shall be determined before the census. The Geodetic institution of FBiH had submitted data about the estimated number of buildings and households (about 500) in the zone in the FBiH part.

42. The organisation of the enumeration of the BiH citizens working or residing abroad for more than 12 months in compliance with the Article 40-42 in the BiH Census Law is not defined yet and the preparation of the methodology, questionnaires, as well as application (if any) for enumeration through internet has not started yet.

43. The enumeration of the BiH citizens working or residing abroad for more than 12 months that are members of households residing in BiH is explained in the Census Methodology.

### **Assessment**

44. The activities referring to preparation of the procedures and documents required for census field organisation are progressing. However, there is no progress in drafting procedures for enumeration in the areas along the boundary line and drafting the Methodology on enumeration of the BiH citizens working or residing abroad for more than 12 months in compliance with the Article 40-42 in the BiH Census Law.

### **Recommendations**

45. Definition of the state and entity boundaries is a political issue, and it is unlikely to be solved before the census. Statistical institutions should stick to the technical issues and should only define procedures on how to prepare the Census and perform the enumeration in the areas of the boundary line.

46. However, as stated in previous reports, it is possible to identify enumeration areas along the line between entities and agree on a procedure to enumerate population living in these areas. For example, a procedure can be to agree on which entity will enumerate these areas (as it could be observed during the pilot census), or to send two enumerators, one from each entity, or that BHAS directly conduct enumeration in these areas. Population of these areas will then be included in the BiH population, but not in the population of any entity, until decision has been made to incorporate each area to the territory of an entity.

47. Therefore, the SC reaffirms its recommendation to determine an agreed procedure to conduct census enumeration in the areas along the entity boundary line.

## **CENSUS QUESTIONNAIRES**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Draft of revised questionnaire based on Pilot Census	End Feb.	Partly achieved	Two draft versions of P-1 submitted to Council of Ministers	2
Field Test of the revised Census Forms	Beg. Apr.	No	No plans	0
Adopted final Census forms	End Apr.	No	Decision expected from the Council of Ministers on 3 April 2013	0

48. Census forms P1 and P2 have been almost agreed by BHAS, RSIS and FOS, and approved by the Central Census Commission in February 2013. However, disputes about question 19 related to citizenship, question 24 on ethnicity/nationality, question 25 on religion and



which questions are to be answered for such persons (questions that are prescribed in Article 40 paragraph 2).

54. A separate individual form and method of enumeration for BiH citizens working or residing abroad for more than 12 months, as provided by article 40 of census law and prescribed in article 40, is not prepared yet.

### **Assessment**

55. The remaining work on finalisation of the Census forms (referring questions 19, 24 25 and 26) is beyond technical discussions among experts from the statistical institutions and depends on the decision of the Council of Ministers.

### **Recommendations**

56. It is recommended that an agreed version of the census questionnaires be available according to the indicated plan of activities i.e. beginning of April 2013 in order to enable further preparation and taking census in October 2013.

57. The SC reiterates the following recommendation already given in the 6<sup>th</sup> and 7<sup>th</sup> SC Report:

- Strictly open questions on ethnicity, religion and language;
- Include in P1 and/or P2 forms a unique building ID code to be copied from the census maps by enumerators;
- Include instruction on the P-1 form which questions are to be answered for household members working or residing abroad for more than 12 months, to avoid extend unnecessarily the interview;
- Creating a separate individual form for BiH citizens working or residing abroad for more than 12 months method of enumeration prescribed in article 40, paragraph 3 and 4;
- Conducting a light test of the agreed versions of the census forms.

58. Regarding citizenship, the formulation chosen should enable unambiguous collection of country citizenship as recommended internationally.

## **MANUALS OF INSTRUCTIONS**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Manuals of Instructions revised and adopted	End May	No		0

59. According to the Census Law, BHAS is responsible to prepare and prescribe the Census Methodology. The document titled as “Methodology for preparation, organization and

conducting the Census of population, households and dwellings in BiH, 2013” consists of 3 parts:

- General part (Census Law, definitions and explanations about the census aims, units to be covered, census reference moment, period of enumeration, census participants, census forms etc.);
- Organization and conducting (performing) the census;
- Instructions for enumeration.

60. The Census Methodology document is designed as a framework based on which the manuals are prepared such as: the Manual for Organization and conducting of the Census, Manual for enumerators and municipal instructors and Manuals for enumeration of special categories of persons. These manuals are drafted with the assistance of BiH Ministry of Foreign Affairs, BiH Ministry of Justice and BiH Ministry of Defence.

61. According to article 47 of the Census Law, “More detailed preparation, organisation and carrying out of the fieldwork may be additionally regulated by the entities and the Brcko District legislation which must be in line with this Law”. According to this provision and based on the framework Census Methodology prescribed by BHAS, the entity statistical institutions can prepare the Manual for Organization and conducting of the Census in their respective entities.

Responsible for preparation	Title of the document	To whom is aimed
BHAS	Methodology for preparation, organization and conducting the Census of population, households and dwellings in BiH, 2013.	- State instructors - Entity instructors - Members of Census Commissions
Entity statistical institutions (that are obliged to submit for BHAS approval before adoption)	Manual for Organization and conducting of the Census (based on the second part of the Census Methodology)	- Entity instructors - Members of Census Commissions
BHAS	Manual for enumerators and municipal instructors (based on the third part of the Census Methodology)	- Enumerators - Municipal instructors
BHAS	Manual for conducting enumerations of the persons working in BiH embassies and DCR	Ministry of Foreign Affairs of Bosnia and Herzegovina and the Staff responsible for enumeration
BHAS	Manual for conducting enumerations of the persons in prisons	Ministry of Justice of Bosnia and and the Staff responsible for enumeration



BHAS	Manual for conducting enumeration of the BiH military personal abroad in military missions.	Ministry of Defense of Bosnia and Herzegovina and the Staff responsible for enumeration
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62. The methodology team is working on the preparation of the framework Census Methodology and the Manuals listed in the table above. Bases for the Methodology are the Manuals used in the Pilot Census. The team is making updates and amendments in those Manuals in accordance with lessons learned from the Pilot Census, recommendations received from the SC and amendments in the census questionnaires.

63. The three manuals for conducting enumerations of the persons working in BiH embassies and DCR, persons in prisons and BiH military personal abroad in military missions are prepared and a meeting with the respective Ministries is planned for the last week of March to adopt the manual.

### **Assessment**

64. The preparations of updated Methodology and Manuals are in progress. There are still discussions among the three statistical institutions to agree on which document should be sent to which participants. According to present state and statements of the team the Methodology and Manuals should be prepared before the planned deadline.

65. Methodology/Manual on organisation of the enumeration of the BiH citizens working or residing abroad for more than 12 months in compliance with the Article 40-42 in the BiH Census Law is not defined yet.

### **Recommendations**

66. It is recommended to continue the process of revision of the census Manuals in light of the lessons learned from the Pilot census, and SC recommendations given so far, including the appropriate updating in accordance with the revision of the census questionnaires.

67. It is recommended to the statistical institutions to make a clear distribution list of the required number of each document.

