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

Second Assessment Report

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List of acronyms

BiH	Bosnia and Herzegovina
DB	District Brčko
EA	Enumeration area
FBiH	Federation of Bosnia and Herzegovina
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
MCC	Municipal Census Commission
PES	Post Enumeration Survey
RS	Republika Srpska
TA	Technical Assistance
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 UN-ECE 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.
- 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.
- 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.
- 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.

2. 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. Katerina 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.

3. 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.

4. 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. The team had meetings with the Agency for Statistics of Bosnia and Herzegovina, the Institute of Statistics of the Federation of Bosnia and Herzegovina and the Institute of Statistics of Republika Srpska. In addition, the team met representatives of the geodetic administrations of both entities (Federation of Bosnia and Herzegovina and Republika Srpska). The SC expert in cartographic issues had also field visits in Republika Srpska (RS), the Federation of Bosnia and Herzegovina (FBiH) and District Brčko (DB). In addition, the Senior Census Expert participated on July 2 in meetings conducted by Mr. Pieter Everaers, Director of Cooperation in the European Statistical System, International cooperation, resources of Eurostat with the Deputy Chair of the Council of Ministers, minister of finance, meetings with the EU Delegation, and meetings with the three Directors of statistical institutes.

5. The present assessment is based on the information reported during these meetings, and on some direct observations of the mission. As a consequence, the comments and recommendations presented below are based on the understanding of the experts, and may not reflect the real situation. This report was prepared by the Senior Census Expert taking into consideration the individual reports of each expert as well as his own observations.

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

Executive Summary

7. Since the first mission, the SC considers that little progress have been made in the preparation of the population and housing census. Only a small number of recommendations of the first report were implemented. Work of the working groups has been irregular or in-existent due to financial constraints. The main findings are as follows:

- **Organisation and management**

8. The most problematic issue concerns the coordination of the preparation and the decision process. Since the first mission, problems of coordination have arisen among the three statistical institutions. Among the three directors of statistical institutions there is no strict decision making process, agreed and respected by all. This jeopardizes active and efficient preparation. The SC considers that in such a big project as a population and housing census, it is impossible to reach a consensus on each and every item. Therefore, the SC recommends urgently to set up a clear decision making process, to ensure that decisions are taken, accepted and implemented. For example, a Census committee composed of the three directors of statistical institutions and chaired by the Director of the Agency could be established and meet regularly, to take decisions on a pre-defined agenda. Decisions of the committee should be formalised and disseminated to all members of working groups. The whole project should be conducted following strict project management methods.

- **Budget**

9. The budget for 2012 and 2013 has been approved. However, there is not yet a technical mechanism to create a unique account managed by the Agency as requested by the census law, and to delegate the funds to the entities. This prevents from preparing and carrying out the pilot census.

- **Questionnaires**

10. Questionnaires are not yet finalized: discussions are still on going on the formulation of several questions and the final layout. Formulations of questions on ethnicity and religion were not revised in accordance with the recommendation for strictly open questions. This recommendation is even more considered as important by the SC after hearing from representatives of the civil society. In addition, question on mother tongue should clearly allow for multiple answers, as recommended in the CES Recommendations.

11. Questionnaires have not yet been tested and are not translated as recommended. It is not planned to conduct a test before the pilot census. The SC reaffirms its recommendation to test the questionnaires before the pilot census.

- **Enumeration instructions**

12. Enumeration instructions are not finalised. No detailed list of manuals was prepared. Only two manuals are planned at present, one for methodology and one for field workers, whatever their role (enumerators, instructors, municipal commissions...). This is insufficient to ensure proper acquisition of their duties by all participants.

13. The responsibilities of each participant in enumeration fieldwork, including the municipal commissions are not clearly defined and explained in the organisational manuals.

- **Pilot Census**

14. The SC considers that the preparation of the pilot census is not on track. The SC came to the conclusion that the pilot census was actually understood by the statistical institutions more as a test of some components of the census rather than a complete rehearsal of the operation, including organisational dimension. On June 28, the three directors of statistical institutions decided to postpone the pilot census to 15 October, and to include municipalities, following the recommendations, but only via a contact person.

15. Selection of EAs for the pilot takes into consideration urban/rural, and entity boundary areas, but not specifically representation of ethnic groups. This may prevent from identifying some problems linked to enumeration of some ethnic groups.

- **Cartography**

16. The inter-institutional group of experts on census mapping was not created.

17. No timetable of mapping activities is available. However, the companies have started to work in FBiH and produce good quality maps. Mapping is expected to be completed by the end of the year in the Federation. In RS, the situation is more worrying as the Geodetic administration lacks resource to complete mapping, and maps already available show serious lack of update. In Brcko District preparatory activities for mapping are well advanced. However, decisions should be taken on codes to be used for the out-of-date addresses, and for the missing street names.

18. The main urgent issues to be solved in cartography are:

- Common definitions in the Entities of spatial units, codes, criteria to demarcate EAs, tools for quality control (minimum common requirements output oriented)
- Definition in each Entity of a realistic timetable of activities to produce census maps for the pilot census and general enumeration in line with the common definitions taken between Entities

- **Communication**

19. The study on the knowledge, perceptions and attitudes to the census and to the national statistical agency has not yet begun but it has been agreed to outsource a quantitative survey and focus groups to an external company paid out of the EUPHC 2 incidentals. The study is expected to be finalized by the end of July.

20. A non-key expert will be recruited to draft a strategy. However, there is not a common well developed understanding shared among the dissemination and communication staff in the Agency, the Institutes and the TA team of what covers outreach and communication. In particular, emphasis is put on tools for publicity rather than on strategy identifying objectives, target groups, methodology, tools, messages, timeline and the outreach activities. The strategy and action plan has been delayed and inevitably collides with summer holiday. It is therefore realistic to finalize it latest by November 2012.

21. The Agency and the Institutes have established a coordination group for communication, but the group has not met yet. It is strongly recommended to have regular meetings from now on.

22. The internal communication between the three institutions is not satisfying and needs to be strengthened if the census preparation shall succeed and finish within a reasonable time.

- **Data processing**

23. The consortium that won the tender for data capture is composed of Scytl (main), TIS and Ping (a local company). All the developing linked with the OCR/IMR process will be performed by TIS, which has considerable experience in census data capture. The data capture process should be in place in October to capture the questionnaires of the pilot census.

24. Data cleaning and editing is envisaged mainly manual. The SC considers that this option will delay the availability of the census results and may generate human biases in the correction of inconsistencies. The SC recommends consider automatic method for editing and imputation. Technical assistance may be required on this area.

- **Dissemination**

25. No update was given on these topics. The SC understands that top priority is not given to these questions but recommend to start planning the development of a strategy and implementations actions. In particular, users can be a strong support in the preparation of the census, and communication strategy should consider including them in target groups.

- **Evaluation of the results**

26. Since the first mission, the Agency requested technical assistance from TA to review the methodology and organisation of PES activities and plans to test the PES questionnaires and methodology in the pilot census. However, it is not yet decided to include the PES in the pilot census.

27. In conclusion, The SC expresses strong reservations about the preparation of the population and housing census to meet the date of April 2013 for the enumeration and recommends immediate and appropriate measures to reverse the situation. Practical recommendations are provided in the course of the report in that regard.

Assessment of the Preparations of the Population and Housing Census in Bosnia and Herzegovina

1. In order to assess the preparations of the census, the mission decided since the first missions to follow the different steps for the preparation and implementation of a population and housing census. A list of activities was built from the United Nations Principles and Recommendations for Population and Housing Censuses, as well as from the experience of the experts. The list of activities is organized as following: (a) preparatory work; (b) mapping; (c) enumeration; (d) data processing; (e) dissemination; and (f) evaluation.

2. In order to avoid repetition with the first assessment report, only updates of the situation are presented for every item. In addition, follow-up of the previous recommendations as well as new recommendations are listed.

PREPARATORY WORK

3. The preparatory work for the census is necessarily long in duration and involves many distinct activities. In addition, some of these activities may be interrelated but also overlap to a large extent. The following preparatory activities could be assessed during the mission.

Legal basis for the census

4. Pursuant to the Article IV.4.a) of the Constitution of Bosnia and Herzegovina, the Parliamentary Assembly of Bosnia and Herzegovina, during the 21st session of the House of Representatives held on 3rd February 2012, and at the 12th session of the House of Peoples, held on 3rd February 2012, has adopted the Law on Census of Population, Households and Dwellings in Bosnia and Herzegovina in 2013.
5. No update for this item described and assessed in the first report.

Recommendations follow-up

R: Develop precise instructions and rules of organisation for the implementation of the law, in particular regarding the enumeration of persons temporarily absent to avoid any inclusion of non-resident persons in the population, or the sharing of responsibilities among the institutions involved in the census, such as statistical institutions, ministries or census commissions to avoid misunderstandings and complication during the enumeration.

© Enumeration instructions are not completely finalised. Regarding the enumeration of persons living abroad, some examples are given but not very detailed. The definition of roles and sharing of responsibilities among the statistical institutions and census commissions have not been specified further since the first mission.

Budget and cost control

6. The law, in its article 38, provides that resources intended for financing Census-related activities and tasks shall be provided from the budgets of Bosnia and Herzegovina, entities, the Brčko District, international donations and other sources.
7. The minimum of required funds amounts to 42 625 603 KM (around 21.8 million Euros).

Assessment update

8. The budget has been revised and adopted for 2012 and 2013 to take into consideration inflation and some additional costs. 7.2 million KM were received by the Agency for the preparation for 2012, and 32 million KM are allocated for next year. The contribution of the entities will be calculated using the same formula as for the usual budget.

9. However, two main problems remain:

- The mechanism to create a unique account managed by the Agency as requested by the census law, and to delegate the funds to the entities has not been defined yet by the ministry of Finance. This prevents the Agency from allocating funds to the entities statistical institutes for the preparation of the pilot census;
- The possibility to pay overtime work, which is limited by law but also diversely regulated in the two entities. This may create difficulties when staff of the three agencies will work together in the data processing centre.

Recommendations follow-up

R: Secure the multi-year census budget as soon as possible:

© The budget has been revised and adopted for 2012 and 2013.

R: Organise the budget by sub-domain of the census, corresponding to projects (such as cartography, communication, enumeration, evaluation, data processing, dissemination...) and to breakdown each sub-domain into categories of expenses (staff, equipment...):

© It was reported that the budget was being reviewed according to the recommendation. The new version should be sent to the SC by July 15.

New R: Set up the technical mechanism to transfer funds to the statistical institutions of entities for the preparation of the pilot census.

Census calendar

10. International recommendations consider as an indispensable element in the planning of a census a calendar or timetable indicating the sequence and estimated duration of each of the component operations of the census.

Recommendations follow-up

R: Develop a detailed timetable for each statistical institution, as part of the general timetable, and follow up regularly its implementation, based on regular reports from the working groups and staff involved:

© A timetable was developed by the agency but not formally adopted by the three institutions. It was reported that the directors follow up during their regular meetings but no evidence of a formal follow up of deliverables was given. In addition, the decision process seems unclear and subject to frequent back and forth. This may be the most critical issue to solve in order to be able to prepare and implement the census.

R: Develop a light monitoring, based on regular reports from the working groups and staff involved. We recommend regular "flash reports", reporting every fortnight on the achievements of the past period and the achievements expected for the next one, the difficulties encountered and the decisions needed to be taken by the top management or other working groups:

© Not implemented. No formal procedure for working group reporting is in place.

R: Develop a risk management plan in order to identify possible risks and prepare solutions.

© There is no global risk management plan shared by the three institutions. The FBiH Statistical Institute has developed such a plan and maintains it updated.

Management structure

11. As provided by the census law, the Census is organised by the statistical institutions in Bosnia and Herzegovina: the Agency, Institute for Statistics of FBiH and Institute for Statistics of Republika Srpska in cooperation with administrative bodies and organisations of Bosnia and Herzegovina, competent entity administrative bodies and organisations, competent bodies of the Brčko District determined by this Law and units of local self-government.

Assessment update

12. Since the first mission, it appears that problems of coordination have arisen among the three statistical institutions. Statistical institutes of entities report a lack of information from the Agency while the latter stresses that decisions already taken in common are later questioned by entity statistical institutions, which hampers making progress in preparations. The three directors of statistical institutions discuss census issues during their regular meetings, but there is no strict decision making process, agreed and respected by all.

13. It was reported that if all working groups are now established, they cannot meet regularly for budget reasons. For example, working groups on communication and logistics did not meet yet.

14. While the Agency obtained the authorisation to hire 22 new staff during the last quarter of 2012, both statistical institutes of entities reported shortage of qualified staff due to budget restrictions.

Recommendations follow-up

R: It is recommended that the Census bureaus set up a strict reporting process, based on the follow-up of their respective timetables.

© While the three institutions reported they followed up progress in preparations, no evidence of formal reporting process was given to the SC.

R: Special attention should be paid to the availability of staff for the preparation and the conduct of the census.

© The situation is better in the Agency but still the two entities report lack of qualified staff.

New R: The SC recommends urgently to set up a clear decision making process, to ensure that decisions are taken and implemented. For example, a Census committee composed of the three directors of statistical institutions and chaired by the Director of the Agency could be established and meet regularly, to take decisions on a pre-defined agenda. Decisions of the committee should be formalised and disseminated to all members of working groups.

New R: it is recommended to explore the possibility for working groups to make short meetings using videoconference. This could reduce the need for physical meetings and allow regular progress on specific topics. Another advantage is too avoid endless discussions but focus on the solution to find.

Buildings, working space

15. A building will be rented for census logistics and data processing in East Sarajevo from January on.

Recommendations

New R: Make sure that the building will meet the requirements of census logistics and data processing, such as easy truck access and IT cabling.

Contracting out

16. Several procedures will be conducted for the procurement of services and goods such as printing or equipment. In the country, procurement procedures usually last from 3 to 6 months, from public announcement to signature of the contract, depending on possible claims.

Recommendations follow-up

R: It is recommended to list as soon as possible all procurement needs and to start evaluate the time needed for drafting the specifications and completing the process.

© The procurement list will be developed by the logistic group, which was set up but did not meet yet. However, the most urgent procurement procedures in IT were initiated.

Quality assurance programme

17. Based on adopted conceptual framework for quality assurance, each respective department is working on development of specific implementation: for example, for supervision during enumeration, or controls during data processing etc.

Assessment

18. There is no integral document quality on quality assurance strategy.

Recommendations

R: To prepare and adopt an integral document on quality assurance strategy. The strategy is supposed to cover:

- Definitions of the goals of the Quality Assurance, and general requirements for the QA Program for the 2013 Census in BiH,
- Role of managers,
- Definitions of data quality (to determine the quality through the dimensions (all or selected one) given in the international census standards: relevance, accuracy, timeliness, accessibility, interpretability, coherence.)
- Indicative activities on Quality Control and Quality Assurance in each census phase. Concrete activities are to be given in each respective manual/s.

IT Organisation

19. The IT work between the three different Statistical Institutions it is organized in four different working groups:

- ICT Infrastructure: 5 persons, Amel Avdic is the group coordinator. The goal of this working group is to use proven, repeatable processes to provide a stable operating environment for all the IT process adopted within the PHC project. They draft detailed configuration and technical specifications of new technologies and provide technical assessments in the form of evaluations tests.

- Application development: 8 persons, Sulejman Hasanovic is the group coordinator. The most used software in this sector is Visual Studio .net. Most of the people in the group are already trained on that component. Nevertheless additional trainings are supposed to be provided shortly.
- DB development & maintenance: 6 persons, Branislava Cvijetic is the group coordinator. The most used software in this sector is MS SQL Server. It is to be underlined that SQL Server it is used from several years and in general there is a good knowledge of its functionality.
- OCR/ICR: 6 persons, Sevala Abaz is the group coordinator. The most used software in this sector is TIS. It is to be underlined that this is the first time the three institutions are using the OCR/ICR technology and that not much previous experience is available in this field.

20. For each of these working groups it is foreseen the possibility to involve some external experts for different period of time, in accordance with the needs.

21. Mr. Sulejman Hasanovic is the general coordinator of the different working groups. He actually coordinates also the application development working group but it is foreseen that in the future he will leave that position keeping only the role of general coordinator of the IT working groups.

Assessment

22. During the last months it seems that the Statistical Agency took the lead on the whole IT operations for the PHC and a global strategy was developed, even if not yet completely detailed defined. The different IT procedures to be developed for the Population Census seem to be taken into account different international experiences.

23. The consortium that won the tender for the optical recognition of the census questionnaires is composed by Scytl (main contractor), TIS and Ping (local company). All the developments related to the recognition process will be performed by TIS which is well known for its experiences in several censuses around the world.

24. The setting-up of the infrastructure system needed for the whole Data Capture operation is actually postponed to mid of July.

Short-term recommendations (before the pilot census)

25. Improve the coordination and the decision making between the three Statistical Institutions. Indeed, in several situations the SC receive as answer that the three Statistical Institutions had a general agreement on the way to approach an issue but no formal decision was yet formalized. In other cases seems that the different Institutions have different ideas on how to approach an issue and not even a general agreement is reached, as it seems the case of the application for monitoring the fieldwork coverage.

26. Improve the capacity of the Agency to manage new technologies through well-organized training programme and via a close collaboration with the PHC TA Project.

27. Improve the IT resource available for the PHC in the three Statistical Institutions.

Questionnaire design

Topics

28. Units to be covered in the Census as well the final list of characteristics to be investigated was decided with the adoption of the Census Law in February 2012. The topics were listed in the first mission report and there are no changes in that regard.

29. Definitions on direct topics and derived topics¹ given in the Census Law and in the prepared Manual are clearly formulated. The definition on “total usual resident population” is in accordance with the international recommendation. Still, during the second mission some of the members of the Inter-institutional Methodology group mentioned a dilemma of the treatment of three specific groups:

- Third level students, studying abroad and returning once a week to the place of residence of theirs’ households (*to be included in the “total usual resident population”*)
- Foreign citizens residing in BiH because of work in the international organisations, (*to be excluded from the “total usual resident population”*).
- BiH citizens absent abroad, working in the international organisations or send by their (BiH) employer to work abroad (for example construction workers), (*to be included in the “total usual resident population”*).

30. The possible solution for including third level students in the total usual resident population is based on paragraph 162(a)² given in the 2010 Censuses Recommendations³ as well on Eurostat document⁴ that says: “Third-level students studying abroad but returning home all the weekends should be classified as members of the household of origin and thus their usual residence should be the place of residence of origin.”

Census questionnaires, their format and wording

31. Since the first Mission, the Inter-institutional Methodology and IT group (consisted of experts from the three statistical institutions) had further work on the finalization of the content of census questionnaires for the Pilot Census. However, during the second mission questionnaires were not finalised. Namely the wording of Question 1 in form P-1 was changed

¹ Direct topics are those for which data are directly collected from the respondents during enumeration. Derived topics are those that will be compiled during data processing based on two or more collected information during enumeration.

² “Persons who work away from home during the week and who return to the family home at week-ends should consider the family home as their place of usual residence regardless of whether their place of work is elsewhere in the country or abroad.”

³ “Conference of European Statisticians (CES), Recommendations for 2010 censuses of population and housing”, prepared in cooperation with the Statistical Office of the European Communities, (EUROSTAT), issued by United Nations, (New York And Geneva, 2006)

⁴ Eurostat, Directorate F: Social and information society statistics, Unit F-1: Population, “On the statistical interpretation of the EU Regulations on population and housing Censuses 2011, questions & answers” ESTAT/F-1/GL Version 2.0, 14 December 2010

several times and still has no final formulation. The changes are due to the attempts to obtain answer whether the person has place of usual residence in the place of enumeration (i.e. whether the person is permanent resident in the place of enumeration).

Sensitive questions

32. The formulation of the questions on ethnic/national affiliation and religion in the latest version of the received census questionnaires is the same one as was during the First mission. In the meantime there were discussions with the civil society and some articles were published in the BiH press that confirmed the sensitivity of these questions.

33. The question on mother tongue was commented as well by civil society representatives. Namely, the instruction (given in the Manual) for giving only one answer to this question was criticized. According to the present formulation of the instructions for this question in the Manual, answer should be given by selecting one of the three offered languages, or to select answer “other” and than to specify the title of the language in the given boxes. There are no instructions for possibility of giving two or more answers to this question.

26. Mother tongue:

Bosnian Croatian Serbian Other →

Assessment update

34. In the present formulation of the census forms and respective instructions in the Manual, third level students are identified as separate group. Data on “Frequency of returning to the place of usual residence” will be collected in the census. Whatever decision about the treatment of the third-level students is adopted, will not influence the census forms and instructions in the Manual.

35. The existing dilemma about the treatment of the three above-mentioned groups can influence the finalisation of the census household and individual questionnaires (part dealing with reason for absence - presence) as well as the finalisation of the instruction for calculation of total usual resident population. The present formulation of reason of absence number 10: “Working abroad in diplomatic, consular and other offices of BiH, or international organisation etc.” and explanations given in the Manual for the persons falling in this group, makes a mixture of two groups of absent persons that should have different treatment referring inclusion in the total usual resident population.

Reason of absence from the place of census – for the person abroad

Working abroad for foreign employer or self-employed	09
Working abroad in diplomatic, consular and other offices of BiH, or international organizations, etc.....	10
Absent, abroad as a family member of persons with reason of absence number 09.....	11
Absent, abroad as a family member of persons with reason of absence number 10.....	12

36. The format and wording of the census questionnaires are not yet finalised and can cause delay in the preparation of Pilot Census. Inter-institutional Methodology Group has no consensus about the formulation of question 1 in P-1 form.