## **PLANS FOR TRAINING AND TRAINING MATERIALS**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Training material revised and adopted	End May	No		0
Training census materials printed and distributed	End Aug.	No		0

68. The Methodology group has updated the plans for training. Training for the first level (for the state and entity instructors- about 240 persons) is planned to be held in 5 groups, 3 in Sarajevo and 2 in Banja Luka. The teams should be composed of representatives from the 3

statistical institutions. The entity statistical institutions agreed that BHAS staff would be included as state instructors in the Census in the entities, in municipalities that needs more than one instructor.

69. The training materials will be amended and tailored for specific groups of participants. For example, the members of the Census Commissions will have one (or 2 days) training with different content compared to the training of the municipal instructors and enumerators. More practical examples will be included in each training.

## CARTOGRAPHY

Milestone	Date	Done?	Remarks	Nb. of weeks delay
Finalised cartographic work and final list of EAs by municipality	End Feb.	Partly	The cartographic work will be finalised by the end of March 2013 for all BiH with the exception of about 30 per cent of the territory of RS where up-to-date orthophotos are not available.	2
Establishment by the BHAS of a single register of census spatial units (Art. 20 BiH census law)	End Feb.	No	The methodology to establish the register was defined by the three statistical institutions but the single register was not created, RSIS disagreeing on the setting-up of such register.	2
Census maps prepared in electronic format	End Mar.	Partly	Census maps will be ready by the first week of April 2013 for all BiH, with the exception of about 30 per cent of the territory of RS where up-to-date orthophotos are not available. The quality control procedures established by all three statistical institutions are expected to be finalised by the end of May 2013	0

70. Preparations for cartographic work have significantly progressed and are almost finalised in all three statistical institutions. In FBIH work has been completed by the outsourced companies jointly with the Geodetic Administration and the FOS is performing a quality control on the GIS database and on the census maps, which is expected to be completed by April 2013.

71. In the RS, the preparatory cartographic work was completed by the RS Geodetic Administration for about 70 per cent of the entity. The remaining 30 per cent is not covered by up-to-date orthophotos as in the rest of BiH. Those orthophotos will be made available to the RS Geodetic Administration in the framework of the EU funded project “Spatial information

services for BiH - phase 2: digital ortophoto maps". The earliest date for their availability is end of June 2013. However, the RS Geodetic Administration is investigating other options to cover the remaining RS territory, such as aerial images taken during the last years, satellite images, cadastral maps duly resized to a larger scale and duly updated in the field. The RSIS has developed an application for quality control to revise and validate census maps prepared by the Geodetic Administration. At the time of the mission, about 25 per cent of the total EA census maps had been validated.

72. In the Brcko District, the process of map updating was finalised and census maps are being prepared by the BHAS. A quality control mechanism was also established to check and validate the maps produced. This activity is expected to be finalised by the first week of April 2013.

73. At the time of the mission, the overall number of demarcated EAs in BiH was 24 394, whose 15 779 in FBiH, 8 161 in RS, and 454 in Brcko District. It was reported that these figures might slightly change when the validation process of the EA maps will be finalised. The number of EAs where it is estimated that no households are living is 1 046, 800 in FBiH, 243 in RS and 3 in Brcko District. It was agreed between the three statistical institutions that no single enumerators would be assigned to EAs with less than 20 households. Instead, those areas will be covered by the enumerators assigned to their adjoining EAs.

74. In a meeting of the working group on cartography organised in Brcko District on 20 and 21 February 2013, it was agreed between the Geodetic Administrations and statistical institutions that the unique ID code of each address or building reported on the maps will be included on P2 and P3 forms. During the meeting, it was also agreed to prepare a specific form to be used by enumerators to number and list dwellings inside buildings, in order to monitor the coverage of dwellings during data collection operations. Those decisions are expected to be reflected in the final versions of the census forms.

75. A single register of spatial units was not established by the BHAS as stated in the BiH census law. This was due to a disagreement among the statistical institutions to provide BHAS with the relevant data for its implementation. The RS Geodetic Administration expressed its availability to provide a list and codes of the spatial units without the electronic files showing their boundaries. The FOS expressed his willingness to transmit to the BHAS the list, codes and boundaries of the spatial units on the basis of a common agreement with the RS entity.

76. As already reported in the first report, the register of spatial units in BiH is composed of the following units:

- State
- Entities/District
- Cantons (in FBiH)
- Towns
- Municipalities
- Cadastral Municipalities
- Inhabited Settlements
- Local Communities
- Statistical Areas
- Enumeration Areas.

77. This classification was decided by the Cartography working group who defined the methodology for the census cartography, and reflected in the document “Study on technology for production of cartographic documentation for 2011 census”. The document mentions the need to establish a common register of spatial units.

78. The definition, coding and visual representation of a hierarchical scheme of the spatial units for census preparations, implementation, and for data dissemination, indicating also the relationships between them, ensures that the boundaries of the spatial units are consistent, and it is an important monitoring tool during data collection operations. However, the most important units seem to be those reported in the census forms, namely municipalities, EAs and buildings with addresses and/or building numbers.

### **Recommendations**

79. The statistical institutions should finalise the preparation and validation of census maps by April 2013. The RS Geodetic Administration and RSIS are encouraged to quickly investigate other options to prepare census maps for all the part of the territory not covered by updated orthophotos, in the event that they will not be available by June 2013.

80. The final number of EAs should be defined by the end of March 2013.

81. The statistical institutions should include in the census forms P2 and P3 the unique ID number of addresses and buildings by the end of March 2013.

82. The three statistical institutions should take a common decision for the implementation of a common register of spatial units by the end of March 2013. As a minimum requirement, the register should include names, codes and electronic files in GIS format of municipalities, EAs and buildings.

## **LOGISTICS**

<b>Milestones</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Detailed Logistic Plan	End March	Most parts completed	Expectation for one or two weeks delay	0
Tender specification for printing and distributing census materials adopted	End Feb.	No	Process of adoption of the tender is unclear. This is a very critical deadline as it is the latest date for announcement of the tender to finish the tender processes in mid-July and start printing questionnaires.	2

83. The timetable for census logistics and the tender process were revised according to the date of census enumeration in October 2013. It was planned to finish adoption of census

logistics for printing and distribution of census materials by the end of February and the announcement for the tender was planned to be completed by the middle of March. However, these activities are almost one month behind schedule.

84. The procurement consists of the printing of census materials, assembling boxes for enumerators, organisation of the delivery and return of census materials. The materials will be directly transported from printing house to the municipalities. Census materials will include the census questionnaires, the instructors, training materials, ID cards, etc.

85. The procedures for census logistics have been prepared in eight steps by the logistic working group;

- i) Packing census materials in the printing house;
- ii) Distribution of packed materials from the printing house to the municipalities;
- iii) Storing census materials in the municipalities- specifications for premises to store census questionnaires and other materials are largely prepared but not finished;
- iv) Collecting materials from the municipal commission –specifications for this procedure have not been identified yet particularly the roles of MCCs and state/entity instructors for packing census materials and preparing the related forms;
- v) Transporting census materials from the municipalities to the central place (data processing centre);
- vi) Receiving census materials and storing them in the central place;
- vii) Sending the census forms from storage to the scanning room
- viii) Receiving the census form from scanning room and storing in the central place;

86. Upon request of BHAS, RSIS has provided the number of estimated census questionnaires by municipalities but FOS did not. BHAS made second request to RSIS and FOS to send estimated number of census questionnaires by languages and municipalities. The estimated number of census questionnaires is calculated using census maps with addition of 20 percent for reserve questionnaires. Ten percent of reserve questionnaires will be sent to the municipalities with other census materials and the remaining 10 percent will be stored in the printing house and sent upon request of MCCs. In addition, the tender will include a clause for emergency printing census materials for 5 percent if needed for any reason.