37. The recommendations referring to the formulation and wording of questions on ethnic/national affiliation and religion given in the first mission report are not yet implemented. The opinion among the majority of the statisticians in the Inter-institutional Methodology group is that the International Census recommendations should be followed and these questions should be formulated as open-ended one. On the one hand, it seems that there is no consensus among the management of the three statistical institutions regarding this issue, thus no final agreement could be reached. On the other hand, discussions held with civil society representatives as well as articles published in the BiH press, show the need for more urgent decision in formulating these questions as open-ended.

38. Despite the statements made by statistical institutions during the first mission, that the question on mother tongue was not sensitive, it appears that this question should be considered as sensitive. Taking into account the multiethnic composition of the population living in BiH, such solution is not appropriate, for example children in mix marriages can have two and even more mother tongues. In that regard, CES Recommendations precise: "*Questions will generally refer to one language only. Multiple languages may be required for the mother tongue and main languages of minority groups.*".

Recommendations follow-up

R: Finalize the questionnaires before the pilot census: review ethnic/religion questions, pre-test before the pilot census in all languages, validate layout with data capture company.

*© Questionnaires are not finalized: discussions are still on going on the formulation of several questions. Formulation of questions on ethnicity and religion was not revised in accordance with the recommendation for strictly open questions. **This recommendation is even more considered as important** by the SC after hearing from representatives*

*of the civil society. In addition, **question on mother tongue should clearly allow for multiple answers**, as recommended in the CES Recommendations.*

© Questionnaires have not yet been tested and are not translated. It is not planned to conduct a test before the pilot census.

© The data processing company has given recommendation for the layout. However, the colours used for the pre-coded answer and for the mark boxes may generate some discomfort in reading to the enumerators. The possibility of adopting less intense colours for the mark boxes and black colour for the pre-coded answers should be investigated with the data processing company.

Additional recommendations

39. Third-level students studying abroad but returning home all week ends can be classified as members of the household of origin and thus their usual residence should be the place of residence of origin. There is room for such treatment, based on paragraph 162(a) given in the 2010 Census Recommendations as well on Eurostat document. Still, before the final decision, the Methodology group should check how neighbouring countries have treated this group of person in their censuses in order to avoid double counting or omission of those persons.

40. Regarding the reason for absence "Working abroad in diplomatic- consular and other representative offices of BiH abroad, in international organization etc. " (Code 10 in the questionnaire), the manual gives erroneous instructions: "*This code is to be assigned to the household members who at the time of the census are abroad at work in our diplomatic and consular missions, parts of enterprises (business companies) abroad, parts of the banks, chambers of commerce offices abroad, the United Nations, its organs and specialized agencies and other international organizations. Code 10 is entered and the members of the Armed Forces of Bosnia and Herzegovina in peacekeeping operations abroad. This response is also given for each person who is absent from the settlement of the census, sent to work abroad by domestic firms to perform construction and other works on the objects that the company is constructing under special agreements.*". According to the law and the international recommendations, only the BiH military, naval, diplomatic and consular personnel and their families, located outside BiH regardless of the duration of absence are to be included in the total usual residence population. The one-year rule should be applied for all others persons absent abroad.

41. The Question 1 in the P-1 Form can be formulated using two approaches, but in the view of the SC the second one is more appropriate, Option 2 (given below).

- The first approach is to ask a direct question "Whether the person being enumerated is permanent resident in the place of enumeration". In such case it is necessary to give definition on "permanent resident" in the questionnaire. The definition itself is not so long, but is not sufficient if is not complemented with the explana-

tions on the treatment of the specific groups of population. If this approach is used, a big responsibility is given to the enumerator;

- The second approach is to formulate the question using the terminology from Article 4 from the Census Law that defined units encompassed by the Census. In such case the terminology to be used in local language is “prebivalište” and “boravište”, that literally translated in English is “place of permanent residence” and “place of temporal residence”. The meaning of these terms is very well known among the population and can be explained with few words in the questionnaire. Still, the usual residents will be established with the set of the first 7 questions in the P-1 form. The Question 1 serves only to give some initial information for directing the flow of the first 7 questions for the person being enumerated.

42. Example of possible formulation of the first 7 questions in the P-1 Form is given in Annex. Whatever approach is decided and applied, appropriate amendments should be done in the respective parts of the Manual.

43. Q22 (number of children) and Q23 (years of birth of children) should be on the same page.

44. Q27 (Whether the person can read and write) could be explained in the formulation: "Is the person able to read and write a short text?". This question would be better placed after the question of completed education (Q 30). So for all persons with more than 3 years of primary education or other higher level of completed education not to ask this question. Appropriate rows for skips should be placed on Q29.

45. Q28 (computer literacy): four sub-questions to detail computer literacy in text processing, drafting tables e-mail, internet will not give accurate results except if strong instructions are given to the enumerators. It was witnessed in The Former Yugoslav Republic of Macedonia that the enumerator systematically ticked all the boxes as soon as the person said they were using computers.

46. Q37: status in employment: it should be mentioned that the question refers to the last job for unemployed person.

47. Regarding the questionnaire P2 (dwelling questionnaire):

- Questions related to the dwelling should be first, before household characteristics and agriculture. Type of housing unit and type of collective dwelling should be the first questions as they give immediate view on the nature of the unit;
- The section "Data on agriculture" should be put at the end, as not concerning all dwellings;
- Questions on drinking water supply system (Q4) and water supply system (Q24) could be close, to understand to possible difference

Census methodology and instruction manuals

48. In the period between the two missions, the Methodology group has amended and updated the draft “Manual for enumerators and municipal instructors for Pilot Census”, document prepared for the Pilot census originally planned for October 2010. The latest updated version of the draft “Manual for enumerators and municipal instructors for 2012 Pilot Census” was received in local language a few days before the second mission.

49. At the end of the second mission were received working versions of the following manuals (in local language):

- Manual on organization and conducting of Pilot Census,
- Manual for conducting of the previous Census (before the field enumeration), In responsibility of the Ministry of foreign affairs,
- Manual for conducting of the previous Census (before the field enumeration), In the premises of the Ministry of justice,
- Manual for conducting of the previous Census (before the field enumeration), In responsibility of the Ministry for defence,
- Instructions for manual preparation of the Census material, Census of population, households and dwelling 2013 (internal methodological material).

Assessment

50. The draft “Manual for enumerators and municipal instructors for 2012 Pilot Census”, provides the necessary methodological and technical explanations on how the enumeration should be performed as well as explanation on how enumerators and municipal instructors should perform their assigned tasks. The structure and the content of the Manual are appropriate to its aim. However there are some shortages that should be amended.

51. The First - General part presents units to be covered in the Pilot Census. The formulation is the same as in the Census Law, Article 4, but there are no definitions of the terms used. Some definitions are given later on in appropriate parts. There are no instructions on the place of enumeration, where the persons should be enumerated.

52. In part 1.3. “Units not to be covered with the Pilot Census” it is mentioned that foreign citizens residing in BiH and working in the international organisations should be not enumerated. This is not in line with the provision of the Census Law.

53. Part 4 lists languages and alphabets in which the census questionnaire can be filled. But it is not mentioned who is deciding that - the enumerator (in accordance with his/her ability), the municipal census commission (through distribution of the census questionnaire) or the enumerated person. This should be clearly established at the beginning of enumeration in order to avoid possible problems later on.

54. Instructions regarding some questions only list possible answers given in the question. For example instructions how to fill the status of the person in the family are only “write in the appropriate code from the list”.

55. Other received manuals are not commented in this report as they are working documents that are still in the process of drafting.

Recommendations follow-up

R: prepare a detailed list of manuals and instructions to be drafted and to update the timetable accordingly:

© No detailed list of manuals was prepared. Only two manuals are planned at present, one for methodology and one for field workers, whatever their role (enumerators, instructors, municipal commissions...). This is insufficient to ensure proper acquisition of their duties by all participants.

R: Comprehensive manuals should be drafted for each participant. These manuals should not only describe the assigned tasks but also explain how and when the tasks are to be performed, inputs, deliverables and reporting.

© The content of the manual for the Pilot Census does not meet this recommendation and is to improve accordingly.

R: The Census Methodology and the “Manual for enumerators and municipal instructors” should include technical instructions to keep record of cases of refusals.

© Not implemented.

Additional recommendations

56. Revise the Manual and ensure consistent use of the terminology. Where possible, use more “user friendly” terminology i.e. terms that are used in BiH. In particular, correct the erroneous instructions regarding the use of reason for absence code 10.

57. The Agency for statistics should check with the BiH ministry for foreign affairs what kind of status have foreign citizens residing in BiH and working in the international organisations. Only those who have a diplomatic status should not be covered in the Census.

58. Add a part on “Place of enumeration” with instructions where the census units should be enumerated.

59. Examples for the list of persons should include more practical examples regarding citizen absent abroad.

60. Include a brief introductory text that the enumerator should say when addressing the household on the door (greetings, introducing him/herself, explaining the purpose of the visit, the census, personal data protection, persons rights and obligations...).

61. Put in the Manual a calendar of enumerator's activities.

62. Include in the Manual a summary of important definitions for census units.

Training preparation

63. Unique Powerpoint presentations were prepared last year but are still not updated. A presentation was given to the SC the last day of the second mission in local language.

Assessment

64. The presentations are complete and cover all topics. However, updating of the training materials to take into consideration recent modifications has not started yet.

65. As already mentioned in the first report, the duration of training (3 days) for enumerators may not be sufficient, in particular when comparing with similar countries and considering the complex context and high sensitivity of some topics. This should be assessed during the pilot census.

Recommendations follow-up

R: The preparation of the training materials should be achieved before the Pilot Census in order to test them in the Pilot.

© The updating of the training materials has not started yet.

R: The cascade system and duration of training (3 days) for enumerators may not be sufficient and should be assessed during the pilot census.

© To be reviewed in comparison with other countries and implemented in the Pilot Census.

Printing

66. Concerning printing, assembly and shipment of materials to/from the fieldwork, it is planned to call for tender for two different lots: i) printing of the questionnaires and assembly of the boxes; ii) shipment of the boxes to/from about 21.000 EA's. The different institution agreed on this solution but no formal decision has been yet taken.

67. It should be noticed that the Census law states that the Municipal Census Commission at the end of the fieldwork operations should take care of the transportation of the materials to the processing centre. In the view of the SC this doesn't mean that the return of the boxes should not be coordinated centrally, ensuring a timely and controlled return of the fieldwork materials.

Recommendations follow-up

R: The procurement procedure for printing should start as soon as possible and the terms of reference should make provision for additional orders in case of accident with a special time clause.

© The specifications for the procurement procedure are not developed yet.