87. The method of tender for printing and delivering census materials has not been finalized yet. It will be an international procurement but the possibility of having two lots in the tender is still under discussion. The working group expressed that they are discussing the advantages and disadvantages of having two lots in the tender.

88. The volume of printing materials has not been decided yet. The logistic working group indicated that printing materials for Cantonal Census Commissions and MCCs have not been decided yet.

89. The procedures for census logistics and the tender should be completed by the end of March. The procurement tender is expected to be launched by mid-April after adoption of procedures and tender specifications by the entities.

### **Assessment**

90. The procedures for census logistics and the specifications for the tender were not completed; therefore the SC was not able to see the document for the tender. All information about the census logistics and the tender were provided by the representative of BHAS.

91. It was not possible to get clear information about the method of the tender from the working group, as it is still not decided. The group has not explained the benefits of having two lots in the tender.

92. Duration of announcement of the tender and evaluation of proposals will take around three months. If the tender is announced in mid-April, the process would be finalized by the mid-July, so there are only two and half months remaining for printing and distribution of census materials. This is very tight schedule and does not allow any delay in tender process.

### **Recommendations**

93. Procedures for census logistics and the tender specification have to be finalized and adopted by the beginning of April. The tender announcement has to be launched at latest by the mid-April. As the enumeration will start on the first day of October 2013, the census materials should be delivered to the MCCs around one week before the enumeration, therefore, there is no flexibility for any delay in this process.

94. Considering very tight schedule for completing the tender process, good communication among three institutions and immediate action for adoption of the tender is necessary to launch the tender on time. Also, during the tender process, the entities should have close cooperation to give quick decision for unexpected factors that may delay the availability of census materials.

95. The SC will carry out next mission in late April. The tender process shall be finished and the announcement shall be launched before the next mission of SC. Indeed, the accomplishment of this milestone by mid-April will be one of the key indicators for conducting the census in October.

## **COMMUNICATION AND OUTREACH CAMPAIGN**

<b>Milestone</b>	<b>Date</b>	<b>Done?</b>	<b>Remarks</b>	<b>Nb. of weeks delay</b>
Census Communication and Outreach Strategy agreed	End January	No	A draft strategy is produced as framework for an updated and final strategy	9
Internal organisation on communication agreed	End January	No	Nothing has been done till now – neither by Agency nor by EU-HCPR 2	9

Management and communication staff trained	End January	No	Was postponed by the Agency because the census was postponed	9
Contract for Communication Campaign awarded	End March	No	Expected to be signed first week of April	2
Census information campaign carried out	20 Sept	No	Contract will be signed with external company	0

96. A draft Communication and Outreach Strategy has been produced by the EUPHC. It received initial comments from the entity SIs and later additional comments from RSIS but a finalised strategy has not been presented to the beneficiary yet. The draft strategy was initially made for a mid and long term outreach and communication phase followed by a short but comprehensive communication campaign right before the census informing the population about the procedures of the census.

97. As the EUPHC-team was contracted for a census planned to take place in April 2013, it is waiting for a possible prolongation of the present contract ending in July. In the meantime the TA team has stopped hiring short term experts and will not engage a communication expert to update and finalise the strategy. The EUPHC-team will wait till a contract is signed by the Public Relation-company (PR) that will carry out the communication campaign immediately before the census and will ask this company to contract the communication expert who drafted the strategy, to finalise it.

98. The EUPHC-team informed that the draft communication strategy had been agreed as a framework for the work of the PR-company. However, the first draft was tentatively agreed by the directors but later comments seem not to have been presented to the entities. The EUPHC-team has included the recommendations on Q 24-26 from 6th mission report and has added a suggestion for the division of work between the Agency and the entity SIs. This suggestion has not been discussed yet.

99. The EUPHC-team envisages that the communication campaign will begin in July, carried out by the PR-company. Besides the work done by this company there is no budget to employ short-term communication experts and no additional activities will be carried out. The only EUPHC resource-inputs into outreach and communication seem to have been 15 working days to a communication expert drafting the strategy and, as described in mission reports 4 and 6, the collaboration between the EUPHC and the beneficiaries has been strained in the field of communication.

100. No meetings have been conducted since August 2012 in the work group for communication and the communication responsible persons in the entity SIs feel left alone. The head of the dissemination unit in the Agency has refrained from inviting the entities and from informing them because there was no final strategy. However, she will try to establish regular internal communication with the colleagues in the entities in order to cultivate a sense of ownership and coordination.

101. As a consequence of the postponement of the census, there has been no training of management and staff. The current economic restraint of the EUPHC-contract makes it unlikely that training will take place before a new contract is signed.

102. The head of dissemination unit of the Agency considers starting directly with the development of a draft action plan for outreach and communication with suggestions on how to share the tasks between the three offices making also full use of the local credibility and media relations of the entity SIs. The Agency plans to employ a communication officer in April.

103. Following the opening of a public email address for questions concerning census, BHAS received many questions from the media. In the meantime, the Agency prepares plans on how to reach areas in which mainstream media are not adequate means to reach all the population.

104. There is a realistic understanding that the Agency and Entity offices have to do communication and outreach themselves, except for the final campaign that will be carried out by an external PR-company. The external PR-company is expected to be contracted mid-April.

105. According to the statistical offices, since the end of the pilot census and postponement of the main census there has been less media coverage. However, as soon as the census gets nearer it is expected that the media will turn again to the census.

106. A network of around 40 civil society organisations and actors – the Initiative for Free Declarations – remains committed to advocate for open lines for questions 24-26, and is strongly against any formulation of question 19 that might allow for combining the national citizenship with entity citizenship.

107. The network is disappointed that the EU Delegation has not stressed that questions on ethnicity/nationality and religion are unnecessary for the EU. The members are worried that the Agency and the Council of Ministers should decide to close questions 24-26 more than in the pilot census. In that case they seem determined to organise a boycott of the census.

108. The NGOs consulted feel that the Agency should be more proactive in communicating about the sensitive issues and also more consequently and quickly correct misunderstandings or false information in the public. However, it has been difficult to communicate clearly about questions 24-26 because the final version had not been agreed yet.

109. It seems that the slogan and the graphical Logo have been agreed, but the RSIS objected to the text under the logo mentioning "Census of Bosnia I Herzegovina".

### **Recommendations**

110. It is recommended that the Agency and the two entity statistical offices immediately develop an action plan for outreach and communication and agree on how to share the implementation. The draft communication and outreach strategy may serve as inspiration for the action plan.

111. In order to immediately begin the implementation of outreach and communication activities, it is recommended that the EU Delegation ensures that the EUPHC finalises the communication strategy, as soon as possible, and in agreement and cooperation with the Agency and the entity Statistical Institutes, including detailed action plan, budget allocations etc.