R: The pilot census shall be an opportunity to test questionnaire printing according to the requirements for optical recognition (special paper, layout, etc.).

© To be implemented.

New R: A final decision should be taken on printing, assembly and transportation of the materials to/from the fieldwork. The idea of having a tender consisting of two different lots (printing of the questionnaires and assembly of the boxes; transportation of the boxes to/from the EA's) is supported by the SC.

Logistics Management System

68. Since a population census is a large time-critical project, with many interlocking operations, the use of a modern IT Management System is of vital importance. In that regard, the application for the management of the field operations that is planned to be developed for the census is expected to have a positive impact on the quality of the data collected and to facilitate the enumeration by planning and managing materials and staff resources needs in each area.

69. The Logistics Management System application will consist in a web-application connected to a central database. It was reported that the System would be developed with the support of the PHC TA Project.

70. The Logistics Management System will allow to store and manage the information related to the EAs, the staff assigned to them, the labelling of the questionnaires with a unique code, the labelling of the boxes for distribution, the tracking of the materials to/from the fields and other logistic information that are crucial for the management of the fieldwork.

71. The main phases that will be managed through the Logistics Management System are:

- Management of the main Census areas (EAs, Instructors Areas, etc.)
- Association of fieldwork staff to their areas
- Box assembly
- Box transportation
- Receipt of the boxes in the municipalities
- Departure of boxes from the municipalities
- Receipt of the boxes in the processing centre
- Manual checking of the boxes contents

72. Barcodes (and barcodes-readers) will be adopted for tracking the phases from the assembly to the manual checking of the boxes (3-8).

73. Before the optical recognition a manual checking of the boxes contents will take place. Indeed the correct identification of each questionnaire is vital for the whole optical recognition procedure, both to ensure that all questionnaires are processed and for retrieving individual questionnaires for correction of the data. The main objective of this phase is to ensure: i) that in each questionnaire the IDs are valid; ii) the consistence between the persons listed in the household questionnaire and the value reported in total number of household members; iii) the consistence between the value in total number of household members and the number of individual questionnaires.

Assessment

74. The System allows storing and managing the logistic information that will improve the management of the Census. However, no comprehensive document describes the technical specifications of the System as well as the roles and responsibilities. In addition, resources and deadlines needed to develop such a system are not yet determined.

75. Since the System will be used by actors located in different places the SC supports the idea of using a web-based application connected with a central database.

Short-term recommendations (before the pilot census)

76. Prepare a comprehensive document containing the technical specification of the Logistics Management System and clearly define responsibilities, resources and deadlines needed to develop such a system.

Mid-term recommendations (before the enumeration)

77. Develop and carefully test the System. Produce manuals and training materials for the different users involved in the process.

CENSUS TESTS

78. Representatives of the Agency and the entities indicated that census questionnaires and the instructions for pilot census are still under discussion since the first mission of the SC. All entities expressed their concern not to be able to complete remaining activities to conduct pilot census in September 2012. During the SC mission, the directors of three institutions discussed the timing of pilot census and agreed to postpone it in the last two weeks of October 2012 after the local election.

79. As requested by the SC, the agency provided a technical note describing the sample design for pilot census which was prepared in 2010 with agreement of the entities. This document describes two alternatives for sampling design, one alternative covering 60 EAs (33 EAs for FBiH, 21 EAs for RS and 6 EAs for Brcko) and other alternative covering 44 EAs (22 EAs for FBiH, 18 EAs for RS and 4 EAs for Brcko) in pilot census. This note also includes presents the criteria for selection of EAs for pilot census. The criteria for EAs are as follows: i) the selected EA should have sufficient number of households (preferably around 100 households in urban settlements and around 70 households in rural settlements), ii) the

selected EAs for urban areas should represent the characteristics of urban households, iii) EAs selected for rural areas should have a land or livestock to ensure they are representing characteristics of agricultural households, iv) At least one EA should be selected from the settlements having newly constructed buildings, v) At least one EA should be selected as representative of institutional population, 6) At least one EA should have no clear boundaries between the entities, 7) At least one EA should be selected from areas with expectation of lower quality of map.

80. The objectives of the pilot census are described in the draft manual for enumerators and municipal instructors as testing the methods and organization of all census activities. The manual also describes that the pilot census will be conducted to test census questionnaires, methodological manuals, organization of the census, duties of enumerators and other actors of the census, duration of enumeration, maps of statistical and enumeration areas, verification of data processing phases and the costs of certain phases of the census.

81. According to the work plan of pilot census, census questionnaires, manuals for field organizations and the responsibilities of census actors including census commissions, instructors and supervisors would be finalized by the end of June, however, the questionnaires and other documents are still under discussion and there is no clear plan for the process of finalizing the questionnaires and other materials for the pilot census.

82. It is our understanding that the entities do not have common plan or agreement for establishing municipal commission for the pilot census as it was suggested by the first report of SC. The representatives of RS and FBiH seem to have different opinion about the importance of testing the roles of municipal commission in the pilot census, while the representatives of the Agency did not clearly explain their plan. However the entities show their interest to follow the recommendations of SC and agree to establish the municipal commissions in general but for the municipalities where it is not possible, one representative will be appointed as focal point to test the census methodology.

83. As suggested in the first report of SC, the importance of carrying out pre-test for census questionnaires and manuals before pilot census was discussed with the Agency and entities. It was our understanding that the Agency and entities do not have a clear idea about the purposes of pre-tests. The entities indicated that the methodological working group agreed to test census questionnaires with 10 households to finalize it before pilot census.

Assessment

84. The meeting with the representatives of the entities showed that the progress in preparations of pilot census is not satisfactory for all partners. There might be several reasons for this, as for example, that the tasks of working groups and the roles of management groups in the process of carrying out pilot census are not clearly identified and that it takes longer than expected to take decision. It seems also that there is no common understanding of the purpose of pilot census and the importance of testing the roles of all census actors in this operation. This might be due to a certain lack of communication between the Agency and entity statistical offices and also not well-defined decision-making process for finalizing census documents.

85. The objectives of pilot census given in the draft instructions prepared for enumerators and municipal instructors are sufficient to test main census activities and are in line with international recommendations. However, it is still not possible to assess whether the pilot census will allow testing all its objectives.

86. It seems there is no plan for conducting tests of census questionnaires and the instructions for enumerators and supervisors before the pilot census. The project to test only 10 questionnaires in each entity cannot be considered as test since there is no clear objectives, methodology and organisation for this activity.

87. According to the context of the country, the criteria for selecting EAs for pilot census seem reasonable and appropriate to test all stages of census in different geographical areas as representatives of different characteristics of population and dwellings. Only limitation of these criteria might be no criteria to cover some EAs as representatives of mixed ethnic groups particularly for testing selection of enumerators and field organisation in these areas.

Recommendations follow-up

R: Design the pilot census to test all stages of census, including the role of local census commissions

© The pilot census was actually more understood by the statistical institutions as a test of some components of the census rather than a complete rehearsal of the operation, including organisational dimension. Municipalities will be included, following the recommendations, but only via a contact person. It is not yet decided to include the PES in the pilot.

R: Geographic location of EAs for pilot census should take into account the representation of the constituent ethnic groups in order to test the suitability of census questionnaires for all communities.

© Selection of EAs for the pilot census takes into consideration urban/rural, and entity boundary areas, but not specifically representation of ethnic groups.

R: It is recommended that the web application for monitoring fieldwork be tested in the pilot census. Pilot census should provide information on what data to be collected during enumeration are appropriate for the different level of decision makers, how statistics to be produced to monitor field operation are suitable to give correct decisions and also it should test the efficiency of decision making process including all levels such as municipal census commission, entity census commission and central census commission.

© Decision has not been taken yet.

Additional recommendation

88. As mentioned above in the part related to questionnaire design, tests of the questionnaire and instructions should be conducted before the pilot census to come to close the final

census questionnaire and the manuals. The objectives can be to test wording and order of questions and whether important information needed during interview are given in the questionnaire. Also, the objective should be to test the design of census questionnaires prepared for ICR/OCR technology, in particular to control whether the design is suitable for enumerators and easy to follow the questions in given order. For this purpose, design of the questionnaires should be done using some standards such as i) the questions can be bold and bigger size compared to the other text given for concern questions, ii) the instructions and examples given with the question can be italic and smaller size, iii) general instructions for groups of questions like economic active population or education can be given with capital letter and different colour. This approach will make easy to distinguish texts in the questionnaires and apply questions systematically. Also colours of the census questionnaires should be soft colour not tiring for enumerators. Selection of colours for census questionnaires is very important for enumerators since they will read the questions whole day during enumeration.

89. Test of census questionnaires and manuals can be carried out with the professional staff who are not directly involved in preparation of census questionnaire to benefit from their professional experience in collecting data. If census staff is involved in the tests, results may not be objective and can be bias opinion since they will evaluate their own work. A limited number of households can be selected (for example 100 for the whole country) , including representative of different population groups (such as some households from urban, rural, big city). Usually, this kind of test it is not carried out in the whole EA as for pilot census, but only for some dwellings in the selected EAs.

MAPPING

90. The inter-institutional group of experts from Entities on census mapping was not established, as recommended in the report of the first mission. Representatives from the Institutes of Statistics and Geodetic Administrations from RS, FBiH and DB expressed their willingness to participate to the group, but no actions were taken to create and making it functioning.

91. Even though the methodology for the census mapping programme in RS and FBiH is based on the common document prepared at State level in 2007⁵, generally in line with International recommendations and European standards, it was assessed in this mission that the current phases of implementation of the mapping programme show differences between the Entities, in terms of map updating procedures, features represented on the maps and coding schemes.

92. The assessment was carried out in the field in each of the two Entities and District Brcko, by investigating examples of EA maps. It was noticed that in each Entity there is a

⁵ “Study on technology for production of cartographic documentation for 2011 census”. The document was the result of a joint work of the BiH Agency for Statistics, the FBiH Institute for Statistics, the RS Institute for Statistics, the Administration for Geodetic and Real Property Affairs of FBiH, the Republic Administration for Geodetic and Real Property Affairs of RS, the Ministry of Civil Affairs of BiH, the Public Registry of Brčko District, representatives from the Municipalities of the FBiH and RS.

different working arrangement of the cartographic preparation for the census, which is however not a relevant issue. The concern is the output of the preparatory work, which should be similar in the Entities in order to ensure a basic uniformity and quality at State level, and especially on the coding system used and spatial features represented.

93. An additional issue which needs to be discussed at State level is the decision to be taken on which ID building codes should be reported by enumerators on the census forms. Indeed, the current version of the questionnaires does not foresee the use of ID buildings codes reported in the census maps, instead codes assigned to the buildings by enumerators. The use of building codes reported on the census maps is much more preferable.

94. In relation to timing, the serious concerns already expressed in the previous mission have to be reiterated. The deadline of 1st October 2012 to complete cartographic preparatory work is not feasible in all Entities. In FBiH and DB could be feasible to complete census maps by the end of the year, if a number of conditions are met. In RS the results of the field visit showed that the maps planned to be used for census operations are out-of-date, with several missing addresses, and without a realistic plan it seems difficult at the moment to estimate when the cartographic census materials could be completed.

95. The recommended group of experts is also expected to discuss about the organisation of census operations in the areas at the boundary between Entities. From the discussions held during the mission with representatives from the BiH Agency for Statistics, the FBiH Institute for Statistics, the RS Institute for Statistics, the Administration for Geodetic and Real Property Affairs of FBiH, the Republic Administration for Geodetic and Real Property Affairs of RS, the Ministry of Civil Affairs of BiH, a decision on the accurate definition of the boundary lines between Entities seems not realistic in the next future. However, it was understood that there would be no objection if the enumeration will take place also in these areas with enumerators from both Entities.

Assessment

96. As anticipated during the previous mission, in FBiH a private consortium has started the cartographic work for the preparation of census maps, using digital cartographic data organised in a GIS environment. The Consortium is composed of two private companies, Angermeier d.o.o. and Gauss d.o.o. which have divided their work by municipalities but following the same technical approach. They are monitored by the Administration for Geodetic and Real Property Affairs, and by the FBiH Institute for Statistics.

97. It was assessed that in FBiH census maps will be derived from a digital mapping system organized in a Geographic Information System (GIS) database composed of i) a base map layer of, orthophotos derived from aerial photographs taken between 2008 and 2009; ii) polygon layers representing boundaries of Entities, cantons, municipalities, settlements, statistical areas, cadastral municipalities, EAs; iii) a line layer with street names; and iv) a point layer with building numbers. Buildings are not planned to be represented on census maps. Each building represented on the orthophotos is identified with the address number when available and a new ID code assigned from 1 to N within each EA (Figure1).

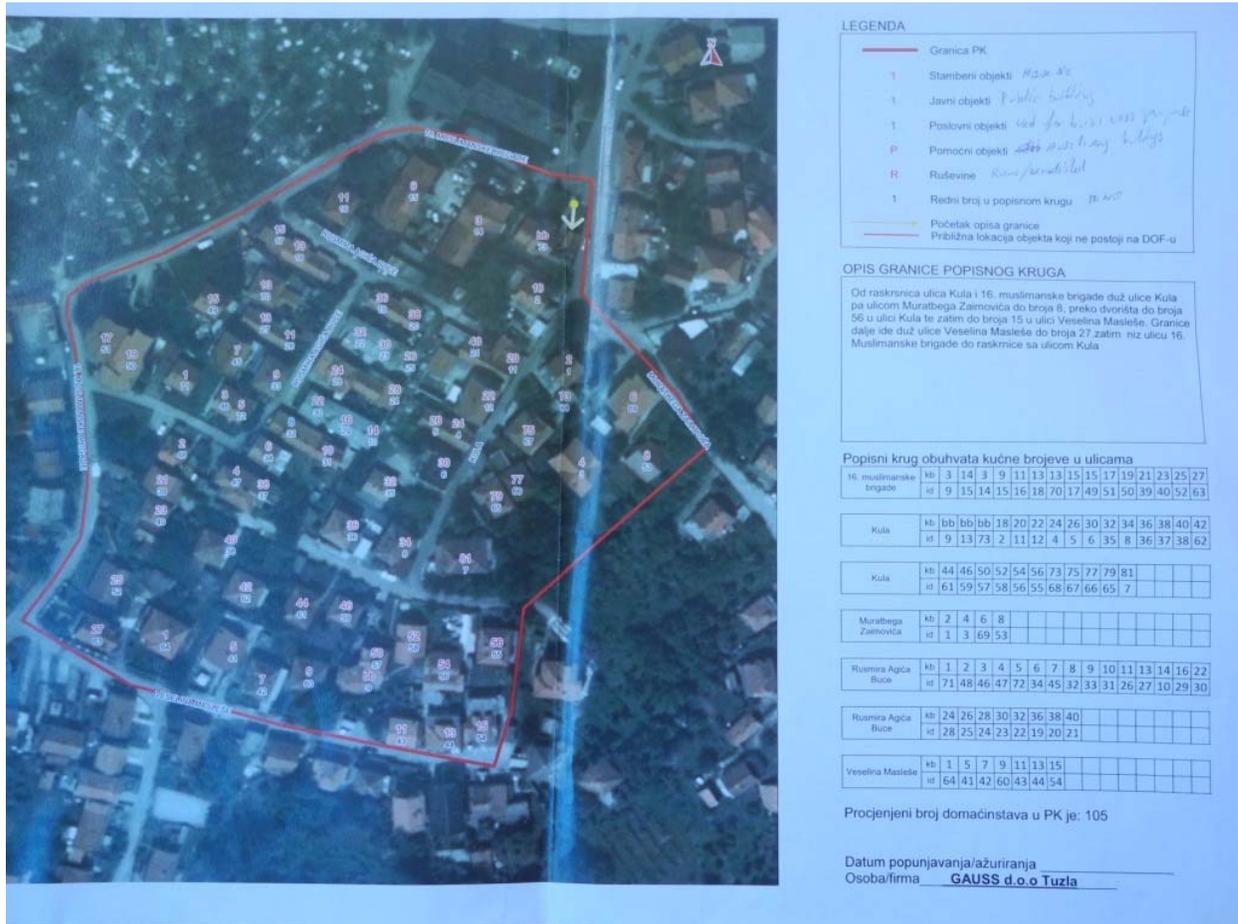


Figure 1. Example of an EA map in FBiH

98. It was reported that since beginning of May, about 100 staff organised in 50 teams are working in the field to update maps and to record number of dwelling units and addresses (Figure 2). It was reported that about 40% of the work in the field has been completed. On the basis of contractual arrangements, by mid-July the cartographic materials of 15 municipalities, with EA maps, have to be delivered to the Geodetic Administration, as a first deliverable. Those municipalities include the selected areas for the September pilot census.

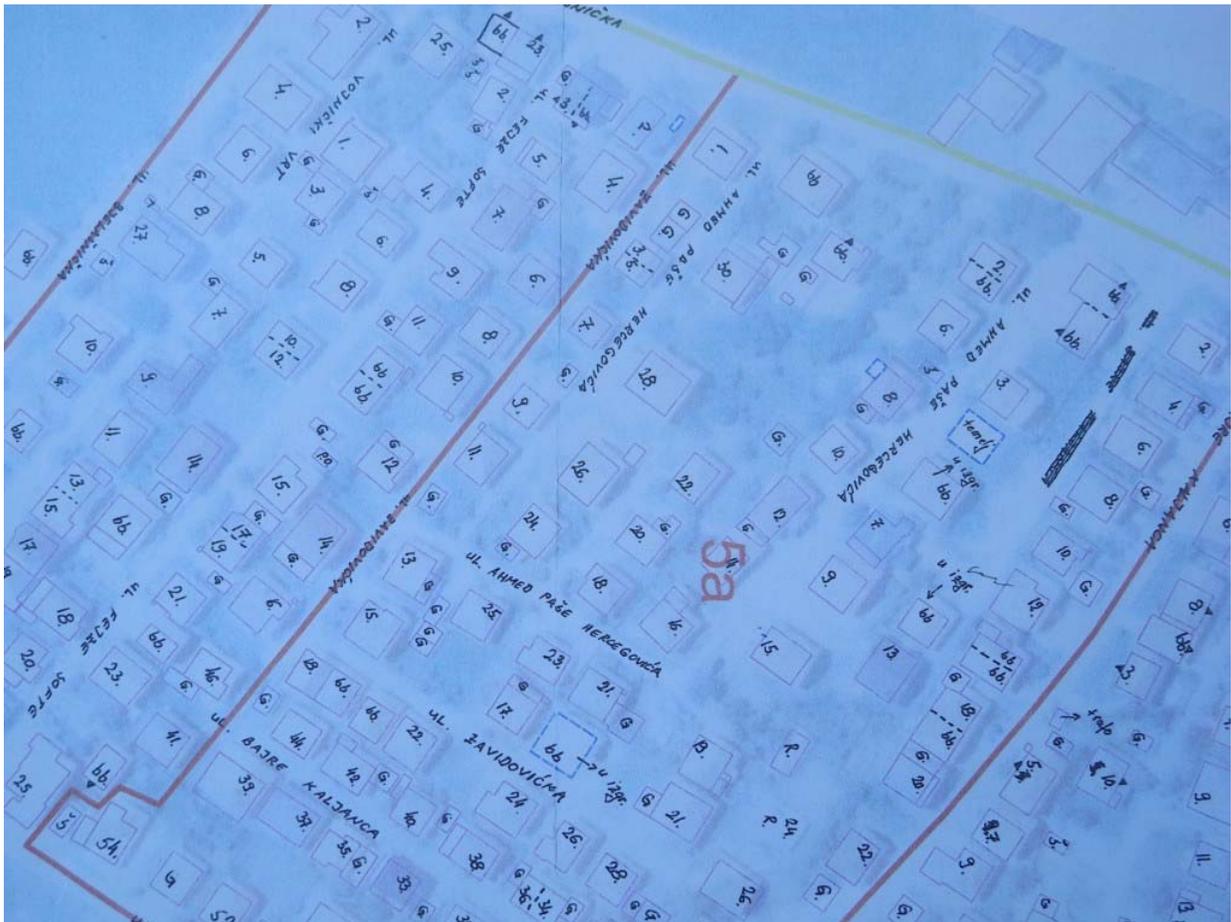


Figure 2. Example of map updating in FBiH

99. During the mission, two areas were investigated in the field, one in the urban area of Sarajevo and one in its suburb. The maps were assessed only in relation to the implemented map updating activity, and not as the final EA census map. Indeed, the boundaries of EAs showed are still the boundaries used for the 1991 census and may be needed to be modified on the basis of the estimated number of dwellings recorded during map updating operations. All the investigated streets and buildings were found represented on the maps with their corresponding codes. The maps were assessed in general as up-to-date and clear (Figure 3 and 4). However, the representation on each building of two different numbers (the administrative one and the new ID map code) is expected to confuse the enumerator, if they have to report that code on the census forms. In addition, it is important to represent on the maps the boundaries of the buildings when they are not present on the orthophotos (new buildings).



Figure 3. Area investigated in Sarajevo



Figure 4. Area investigated in the suburb of Sarajevo

100. In RS one large map was visited in the field and assessed (Figure 5). In RS orthophotos are not available and it was reported the GIS database is composed of i) a base map layer of vector topographic and cadastral maps; ii) polygon layers representing boundaries of the municipalities, settlements, statistical areas, cadastral municipalities, EAs; iii) a layer with street names; and iv) a layer with the existing buildings and addresses. Buildings are represented only if they have numbers and are not illegal constructions.