## **LOGISTICS MANAGEMENT (CENTRAL MONITORING INFORMATION SYSTEM)**



Milestone	Date	Done?	Remarks	Nb. of weeks delay
Central Monitoring Information System (CMIS) developed	End Mar.	No	Draft version agreed by the three institutions developed by beginning of May.	0

112. The Central Monitoring Information System (CMIS) will allow store and manage the information related to the EAs, the staff assigned to them and their contracts, the labelling of the questionnaires and boxes with a unique barcode, the tracking of the materials to/from the field and other logistic information that are crucial for the management of the fieldwork. The CMIS application will consist in a web-application connected to a central database. The System is currently being developed with the support of the EUPHC TA Project.

113. The system will be composed of three main parts:

- *Human resources management*: will permit manage all staff involved in field operations, like EN, MI, SI, MCC, including their contracts. At the moment, the system requirements for this part are not yet specified;
- *Logistic monitoring module*: will permit track the status of the material from box assembly to processing. At the moment, the system requirements for this part are drafted;
- *Preliminary results entry*: will allow enter the preliminary results as soon as the fieldwork operations will end. More exactly, the P3 summary data (first page) will be entered in the municipalities by the MCC while the remaining P3 data (other pages) will be entered when arrived in the processing centre. This part of the application was completely developed and tested during the pilot census.

### **Recommendations**

114. The system allows managing the different logistics phases and will improve the management of the census. However, no comprehensive document describes the complete features of the system as well as the roles and responsibilities of the different actors involved. In addition, specific resources to be adopted in the different phases are not completely defined. It is thus recommended to complete the documentation of specifications.

115. To finalize and carefully test the system. To define users and resources for each phase.

116. To produce manuals and training materials for the different users involved in the process.

## **DAILY PROGRESS REPORT SYSTEM (FORMERLY CENSUS REPORTING SYSTEM)**

Milestone	Date	Done?	Remarks	Nb. of weeks delay
Daily progress report System developed	End Mar.	No	Draft version agreed by the three institutions developed by beginning of may	0
Field Test of the Daily Progress Report System	Beg. Apr.	No	Final version expected to be tested by mid may	0

117. The traditional method of monitoring fieldwork coverage implies that enumerators report daily information about number of dwellings and number of persons interviewed to their instructors, then instructors aggregate these data at their own level and transmit them to the regional coordinator. Finally, the regional coordinator transmits the data aggregated at the regional level to the referent statistical institution. Given the huge number of persons involved in the fieldwork operations, it seems optimistic to have accurate daily information about the coverage. This situation may lead to the fact that the intervention of the statistical institutions in problematic areas may not happen timely.

118. An innovative approach under evaluation by the three statistical institutions for monitoring the fieldwork coverage is the use of SMS messages. In this approach each enumerator is instructed to daily contact his instructor and transmit to him his daily figures in collecting the census forms. Then the instructor is aggregating the figures of his enumerators at the level of the instructor area and transmits via SMS those aggregated figures to a central database. Such system could even enable State Instructors access a web-based application displaying the progress of their Municipality Instructors in covering their own areas.

119. A different alternative that is under evaluation is a web-application to transmit Municipality Instructor's daily figures to a central database. Such a solution implies that the Instructors will all be able to daily access to the Internet, even if located in remote areas.

120. Since the last SC mission, there is no significant progress in planning to monitor the progress of the operations during the enumeration phase. The Agency and two entities are still considering developing a web based application or to use SMS text message to collect basic information such as number of enumerated population and number of enumerated dwelling by enumeration area.

### **Recommendations**

121. The type of information that is needed to be collected via the system should be defined and detailed.

122. Whatever the specific mean that will be used to collect the information, a basic system should be developed for monitoring the fieldwork progress and its effectiveness tested during the field test of the revised census forms. Then, on the basis of the results of this field test, a more final system should be developed and carefully tested.

123. Instructions shall be developed for the fieldwork staff to properly use the system.

## DATA CAPTURE (E-FLOW PLATFORM)

Milestone	Date	Done?	Remarks	Nb. of weeks delay
E-flow platform developed with the final questionnaires	End May	In progress		0
E-flow platform tested with real questionnaires	End June			0
E-flow platform operational	Mid Sept.			0

124. The e-flow platform works in the following way:

- Once the questionnaires are scanned, the images are first organized in *collection* (a set of 15 forms with the same alphabet) and passed to an IMR/ICR engine that attempts to recognize the contents of the answers.
- Next step is the *tile* phase in which the images of all interpreted digits of the collection are presented to an operator according to their current value. If a value appears in the wrong group, operators can easily mark it for corrections. *Fuzzy match* is then used to attribute a specific confidence value to the interpretation of each character. Depending on the confidence of the recognition process (tile and fuzzy match) the engine either accepts the inferred result or rejects it.
- Next phase is the *completion* in which the field containing values selected in tile phase or having a low fuzzy match index are manually verified by images. In this phase also field that doesn't respect the validation rules are verified by images.
- Last step in the e-flow platform is the *supervision* phase in which a specialized operator, following some pre-determined rules will try to solve some of the logical inconsistency that are in the questionnaire. Finally the data are *exported* in an SQL server database.

125. In addition to the above phases, a parallel process will be in place for quality assurance. During this process, a selected group of operators will re-process a fixed percentage of the questionnaires already exported. Indicators about differences between exported and re-processed data will be used to evaluate the quality of the single operators as well as the quality of the whole capturing phase.

126. The developing of the e-flow platform was completely outsourced and developed on the base of the pilot census questionnaires. It seems that some problems can be raised by the company that is in charge to develop the final e-flow platform since they are making contractual opposition to anything that will produce changes on the system design of the platform. Moreover their contract is supposed to expire by mid-April 2013.

127. No staff was involved in the process of developing the current e-flow platform. A set of basic training on how to develop an e-flow platform with TIS will start in April. The company will anyway provide assistance on the platform for one year after the census.

128. A backup data entry system was developed with the support of the TA Project to process those questionnaires that are damaged or not properly recognized by the Data Capture System. This manual entry system was actually used to enter the questionnaires of the pilot census.

129. Personal names are very sensitive data that may lead to the identification of individuals and there is a strong need to preserve them securely. Names should be processed according to strict rules of individual data protection and used only for the essential statistical purposes planned within the census data processing. During the processing of census data, names are needed for two main aims: identify duplicate records and perform the record linkage of the census individual data with the PES records.

130. It should be noted that personal names are not the only potentially sensitive variables collected in the census. The combination of the variables on ethnic affiliation, religion and mother tongue should also be considered as sensitive.

### **Recommendations**

131. The big advantage of using IMR/ICR technology is that at any points it is possible to go back to the images and verify if the data are properly acquired. A modern approach to IMR/ICR should include the localization and the verification of the main inconsistencies but only with the purpose of correct mistakes of the recognition process, not with the objective of solving inconsistencies that exist in the paper questionnaires. These inconsistencies should be solved in a second step (data editing and correction). Indeed, controls to make sure that the capture is accurate are in the scope of data capture, but the role of data capture is not to correct inconsistencies that are already in the questionnaire.