Figure 5. Area investigated in the suburb of Banja Luka

101. The visit was carried out with representatives of the Republic Administration for Geodetic and Real Property Affairs, and the Director of the Institute of Statistics.

102. The EA map reports the ID codes for the Municipality and EA. The EA boundary is the same used in the 1991 census. Therefore, also in Banja Luka the map was assessed in respect to the map updating activity, which the Geodetic Administration reported to have been completed. Buildings were coloured on the basis of their access, red from one street and green from the other street. Boundaries of parcel plots are also reported in the census map.

103. The result of the visit pointed out that the area was not updated. Several buildings (including residential buildings) were missing from the map, in many cases address numbers were not coinciding with the numbers reported on the map, and in some cases were missing. The map was assessed as no suitable to conduct census operations in that area.

104. The meeting with the Assistant Director for Geodetic Affairs, Mr Dragan Macanović, which followed to the field visit, showed that the Institute suffers from lack of adequate resources, and that the preparation of census maps in RS is progressing very slowly. Municipalities are not very active as well, due to lack of planning, coordination and resources. The progress of updating addresses is also limited by the fact that illegal constructions are not assigned with house numbers from the municipalities.

105. In District Brčko, the BiH Agency for Statistics jointly with the local Public Registry, demarcated in 2003 EAs (372) and SAs (128). Maps and EA boundaries were updated in 2010 in the framework of the preparatory census activities. The main issue reported is the out-of-date system of addresses in the District, which needs to be updated.

106. An area in the suburb of Brčko was visited and assessed (Figure 6).

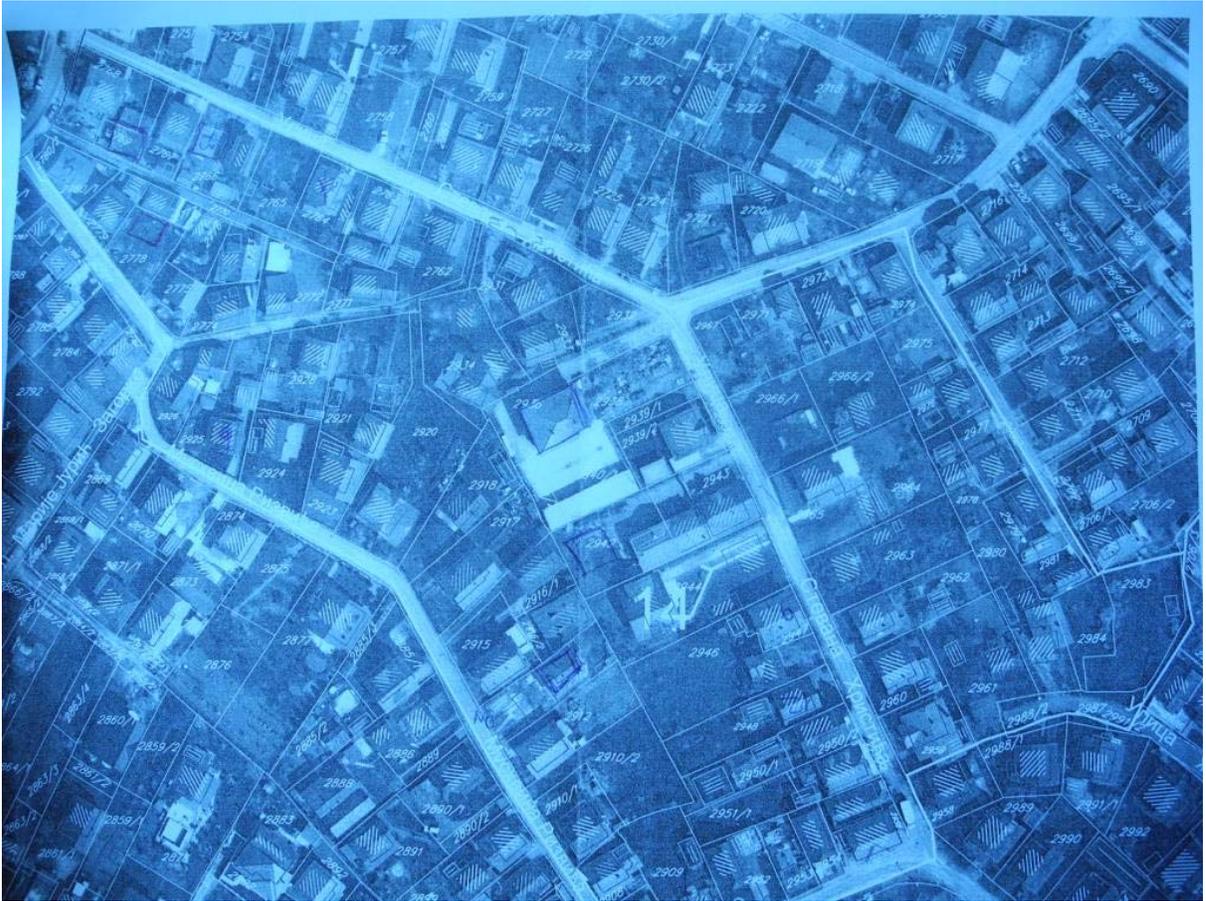


Figure 6. Area investigated in the suburb of Brcko

107. The EA presents clear boundaries, street names, street numbers in some cases, and the buildings are in general reported. As in FBiH, the EA map include in background an ortho-photo taken in 2009. A total of 6 buildings out of about 60 were found missing from the map. As in RS, parcel boundaries are reported, with the parcel numbers. It was understood the idea was to substitute the out-of-date address system with the parcel IDs.

108. In conclusion, the assessed maps on the fields present some common elements and some different characteristics, some of them not in line with international standards. Some recommendations are provided in the next chapter.

Recommendations follow-up

R: Establish an inter-institutional group of experts on census mapping to take immediate actions on the definition of census spatial units and code schemes; the criteria to demarcate enumeration areas, procedures for quality control, boundary lines between entities.

© The inter-institutional group of experts on census mapping was not created. The delineation of the boundary lines between entities has not been tackled yet.

R: Prepare an updated weekly timetable of activities on census mapping activities until October 2012.

© No timetable of mapping activities is available.

R: Draw an up-to-date inventory of the preparation of census maps for each municipality in both entities.

© Not implemented.

Short-term Recommendations (before the Pilot Census)

109. As pointed out with the previous mission report, a group of experts on census mapping should be functioning soon between the Agency for Statistics, the FBiH Institute for Statistics, the RS Institute for Statistics, the Administration for Geodetic and Real Property Affairs of FBiH, the Republic Administration for Geodetic and Real Property Affairs of RS, the Public Registry of Brčko District. The BiH Ministry of Civil Affairs may also support the coordination. The group should take immediate actions on (and prepare a document):

Final definition of census spatial units (administrative, statistical, geographic units) to be used in the Entities, their hierarchy and code schemes;

Clear definition of the criteria to demarcate enumeration areas in both Entities, and preparation of an example of EA map layout;

Clear definition of the applied and planned procedures for quality control to ensure full coverage of enumeration units in BiH;

Preparation of an updated timetable of activities on census mapping activities until October 2012;

The organization of the enumeration in the areas at the boundary line between entities.

110. It is expected that the Sector for Geodetic, Geological and Methodological Affairs of the Ministry of Civil Affairs could investigate the availability of digital orthophoto maps produced in the framework of the EU funded project "IPA-spatial information services for Bosnia and Herzegovina-phase 2: digital orthophoto maps". This would be of utmost importance especially for the territory of RS.

111. Each entity should define a realistic timetable of activities to produce census maps for the pilot census and the general enumeration.

112. For RS, it is recommended to take immediate actions for a quick progress of the census preparatory activities, according to international standards and recommendations. It is recommended to make available additional resources for the Geodetic Administration, or to hire a private company following the model of FBiH. In both cases, is essential a continuous monitoring from the Institute of Statistics and the Agency.

113. For BiH it is recommended not to use double numbers on the census maps to identify buildings. This may confuse enumerators while reporting the building code on the census forms. It is also recommended to represent new buildings not reported in the orthophotos.

114. For Brcko District it is recommended to organise a quick map updating in order to improve census maps prepared in 2010. It is also recommended not to represent parcels (and parcel numbers) in the census maps. Due to the difficulties to update the address system, is recommended to assign a new ID code to buildings in each area, as in the case of FBiH.

115. The pilot census should be used to test census maps. A list of addresses should be also prepared and provided to enumerators, who should update it in their assigned area two days prior to the commencement of the enumeration. New addresses, addresses not existing anymore, and changes on the street names should also be recorded.

Mid-term Recommendations (before census enumeration)

116. The boundaries of the spatial census units as demarcated for the 1991 census should be preserved as much as possible in order to ensure the comparability of census data at small area level. When not possible, a correspondence coding scheme should be established between old and new spatial units.

117. The Institutes of Statistics of the two Entities should be continuously and directly involved in the preparation of census maps, especially in the demarcation of the EAs

118. A list of collective living quarters in both Entities, by municipality, should be prepared soon, if not already done.

Long-term Recommendations (before dissemination)

119. The preparation of a dissemination plan for census spatial data (census atlas, webGIS, thematic mapping and spatial census data).

COMMUNICATION

120. Since the first mission the experienced journalist hired to lead the communication and outreach activities has left for another job. A Communication group in the Agency deals with Dissemination and Public Relations campaigns. The Department for International Cooperation and External Information (ICEI) and the Communication group of the Agency have no dissemination strategy and action plan for the census concerning tabulation tools, clients and stakeholders. The Communication group will be responsible for strategy, action plan and implementation of communication and outreach activities, but requests training in communication and outreach as well as a strategy and action plan. Relevant staff has been appointed in the Agency and in the two Institutes to be responsible for the communication before the census. To coordinate communication and dissemination activities with the statistical institutes in the two entities a working group have been established, but have not yet met. Since the first mission the institutions are in the process of developing websites for the census including Q&A, documents such as the law or other relevant information.

121. In line with the recommendations from the first mission the Agency and the TA-team have begun preparing a quantitative survey interviewing 1000 persons about their knowledge and attitudes to the census. Further they are preparing focus group consultations that together with the survey shall form the basis for the communication and outreach strategy. The quantitative and qualitative surveys will be carried out by an external company. The deadlines put forth in the recommendations from the first mission are passed.

122. Media consulted during the mission find that the management of the agency has good relations to the media and that it is reasonably easy for the media to get the statistical information they may need for their work.

123. At the FBiH Statistical Institute a dissemination sector has 5 persons working on dissemination and 3 on public relations. The Dissemination sector sends out hard copies of press releases written by the Agency to various institutions, they publish it on their website, and they help clients and students looking for information. They seem to work together with the Agency in their usual work.

124. At the Statistical Institute of RS the Publication Department has two full time and two part time employees who deal with dissemination of information, publications, and website. The department is not certain about its role before the census but is member of a census communication group as well as of a census dissemination work group for the Agency and the two institutes. None of them have had any meetings.

125. In almost all fields examined by the SC the three institutions have expressed the need to improve internal communication. Partly technical solutions for intra-institutional communication have not been harmonised, partly the foreseen face-to-face meetings have not taken place, mainly due to lack of approved budget, partly systematised updating formats have not been developed. The Agency is expected to be more proactive in this domain.

126. There is in the TA project a budget for public relations campaign activities of around 270.000 Euros and a full time dissemination/communication expert technical assistance is allocated for communication. The TA team explained that there is no budget set aside for the communication and outreach activities. This could be compared to the census in Kosovo⁶, which had a budget of 1.15 million Euros for the communication and outreach activities and a full time senior TA expert on communication.

127. During the first mission the political landscape was described as pretty stable with a solid State government and 6 parties unanimously agreeing on the census law has changed. Since the last mission, a reshuffling of the government coalition has started with the SDA very likely not being a member of the coalition anymore.

128. The issue of boundaries between entities has not yet been resolved and is considered by the Director of RS Statistical institute to pose a risk of dispute between municipalities and entities including for the apportioning of the population living in these areas.

⁶ All references to Kosovo, whether to the territory, institutions or population, shall be understood in full compliance with United Nation Security Council 1244 and without prejudice to the status of Kosovo.

129. Media and NGOs that were met by the mission have expressed concerns that a census in the country always has focused on nationality and ethnicity and that this time it also seems to be the case. The six political parties who promoted the census law are described as waiting for the census results in order to make use of the changes in ethnic composition since the 1991 census. Some journalists anticipate that the number of Croats and Bosniaks in RS has been significantly reduced and the political parties consequently will demand more constitutional rights for the Serb majority. The same journalists expect that in the Federation the number of Serbs and Croats has fallen and the Bosniak majority consequently would demand constitutional changes giving those more rights. In the political landscape media representatives find very little possibility for people to maintain an identity as Bosnian citizen.

130. The Initiative for Free Registration is an umbrella initiative for human rights oriented NGOs are very much engaged in the census with the purpose of avoiding it to be abused by political forces to strengthen ethnic and national divide. As discussed in the chapter about the questionnaire key issues of concern to the NGOs are the questions on ethnicity, religion and language because they can be seen to offer a mapping of the nationalities and ethnicities in the country. In addition, they deplored that representatives of the civil society were not associated neither to the preparation of the law nor to the preparations of the census.

Assessment situation –institutional, strategic, contextual

131. Since the first mission the context for the census has become more politicised and changes within government and opposition might cause additional problems around the census. In the first mission report the team was in doubt whether it would be counterproductive to carry out extensive outreach and communication activities to ensure that political, religious and civil society leaders would be supportive to the census. With the new political context the SC is of the opinion that comprehensive outreach and communication activities are necessary.

132. The head of ICEI seems very well aware of the need for a contextually based communications and outreach strategy with a detailed action plan, while the Communication group of the Agency seems more focused on tools for publicity in the final months before the census and the dissemination of results. This was clearly also the case for the FBiH and RS Statistical Institutes. The communication people in the Agency and the two Institutes all seem surprisingly far from the management and not aware of the political context and the census preparation. There is a need for training of staff in working with modern modalities for communication and outreach ahead of the census and at least for one senior expert in each institution to be much more involved in management policies.

133. Till now the work group established for communication has not worked. It seems like the Agency waits for an external consultant to develop outreach and communication strategy and plan before it communicates with the relevant partners in the Institutes. It is however important already at this stage to establish regular communication procedures with the Institutes in order also to ensure co-ownership.

134. There is a very limited budget for outreach and communication if it is understood correctly that there is no money set aside from the State.

135. It has already been mentioned that there is generally a lack of understanding of the importance of a proactive outreach and communication in order to ensure full participation and trust from all population groups. However, all relevant staff share interest in finding out more in this field.

136. The first mission report recommended carry out the research prior to developing a communication and outreach strategy by 1st of July 2012, but this will earliest happen ultimo July. With the postponement of the pilot census and the summer months ahead it is however advisable not to rush through the research and development of the strategy and action plan. Better quality may be preferred to a quick delivery on this side of the summer. It must however also be noted that if the census will take place in April 2013 as planned it will be too few time to change attitudes and minds of people sceptical about the census and to reduce the risk of misuse of the results.

137. With the very limited discussions with civil society and media the mission had, some issues already appear important for outreach and communication strategy. There is a need to address the question of nationality/ethnicity, religion and language to ensure that the population perceives the census as only an instrument for planning. It also seems obvious to address the risk of political use of the census results for strengthening tensions between different population groups or between the entities and the state. The statistical institutions must remain and be perceived as politically independent and professional.

138. A solid outreach and communication strategy and action plan can put focus on the census as a tool for local and state planning or accession to EU and minimize political and public discussions about the census as first of all a measure of entities. It might also help giving all population groups' confidence in the statistical offices and the census results and in this way ensure full participation. A comprehensive outreach strategy can also work to prevent that Agency and the Institutes are perceived as politically biased and help avoiding that census results are politically abused to instigate new national, ethnic or political divides in the vulnerable society. It is however clear that the time for implementing such strategy is very limited.

Recommendations follow-up

R: Carry out study on the knowledge, perceptions and attitudes to the census and to the national statistical agency. Begin building partnerships with civil society organisations, politicians and other stakeholders for the outreach activities.

© ToR were drafted in the EU TA project. A company should be selected beginning of July to conduct quantitative and qualitative surveys on knowledge, perceptions and attitudes to the census.

R: based on the study conducted, develop a comprehensive evidence based communication and outreach strategy with defined objectives, target groups, methodology, tools, messages, timeline and budget. Prepare workshops for interested journalists.

© The study has not yet begun but it has been agreed to outsource a quantitative survey and focus groups to an external company paid out of the EUPHC 2 incidentals. Ques-

tionnaire and focus group study preparation should be done in collaboration between the TA team and the Agency and has not yet been finalized. It is expected that the study will be finalized by the end of July.

Short-term Recommendations (before the Pilot Census)

139. Since the first mission report the Agency has gradually begun building relationship with civil society organisations and should benefit from regular meetings with organisations such as the Initiative for Free Declaration. Such networks should be strengthened also in the Institutes.

140. Since the first mission report coordinating work groups between the communication units from the Agency and the statistical offices have been established but they should begin to meet and establish regular communication routines as soon as possible.

141. Since the first mission report the dissemination and information units in all three institutions have been designated as responsible for the outreach and communication activities. They should have their capacity to do politically sensitive outreach strengthened. This can be done through designating the responsibility to one of the existing staff or by adding one senior expert.

142. The efforts to build necessary partnerships with civil society organisations, politicians and other stakeholders for the outreach activities should be enforced right after the summer holidays.

143. It is strongly recommended that the TA-team begins immediately focusing on assisting the key personnel in the institutions to develop and manage common internal communication systems and content with daily updates, follow up and discussion possibilities.

144. Since the first mission report the recommended quantitative survey and focus group consultations on knowledge, perceptions and attitudes to the census has not been implemented but is expected to be finished ultimo July. The survey and the focus group consultations should be planned in close collaboration between the Agency and the TA-team. An option to consider is to test with the focus groups whether the current formulation of Questions 23, 24 and 25 or completely open questions are preferable with the goal to reflect the diversity of the population best possible including those who identify themselves as Bosnians. The studies are expected to be finalized by the end of July.

145. The communication and outreach strategy should be with defined objectives, target groups, methodology, tools, value based aspirational and tactical messages, timeline and budget and should consist of both a long-term component and of a campaign component to be implemented within the final months leading up to the census. The messages should be tested through a focus group consultation.

146. The outreach strategy will serve as a road map for developing and managing relationships with a whole range of stakeholders, residents, government, local communities, civil society organizations and other target groups according to the risks. The communication and

outreach strategy with detailed action plan and budget must be finalised before the pilot census takes place.

147. The communication and outreach strategy and action plans should be managed and implemented by the Agency for Statistics BiH in collaboration with the entity statistical offices and external civil society representatives. The placement of advertisements, information spots, billboards, leaflets, etc. during the final campaign months should be outsourced to a professional company, while media relations, outreach partnerships and activities with social media etc. should remain with the Agency and the Statistical Institutes.

148. Since the first mission report it appears that there is no money set aside for communication within the state budget but only in the TA-project. The budget for communication and outreach activities should be revisited in order to ensure that there is sufficient money for the needed activities.

149. The pilot census should include tests of some of the communication tools and messages.

Mid-term Recommendations (before census enumeration)

150. Training of communication staff in the statistical institutes and the Agency should take place with a focus on strategic communication, advocacy, crisis communication and media relations.

151. Training of management at the statistical institutes and the Agency should be carried out with a focus on how to react to public criticism, appear in interviews, and deal with civil society, politicians and other stakeholders.

152. A senior expert with solid experience from the region, political sensitiveness, experience with communication and outreach strategies and from communicating about censuses should be employed for at least two months to develop a comprehensive evidence based communication and outreach strategy. This will be based on the quantitative survey, the focus groups and interviews with key stakeholders across the state. The engagement of the senior expert should happen as quickly as possible.

153. Workshops for interested journalists should be carried out with a focus on understanding and using statistical and census related issues to feed into journalistic reports. No training plans have been shown to the mission team but training should begin being carried out by September.

154. The Agency and the Institutes should continue strengthening their relations with national and local media and journalists. The Institutes should entity enforce the work with media relations, regular press briefings in order to inform about the upcoming census and on other related statistical outputs. This is to be done in a mid and long term perspective.

ENUMERATION

Monitoring field operations

155. Since the first mission report, there is no significant progress in planning to monitor field operations and management information system for enumeration phase. The Agency and two entities agree to develop a web based application system to monitor fieldwork. The Agency is planning to use SMS text message to collect basic data such as number of enumerated population, enumerated dwelling status of dwellings by enumeration areas. The agency is also planning to produce statistics to monitor daily progress in field operation.

156. The FBiH is planning different monitoring system to collect detail data on the progress of fieldwork requiring daily data capture of various quantitative and qualitative data at the level of enumeration areas.

157. The system for monitoring field operation will be discussed by a working group. There is a plan to test this system in pilot census by the Agency.

Assessment

158. There is common plan to use web application to monitor fieldwork among entities, but there is no clear strategy how to build the system. The Agency prepared the list of data to be collected during the fieldwork. However, the methods of capturing data during enumeration, types of statistics to be produced for monitor field work and decision making process have not been studied yet.

159. The system planned in FBiH is quite complicated, as daily entering data for many topics would represent a challenge considering that enumeration will be completed within two weeks and that a large number of field staff will be involved in this process. In addition, developing different systems for the entities entails duplication of efforts and hampers harmonized monitoring of fieldwork.