132. One of the objectives of the IMO SC is to ensure that data processing data was carried out in conformity with international standards. In this view the following recommendations are suggested:

- Move all validation rules from the phase of completion to the phase of data editing and correction, except for range values;
- Remove any kind of codification from the phase of completion. Tile or mass verification for characters and checkbox may be also considered at this stage;
- Move any kind of codification to the supervision phase;
- Export for backup all data after each of the main phase of the e-flow platform: after recognition, after completion and after supervision.

133. Define a detailed strategy to ensure that there is no risk of disclosure or misuse of personal names and potentially sensitive information, both during the data processing and when cleaned data are available. The safeguard measures to ensure that there is no risk of disclosure or misuse of personal names should include the encryption of the data as soon as captured in digital form. In addition, the encrypted data should be kept in separate tables of the census database and the encryption keys in separate safes. Personal names should also not be included in any dataset that will be used for the production of the results.

134. The success of the data capture process depends to a certain extent on the training of the staff involved in the capturing operations. Specific manuals and training sessions should be organized for the different actors involved in the data capture phase: scanner operators, completion operators and supervisor operators.

## CODING, DATA EDITING AND DATA CORRECTION

Milestone	Date	Done?	Remarks	Nb. of weeks delay
G-Code application and Logical check application are operational	Mid Sept.			0

135. The Occupation classification adopted in the census is the international occupation classification ISCO-08. The Industry classification adopted in the census is the General Industrial Classification of Economic Activities NACE. The industry in which a person is engaged is determined by the main economic activity carried out in the local unit. The education classification adopted in the census is International Standard Classification of Education ISCED. The ISCED classification has been designed as an instrument suitable for assembling, compiling and presenting educational statistics both within countries and internationally.

136. A global strategy was developed on how to perform the coding of the three main international classifications adopted for the census (ISCO, NACE and ISCED) and an ad-hoc application called g-Code is under developing to approach this issue.

137. Concerning the questions on mother tongue, ethnicity affiliation and religion it is to be underlined that a final decision on leaving them completely open or semi pre-coded is not yet taken and that the final decision may require some adjustment of the coding strategy.

138. When the operation of coding is concluded starts the editing and correction of the data. The procedure foreseen by the three Statistical Institutions for the whole data-cleaning phase is to use an ad-hoc application called Logical check that is currently under development. This application will permit to define and test deterministic corrections on a temporary copy of the census data. The idea is to pre-define and test using pilot census data a set of deterministic corrections that will be applied to the census data and - eventually - integrate them with new corrections rules, after having analyzed the complete set of census data.

139. Other kind of editing activities are related to the relationships pertaining to the family nucleus inside the households, or to the individuals inside a nucleus. These relationships can be very complex, and the resolution of inconsistencies at this level can be very difficult. These kinds of problems cannot be solved neither with basic imputation techniques, nor with simplistic deterministic programs: it is in general necessary to apply a set of rules that take in account the number of family nucleus inside a household and several characteristics of the individuals inside each family nucleus. Such operation requires the use of special purpose system or to develop ad-hoc complex applications.

### **Recommendations**

140. Estimation of the timing and of the resources needed for coding ISCO, NACE and ISCED should be produced and reflected in the budget.

141. Concerning the questions on mother tongue, ethnicity affiliation and religion it is to be underlined that a coherent IT strategy should be developed as soon as a final decision will be taken. It must be also noted that coding the "other specify" modalities or the whole set of answers should not affect in a significant way the time and the budget required to accomplish the work. After the coding phase no changes should be allowed to the potential sensitive question as religion, ethnicity affiliation and mother tongue.

142. Due to their sensitivity, it is **strongly recommended** to record all answers on questions on ethnicity, religion and mother tongue without any other aggregation than grammatical variations (for example adjective/noun, or masculine/feminine form). Dissemination should be made of all possible answers found with their frequency, users making their own aggregation as they wish. For example, it was observed some lobbying to aggregate during processing "Bosniak" and "Muslim", for historical reason. The SC urges Statistical Institutions to keep the original information, first because statisticians have no legitimacy to proceed to such aggregation, and second because the analysis of each of this possible answers may be of interest for researchers, for example crossed with characteristics of age.

143. The procedure foreseen by the three Statistical Institutions for the data cleaning seems to leave much discretion to the human intervention of the specialized staff that will test and define the deterministic corrections. However, deterministic correction is rarely feasible for censuses, essentially because of the high risk to introduce bias in the data.

144. The conditions for detecting and correcting the inconsistencies are usually specified in specialized applications that perform automatic error localization and correction based on imputation from a set of donors. A discussion should be initiated on the opportunity to use unbiased and more sophisticated statistical methods for data correction. The SC is proposing here the Fellegi-Holt approach and the related imputation methods, considering also the fact that the three Institutions are not new on that approach. Indeed, it was recently used in the household budget survey where - with the help of technical assistance support - the three Institutions defined the rules for the localization of the errors and adopted the Fellegi-Holt approach both to correct inconsistencies and missing data.

145. Define a proper strategy to approach the correction of the relationships pertaining to the family nucleus inside the households, or to the individuals inside a nucleus.

## POST ENUMERATION SURVEY (PES)

Milestones	Date	Done?	Remarks	Nb. of weeks delay
PES prepared: questionnaire, methodology, manuals	End Aug	No	No clear deadline for finalization of the questionnaire and methodology.	0

PES sample selection	Mid Oct	No		0
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146. The data collected during the pilot PES was captured manually in January. Pilot census data was captured also manually in December 2012. Individual pilot census records and original census questionnaires were given to the PES team only after the three directors signed an agreement, which took around one month.

147. The PES team consists of two members from each entity and two members from IT group. The team with the consultant have finished the first phase of individual matching. The method of automatic record matching was applied using the personal ID numbers, name and surnames to match pilot census database and pilot PES database. The matching of individual records was carried out by representatives of BHAS and FOS without participation of representatives of RSIS. It was explained by the team leader that RSIS did not agree to meet in Sarajevo for matching operation and suggested to meet in Banja Luka. However, as the original questionnaires are needed for matching operation, it was necessary to conduct the meeting in the Agency.

148. Next step for matching two databases will be matching the dwellings and households. It was observed that there is no complete steps and methodology for matching operations and analysis of PES results. Indeed, there is no methodological document specific to the PES questionnaire to carry out matching operation, testing the methods for measuring coverage and content errors and finally analysis of PES results. In addition, there is no clear timetable to carry out these activities and finalization of the pilot PES. The Agency emphasized that the methodological document will be prepared in the process of testing all stages of PES, which is not a very practical and operational approach.

149. According to the preliminary results of individual matching, around 97% of total PES records (1223 individuals) were matched with the enumerated individuals in the census database. Out of matched cases, 10% of them were matched fully manually while 90% were matched using various rules of combination of ID, name, surname, address, house number. On the contrary, around 10% (147 cases) of the enumerated individual in the pilot census were not enumerated in the pilot PES while 38 individuals were enumerated in the PES but not enumerated in the pilot census. No information was available for matched households during the mission.

150. Following the analysis of the results of pilot PES, the PES questionnaires, methodology and organization of the PES enumeration will be amended. One of important issues is the amendment of the roles of entity instructors and census commissions in conducting PES. In the pilot PES, their roles were mainly assisting the controllers and municipal instructors for checking the border of EAs and informing the public about the objectives of the pilot PES. The Agency expressed the need for clarification of the roles of all field staff for PES to eliminate confusions and overlapping of duties in line with the census law.

151. During the pilot PES, few people (9 persons) refused to participate. The feedbacks from the pilot PES indicated that the public should be informed well advanced before the real enumeration about the PES and its objectives and methodology.

152. Initial methodology of PES has not been revised according to the cartography work. As it was agreed before, the size for PES would be 200 EAs (initially it was about 1% of present estimated number of EAs). The Agency estimated the cost of all PES activities around 375,000 KM.

153. The agency explained two possibilities for sample methodology; i) selecting EAs for PES from census maps (EAs) or ii) selection EAs for PES based on the preliminary results of the census to take into account enumerated dwellings in the enumeration.

154. On basis of lessons learned from the pilot PES, the training programme for controllers and municipal instructors will be for two days and will be organized in two central places.

### **Assessment**

155. Progress were made in data capture of pilot PES and pilot census data and reaching a consensus for the methods of sharing individual records and original census questionnaire with the PES team.

156. In principle, automatic matching methodology will be used, but procedures and rules are not clearly determined. Considering the first seven questions in the individual questionnaire for identification of the status of the enumerated persons, matching procedures should include a phase for matching the status of the persons enumerated in the households. Indeed, the matching procedures were not prepared specifically to the census questionnaire of BiH.

157. PES questionnaire, manual and training materials have not been updated on the basis of the findings of pilot PES. These materials will be updated after finalization of the census questionnaires and instructions.

158. On the basis of lessons learned from the pilot PES, some difficulties can be expected regarding the role of the entity instructors in the organisation and conducting of PES because of different interpretation of Article 20 (Tasks of the Agency) in the Census Law which prescribed that the Agency shall “Carry out Control Census /Post enumeration survey in the whole territory of Bosnia and Herzegovina, in cooperation with the entity statistical institutes”.

159. It is reminded that PES shall be independent from the census. This practically means that the probability for a person or household to be included in the PES shall be the same whether the person or household was included or not in the census. In that regard, sampling the PES EAs taking into account the results of the census is a clear violation of this principle. For example, excluding EAs with no population in the census from the PES sample would lead to neglect cases where these areas were incorrectly enumerated in the census.

### **Recommendations**

160. First of all, methodological document for evaluation of PES data specific to the census questionnaire of BiH shall be prepared for all stages of PES, including matching procedures, identification of status of persons, how to deal with unsolved cases, reconciliation visits and methods for estimating coverage and content errors. In addition, the planned methodology should be tested using the pilot PES data and then the procedures shall be finalized on the basis of lessons learned from the pilot PES.



161. As the census questionnaire includes seven questions to identify the status of the persons regarding a member of households or temporary present in the households, the procedures for matching should include a stage for comparison of the status of matched person in PES and census.

162. According to the initial plan, the PES size is determined 200 EAs as 1 % of estimated total EAs. On the basis of census cartography, the number of total EAs is estimated around 24000. It is suggested to adjust the size of PES if the 1% of representation of PES sample is still valid. It is strongly recommended to sample EAs for the PES independently from census results.

163. Preparations for the pilot PES were very intensive work because of last moment changes in the questionnaire and decisions for inclusion of the PES in the pilot census. Therefore, the PES questionnaire, method for field organisation and instructions were prepared in very short time. Based on this experience, it is suggested to implement all activities according to the timetable and finalize PES questionnaire, methodology and manuals by August in light of the results of record matching and on the basis of the lessons learned from the PES Pilot census.

164. Publicity campaign of the census shall be used to inform the public about the objectives and methodology of the PES. The public shall be aware of possibility of re-enumeration for purpose of evaluating census quality. This type of publicity campaign would improve the quality of the work as both field staff and the public would be aware of quality control well advance before the real enumeration.

165. Re-conciliation visits should be included in the PES methodology to finalize the status of non-matched persons and households in PES and Census databases.

## DATA DISSEMINATION

166. The draft dissemination strategy was prepared by the EUPHC TA and submitted to the BHAS in December. The strategy includes two parts; first part presents census publications for preliminary and final results and second part presents the application of PC-Access software for disseminating the results online.

167. The preliminary results are planned to be published by 90 days after completion of the enumeration. Final results of the census will be released gradually in 2014, 2015 and 2016. The final results are expected to be released in late 2014, but no timetable was drafted for thematic reports.

168. Four publications for final results of the census are proposed by the TA: i) General results (probably after 12 months from the enumeration), ii) Social and economic aspects, iii) Building, Dwellings and households, and iv) Ethnic structure of population.

169. The TA has proposed seven tables for preliminary results including tables for ethnic characteristics of the population. However, the Control Form (P-3) form used for preliminary results does not include any information about ethnic composition; therefore the proposed tables are not relevant with the information collected through the Control Form. The working group intend to amend the proposed tables and share with the entities for adoption.

170. Through Danish project –IPA 2008, the dissemination group was trained on dissemination of statistical results based on PC-Access tool in last December and January. Recently the Agency signed the contract with Sweden for the PC-Access software and technical assistance for application of the software and dissemination of all types of statistics.

171. The agency plans to test tabulation plan for preliminary results using PC-Access software, but there is no clear activity plan.

172. Since the last census in 1991, there are many changes in the boundaries of administrative units. The strategy for presenting comparable results with previous census is not clear and no action is taken to adjust administrative units for dissemination purposes.

173. Dissemination strategy does not include any activity for disseminating anonymised micro data. The working group indicated that they consider the data requests of Eurostat and they were aware of hyper cubes for census dissemination.

### **Assessment**

174. The report for dissemination strategies and the tabulation plan prepared by the EU-PHC TA was not provided to the SC, therefore the assessment has been done based on the information provided by the representatives of the Agency during the mission.

175. There is no substantial progress in developing dissemination strategies as it was planned in the work plan of census activities. The SC understands that top priority is not given to dissemination activities but there is no still clear action to start planning the strategy and implementations. The SC made a lot of recommendations on this topic since April 2012, in particular, the SC emphasized the importance of users' consultation in developing strategies. But no progress was observed on consultation with users in developing dissemination strategy.

176. EUPHC TA supports the activities related to dissemination strategy but this concerns mainly census publications. Also the Agency is supported by the IPA-2008 project for software application for online dissemination. It was observed that there is no technical support for overall components of dissemination strategy of the census. Moreover, the proposed publications by the TA are very basic and not properly cover main topics of the census with regard to thematic reports; for example, economic activity, migration and education might be different topics for thematic reports. It is observed that the proposed census reports are not suitable to the recent approaches of dissemination census results in the context of thematic reports.

177. Recording first results in EA forms is subject to errors. It is necessary for population counts because it provides elements for control. However, recording first results on sensitive questions such as ethnicity would provide inaccurate figures (especially for open modalities) and it would entail a high risk of breach of confidentiality of individual answers.

### **Recommendations**

178. The Agency shall develop strategies including the following components:

- i) Identification of potential users;

- ii) Users' consultation to determine demand for relevant products and services with suitable format;
- iii) Strategies to adapt a range of products and services to meet current emerging needs;
- iv) Dissemination plan for on line dissemination, thematic reports, census atlas and anonymised micro data to meet the needs of different types of users;
- v) Strategy to disseminate metadata for dissemination of census products and services;
- vi) Dissemination policies for confidentiality of data and pricing policy for census products and services;

179. The Agency shall be received more technical assistance from EUPHC project on all components to apply current innovations in dissemination census results to meet the needs different types of users.

180. Statistical institutions should strictly avoid collecting any first results on ethnicity, religion or mother tongue, as well as other statistical variables. This would only provide inaccurate figures and present a high risk of confidentiality breach. In that regard, the EA control form should include only counts of population, dwellings and households.

181. The census reports for releasing final results shall be planned in a more friendly way and targeting different types of users. For example, thematic reports shall include separate publications on population growth and age-sex structure, migration, education characteristics, economic characteristics, housing conditions, agriculture and as well as census atlas.

182. Pilot census databases shall be used to test preparation of the preliminary results to finalize the methodology for collecting data and preparing the reports using the software application.

183. The work plan for all components of dissemination strategies shall be included in the work plan of census activities.

# ANNEXES

## ANNEX 1. AGENDA

### AGENDA, draft

#### Eight mission of the International Monitoring Operation Steering Committee

Date: 18 - 22 March 2013

<b>Monday, March 18, 2013, Republika Srpska Institute for Statistics (RSIS), Banja Luka</b>		
<b>7h</b>	<b>Departure from Zagreb to Banja Luka</b>	
<b>10:00 – 11:00</b>	<b>Meeting with the Director, Deputy Director and Census coordinator of the Republika Srpska Institute for Statistics</b>  <ol style="list-style-type: none"><li>1. Radmila Čičković, director</li><li>2. Radosav Savanović, deputy director</li><li>3. Bogdana Radić, assistant director, sector for statistics of population, education, social statistics and justice</li><li>4. Radoslav Latinčić, assistant director, ICT and publishing sector</li></ol>	<b>RSIS, Banja Luka</b>
<b>11:00 – 16:00</b>	<b>Meeting with all relevant staff for the Census preparation</b> (methodology, logistics, data processing, dissemination, communication etc.)  <ol style="list-style-type: none"><li>1. Bogdana Radić, assistant director, sector for statistics of population, education, social statistics and justice</li><li>2. Radoslav Latinčić, assistant director, ICT and publishing sector</li><li>3. Milka Miholjčić, head of population statistics department</li><li>4. Vladan Sibinović, head of publication databases and statistical publications</li><li>5. Mladen Marić, head of department for data entry, application development and databases administration</li><li>6. Rajko Vranješ, senior officer for population censuses and projections</li><li>7. Dara Petković, senior officer for national population change statistics</li><li>8. Nataša Dragić, senior officer for register of spatial units and GIS</li><li>9. Darko Marinković, senior officer for statistical sample and analysis</li><li>10. Dean Arežina, senior officer for population censuses and projections</li><li>11. Dragana Mandić, senior officer for migration statistics</li><li>12. Vanja Vilipić, senior officer for social protection, health and gender</li></ol>	<b>RSIS, Banja Luka</b>
	<b>Meeting with all relevant staff for the Census cartography</b>  <b>The meeting with all relevant staff for cartography will not be held since the staff from Geodetic Administration will be on business trip</b>	
<b>16h</b>	<b>Departure to Sarajevo</b>	

<b>Tuesday, March 19, 2013, Institute for Statistics of FBiH (FOS), Sarajevo</b>		
<b>8:30 – 10:00</b>	<b>Meeting with the Director, Deputy Director and Census coordinator of the Federal Office of Statistics of FBiH</b> <ol style="list-style-type: none"> <li>1. Hidajeta Bajramović, Director</li> <li>2. Galiba Karačić, Secretary of FOS</li> <li>3. Hidajeta Čolović, Assistant Director</li> </ol>	<b>FOS, Sarajevo</b>
<b>10:00 – 13:00</b>	<b>Meeting with all relevant staff for the Census preparation</b> (methodology, logistics, data processing, dissemination, communication etc.) <ol style="list-style-type: none"> <li>1. Jasmina Velić, Head of the Department of Population Statistics and Population Register</li> <li>2. Nusreta Imamović-Kaljanac, Head of the Department of Industry, Construction and Energy Statistics,</li> <li>3. Sanela Čengić, Head of the Financial Affairs Department</li> <li>4. Zehra Kaba, Head of the Publishing Department</li> <li>5. Nermina Ibrišević, Head of the Department of National Accounts Statistics</li> <li>6. Nermina Sarajkić, Head of Department for Developing of Applications for Data Entry</li> <li>7. Šemso Šurković, Head of Department of Information Systems and Technical Support</li> <li>8. Muamera Idrizović, Adviser for Demographic Analysis and Projections</li> <li>9. Arijana Muhić, Head of the Department of Statistical Methods and Coordination</li> </ol>	<b>FOS, Sarajevo</b>
<b>13:00 – 14:00</b>	<b>Lunch</b>	
<b>14:00 – 16:00</b>	<b>Meeting with all relevant staff for the Census cartography</b> <ol style="list-style-type: none"> <li>1. Munira Zahiragić, Assistant Director</li> <li>2. Belmira Hadžiabdić, Head of the Department of GIS and Spatial Unit Register</li> <li>3. Suada Lokvančić, Special Advisor for the Register of Spatial Units</li> <li>4. Valentino Vlašić (FGO)</li> <li>5. Medić Ivan (FGO)</li> <li>6. Nedžad Pačalić (FGO)</li> </ol>	<b>FOS, Sarajevo</b>
<b>16:15</b>	<b>Meeting with Dijana Sikima and Dzenita Polic, EU Delegation, on cartographic issues</b>	<b>Roberto Bianchini</b>

<b>Wednesday, March 20, 2013, Agency for Statistics of BiH, Sarajevo</b>		
<b>8:30 – 10:00</b>	<b>Meeting with the Director, Deputy Director and Census coordinator of the Agency for Statistics of BiH</b>  <ol style="list-style-type: none"> <li>1. Zdenko Milinović, director</li> <li>2. Slavka Popović, deputy director</li> <li>3. Fadil Fatić, deputy director</li> <li>4. Admir Kulić, coordinator</li> </ol>	<b>BHAS, Sarajevo</b>
<b>10:00 – 11:30</b>	<b>Meeting with all relevant staff for the Census preparation</b> (Review of the working plan, and all the components - methodology, questionnaire, enumeration, budget, logistics, data processing, dissemination, communication, PES, etc.)  <ol style="list-style-type: none"> <li>1. Admir Kulić, Census coordinator - Census organisation</li> <li>2. Nora Selimović – Census forms and manuals; Training materials</li> <li>3. Dajana Mitrović – Logistics</li> <li>4. Ivona Bulić – Communication and outreach strategy</li> <li>5. Sulejman Hasanović – data processing</li> <li>6. Edin Šabanović – PES</li> </ol>	<b>BHAS, Sarajevo</b>
<b>12:00-14:00</b>	<b>Meeting with NGOs.</b>	<b>PILPG Office, Podgaj 15.</b>
<b>14:00-15:00</b>	<b>Lunch break</b>	
<b>15:00 - 16:00</b>	<b>Meeting with all relevant staff for the Census preparation (Cont.)</b>  <ol style="list-style-type: none"> <li>1. Admir Kulić, Census coordinator - Census organisation</li> <li>2. Nora Selimović – Census forms and manuals; Training materials</li> <li>3. Dajana Mitrović – Logistics</li> <li>4. Ivona Bulić – Communication and outreach strategy</li> <li>5. Sulejman Hasanović – data processing</li> <li>6. Edin Šabanović – PES</li> </ol>	<b>BHAS, Sarajevo</b>
<b>16.00 – 16.30</b>	<b>Meeting with EUHCR TA</b>  - <b>Progress on the census preparation. Main aspects and issues</b>	<b>BHAS, Sarajevo</b>  <b>Participants:</b> <b>Team Leader, EUPHC Phase2, BiH Census</b>

<b>Thursday, March 21, 2013</b>		
<b>8:30 – 12:00</b>	<b>Continuation with Agency to deepen the subject not treated on Wednesday, Next Milestones and deliverable to provide to SC until the next mission</b>  <ol style="list-style-type: none"> <li>1. Bakir Sujoldžić - Cartography (Not available on Wednesday)</li> <li>2. Admir Kulić, Census coordinator - Census organisation</li> <li>3. Nora Selimović – Census forms and manuals; Training materials</li> </ol>	<b>BHAS, Sarajevo</b>

	<ul style="list-style-type: none"> <li>4. Dajana Mitrović – Logistics</li> <li>5. Ivona Bulić – Communication and outreach strategy</li> <li>6. Sulejman Hasanović – data processing</li> <li>7. Edin Šabanović – PES</li> </ul> <p style="text-align: center;"><b>Visit Pieter EVERAERS</b></p>	
<b>14:00 – 15:15</b>	- Meeting with SC	<b>EU Delegation</b>
<b>15:15 – 15:45</b>	- Meeting with the EU Delegation	
<b>15:45 – 16:00</b>	- Preparation of facilities for MG meeting	
<b>16:00 – 17:00</b>	- Phone conference meeting with the MG (connection with New York, - Brussels and Geneva needed)	

<b><u>Friday, March 22, 2013 – Visit Pieter Everaers</u></b>		
<b>8:30 – 9:30</b>	<b>Continuation with Agency to deepen the subject not treated on Wednesday, Next Milestones and deliverable to provide to SC until the next mission.</b>	<b>BHAS, Sarajevo</b>
<b>10:00-11:00</b>	<b>Meeting with Minister Hadzic</b>	
<b>11:00-11:15</b>	<b>Press Conference</b>	<b>EU Delegation</b>
<b>12:00-13:30</b>	<b>Lunch</b>	
<b>14:00-16:00</b>	<b>Meetings with Agency and Entities Directors</b>	<b>EU Delegation</b>

## ANNEX 2. CENSUS PREPARATION MILESTONES

Milestone	Date	Done?	Remarks	Nb. of weeks delay
Census Communication and Outreach Strategy agreed	End January	No	A draft strategy is produced as framework for an updated and final strategy	9
Internal organisation on communication agreed	End January	No	Nothing has been done till now – neither by Agency nor by EU-HCPR 2	9
Management and communication staff trained	End January	No	It was postponed by the Agency because the census was postponed	9
Internal organisation for communication among BHAS and entity SI agreed	End Jan.	No	Coordination and cooperation among statistical institutions still problematic.	6
Financial plan adopted (Art. 38 of the Census Law)	End Feb.	No	Final version agreed by directors expected on March 27, to be adopted by CoM on April 3.	2
Roles, duties and responsibilities of the three statistical institutions in the Census.	End Feb.	No	Still in discussion	2
Duties and responsibilities of the MCCs harmonized to the State Census Law in RS	End Feb.	No	Information was given orally by the Director of RSIS that RS Census law would be modified in order to clarify this point and align the responsibilities of MCCs on State census law.	2
Establishment, maintenance and ownership of “common data base” of Census data;	End Feb.	No	Still in discussion	2
Ethnic composition of the Census Commissions of the units of local self-government.	End Feb.	No	RS Census Law still not in compliance with State Census law.	2
Selection of the census field staff in accordance with article 26, point 4 and 5 (that will ensure the ethnic structure from 1991 and where is not possible at least 50 %);	End Feb.	Yes		



How to conduct the enumeration in the areas of the boundary line	End Feb.	No	RS Statistical Office expressed the opinion that delineation of the boundary line shall be determined before the census	2
How to conduct the enumeration of the BiH citizens working or residing abroad for more than 12 months in compliance with the Article 40-42 in the BiH Census Law.	End Feb.	No		2
Draft of revised questionnaire based on Pilot Census	End Feb.	Partly achieved	Two draft versions of P-1 submitted to Council of Ministers	2
Finalised cartographic work and final list of EAs by municipality	End Feb.	Partly	The cartographic work will be finalised by the end of March 2013 for all BiH with the exception of about 30 per cent of the territory of RS where up-to-date orthophotos are not available.	2
Establishment by the BHAS of a single register of census spatial units (Art. 20 BiH census law)	End Feb.	No	The methodology to establish the register was defined by the three statistical institutions but the single register was not created, RSIS disagreeing on the setting-up of such register.	2
Tender specification for printing and distributing census materials adopted	End Feb.	No	Process of adoption of the tender is unclear. This is a very critical deadline as it is the latest date for announcement of the tender to finish the tender processes in mid-July and start printing questionnaires.	2
Census maps prepared in electronic format	End March	Partly	Census maps will be ready by the first week of April 2013 for all BiH, with the exception of about 30 per cent of the territory of RS where up-to-date orthophotos are not available. The quality control procedures established by all the three statistical institutions are expected to be finalised by the end of May 2013	0
Detailed Logistic Plan	End March	Most parts completed	Expectation for one or two weeks delay	0
Contract for Communication Campaign awarded	End March	No	Expected to be signed first week of April	2

Central Monitoring Information System (CMIS) developed	End March	No	Draft version agreed by the three institutions. Expected to be developed by beginning of May.	0
Daily progress report System developed	End March	No	Draft version agreed by the three institutions. Expected to be developed by beginning of may	0
Field Test of the revised Census Forms	Beg. April	No	No plans	0
Field Test of the reporting system	Beg. April	No	Final version expected to be tested by mid may	0
Adopted Final Census forms	End April	No	Decision expected from the Council of Ministers on 3 April 2013	0
Manuals of Instructions revised and adopted	End May	No		0
Training material revised and adopted	End May	No		0
E-flow platform developed with the final questionnaires	End May	In progress		0
E-flow platform tested with real questionnaires	End June			0
PES prepared: questionnaire, methodology, manuals	End Aug	No	No clear deadline for finalization of the questionnaire and methodology.	0
Training census materials printed and distributed	End Aug.	No		0
E-flow platform operational	Mid Sept.			0
G-Code application and Logical check application are operational	Mid Sept.			0
Census information campaign carried out	20 Sept	No	Contract will be signed with external company	0
PES sample selection	Mid Oct	No		0