160. It seems that the Agency just started to work on methods and objectives of monitoring fieldwork. Considering the limited remaining time for pilot census, there might be a risk of not completing this phase for the pilot census if there is no good and continues collaboration between the Agency and entities.

Recommendations follow-up

R: Develop a system for monitoring enumeration.

© On the basis of the results of the Pilot Census exercise, a more sophisticated and comprehensive system should be developed for monitoring the fieldwork coverage.

Short-term urgent recommendations

161. Monitoring the field operation needs careful design with involvement of all subject matter experts such as statistical methodologists, operational experts and system experts in-

involved in the census. Usually developing such system takes longer time than expected because of complexity of planning efficient and relevant management information system for all decision-making bodies. Also it is important to ensure that the information collected is needed and will be used constructively in the management of the operation. Therefore, the Agency should take an urgent action for all components of the system and discuss with the entities. In addition, it is strongly recommended to build a unique system, to be used in both entities and DB, in order to avoid duplication of efforts and enable complete and consistent monitoring and follow-up of field work.

162. This phase of the census should be planned carefully with clear description of its objectives. Urgent decision should be taken by all entities on i) what information will be collected, ii) who will collect and enter data during enumeration, iii) what will be regular reports, iv) who will analyze the results and give a decision on what problems.

163. List of potentially useful information should be decided considering the quality of information to be collected during enumeration. Poor or incomplete information will bring extra work for field staff but with no value or little contribution in monitoring the fieldwork. It is strongly recommended to keep the list of data minimum as those considered essential or highly desirable for monitoring. Therefore, there should be common understanding of value of each item of information and how to use each item to monitor fieldwork. These are some examples for useful information based on country experiences; i) response rates and completion rates ii) non-response and refusal follow-up rates iii) coverage checks and controls (according to population estimates from alternative sources/methods) iv) types of dwellings, v) the quality of the work of enumerators and supervisors based on the feedback from instructors.

164. The methodology of monitoring field operation should be tested in pilot census. This is only way to test overall system in terms of testing the quality of each item to be collected during enumeration, efficiency of web application and types of reports for each level of decision makers.

DATA PROCESSING

Data Capture and Editing

165. The Data Capture System works in the following way: once the questionnaire's forms are scanned, the images are processed and passed to an IMR/ICR subsystem that attempts to infer the contents of the answer. Depending on the confidence of the recognition process, the IMR/ICR system it either accepts the inferred result or rejects it. Once the recognition of a questionnaire is completed the fields in which a rejected character was identified are shown to a Verifier Operator who - looking at the same time to the value recognized and to the related image - has to decide if the value is properly recognized: if not he has to manually cor-

rect it. The keyed fields are then merged with the accepted fields and used for the subsequent processes.

166. When the operation of verification is concluded starts the validation of the questionnaire. If the questionnaire has inconsistencies, the errors will be used to generate a correction request that will be solved by some specialized staff. When all the inconsistencies reported for a specific questionnaire are corrected, the master data will be updated with the corrected data and the System will again perform the validation of the questionnaire. If the questionnaire still has inconsistencies, the errors will be used to generate a new correction request. This operation will be repeated until all the inconsistencies of the questionnaire are solved.

167. In addition to the above phases, a parallel process will be in place for quality assurance. During this process, a selected group of operators should check field-by-field 1% of the questionnaires scanned and correct any field that is mistaken. Indicators about the corrections performed on the selected questionnaires will be used to evaluate the data quality of the whole capturing phase.

168. It is planned to develop a backup data entry system to process those questionnaires that are damaged or not properly recognized by the Data Capture System. No clear information was given about who is going to develop such a system. However, it seems that it will be developed with the support of the TA Project.

169. The data processing company has given recommendation for the questionnaires layout to ensure a better and easiest recognition of the answers. Those recommendations were receipted in the latest layout of the questionnaires.

Assessment

170. The model that will be developed for data capture is now outlined and the whole system is expected to be in place by the end of October. It will be tested in the beginning of November and should be ready when the data from the Pilot census will start to arrive to the processing centre. During this period the IT expert of the SC will have the chance to go through the system and assess the results of the test.

171. Concerning the procedure for detecting and correcting the inconsistencies, it is to be underlined that manual correction is rarely feasible for censuses, both from the data quality and the merely economic point of view. The conditions for such corrections are usually specified in specially designed applications that perform automatic error localization and imputation based on other information for that person (household/dwelling/building) or for other persons (household/dwelling/building).

172. Four components are normally considered essential for performing an effective cleaning of the raw data:

- a. *Definition of the edit rules*: the editing rules should be designed to detect data inconsistencies and errors, such as: i) unanswered questions; ii) unrecorded answers; iii) inappropriate responses.
- b. *Error localization of categorical variables*: Once logical edit rules have been explicitly defined by *analysing* the questionnaire and also by making use of all the knowledge regarding the

objects of the survey, they need to be controlled. It is also necessary to derive all edits that are implicitly contained in the initial ones: this is essential in order to correctly localize errors.

- c. *Imputation procedure of categorical variables*: once the errors are localized, one of the several imputation techniques can be used to correct the data. It should be noted that the nearest *neighbour* or *hot-deck* imputation techniques approach guarantees that - with the minimum set of changes in terms of variables corrected and frequency distributions - the data will satisfy simultaneously all the edits.
- d. *Imputation procedure of numerical variables*: based on the identification of outliers. Once an outlier is classified as erroneous, it is treated as a missing item and corrected using *imputation techniques*.

173. Another 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 can not be solved neither with the basic imputation techniques, nor with simplistic deterministic programs: it is in general necessary to use special purpose system or to develop ad-hoc complex applications.

174. The procedure foreseen by the three Statistical Institutions for the whole data-cleaning phase doesn't seem to respect the above requirement, leaving too much discretionarily to the human intervention of the specialized staff that will manually correct the data.

175. Regarding the questionnaire's layout should be noticed that the colours used for the pre-coded answer and for the mark boxes may generate some discomfort in reading to the enumerators. The option of adopting less intense colours for the mark boxes and black colour for the pre-coded answers should be investigated with the data processing company.

Short-term urgent recommendations (before the pilot census)

176. For the purpose of monitoring the correctness of the whole data processing phase it is crucial that the system will contain both a copy of the data as originally coming out after the OCR/IMR recognition and the final data after the verification and the validation phase. Moreover, the changes made to the original data after the OCR/IMR recognition should be recorded, together with information on the operator responsible for the change, the date and the phase in which this change is made.

177. After the verification phase no changes should be allowed to the potential sensitive question as Religion, Ethnicity affiliation and Mother tongue.

Mid-term recommendations (before enumeration)

178. As mentioned, the procedure for detecting and correcting the inconsistencies seems to leave too much discretionary decision to the specialized staff that will correct the data. A discussion should be initiated on the opportunity to use more sophisticated statistical methods, especially regarding the Fellegi-Holt approach and the related imputation methods.

179. Define the technical requirements for the backup data entry system to be used to process the damaged or not properly recognized questionnaires.

Long-term recommendations (before data processing starts)

180. 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, Verifiers Operators and specialized staff that will correct the data.

Confidentiality Safeguards

181. 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.

182. The 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 the data are 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. The Personal names should also not be included in any dataset that will be used for the production of the Census results.

183. 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 being sensitive as well.

At the current stage seems that the three Statistical Institutions do not have any plan for ensuring that there is no risk of disclosure or misuse of personal names and other potentially sensitive variables.

Short-term urgent recommendations (before the pilot census)

184. Define a detailed strategy to ensure that there is no risk of disclosure or misuse of Personal names and potentially sensitive information collected during the census.

Coding

185. A time-consuming operation in census data processing is the coding of the variables that follow a specific classification. Indeed these classifications are normally quite complex and require some specialized operator to be performed efficiently.

186. The Occupation classification adopted in the census is the international occupation classification ISCO. The code to which a person's occupation is classified is determined by the kind of work performed, irrespective of the place in which, or the purpose for which, it is performed. The nature of the industry, business or service in which the person is working has no influence on the classification of the occupation.

187. 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 industrial classification is concerned only with the ultimate purpose of the unit regardless of the precise nature of the work performed by each individual.

188. 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.

189. 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.

Assessment

190. The code to which a person's Occupation is classified is determined by the kind of work performed, irrespective of the place in which, or the purpose for which it is performed. Some others complementary information (i.e. years of education, the type of diploma, etc.) may be helpful in more specific situations.

191. Coding of Industry can be considerably improved by using the register of enterprises, and their known NACE codes. Respondents may find it easier to report the name of their employer than to describe the principal economic activity of the company. This approach obviously requires the existence of a comprehensive national business register. If this is the case, a strategy should be developed to join the name of the enterprises reported in the census questionnaire with the national business register.

192. Despite which will be the final decision concerning the questions on Mother Tongue, Ethnicity affiliation and Religion, it should be underlined that a certain amount of work will be necessary to post-code them (or to post-code the modality other specify, in the case in which the semi pre-coded solution will be adopted).

193. Despite the fact that the three Statistical Institutions are aware of the importance of the whole coding phase, not a clear plan seems to be in place to approach it. Especially is not very clear how many human resources will be mobilized in each phase and what is the plan to train them. Especially about ISCO and NACE, a not well-trained staff could lead to a poor quality of the codification.

Short-term recommendations (before the pilot census)

194. A global strategy should be developed on how to perform the coding of the three main international classifications adopted for the PHC (ISCO, NACE and ISCED). Also an estimation of the timing and of the resources needed for accomplish this result should be produced.

195. Concerning the questions on Mother Tongue, Ethnicity affiliation and Religion it is to be underlined that as soon as a final decision will be taken, a coherent IT strategy should be developed. 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.

Mid-term recommendation (before enumeration)

196. At a certain stage before the fieldwork will take place, the estimation of the timing and of the resources needed for accomplish the whole coding process should be verified using the Pilot data and, eventually, adapted.

DISSEMINATION OF THE RESULTS

Recommendations follow-up

R: identify categories of potential users and organise consultation of the users to determine demand for relevant products and services with suitable format and to adapt a range of products and services to meet current emerging needs.

R: prepare a dissemination plan, considering online dissemination, thematic analytical reports, census atlas and micro data to meet the needs of different types of users.

© No update was given on these topics. The SC understands that top priority is not given to these questions but recommend to start planning the development of a strategy and implementations actions. In particular, users can be a strong support in the preparation of the census, and communication strategy should consider including them in target groups.

Preliminary results

197. According to the Law, preliminary census results will be published within 90 days after the enumeration. Since the first mission, the Agency prepared a plan for collecting preliminary results of the census with web application. The preliminary results including number of enumerated population, households and dwellings will be entered immediately after enumeration of one EA is completed.

Assessment

198. There is a consensus between entities to use a web application to collect data on preliminary census results; however, there is no clear strategy for organization of collecting and entering data by EA level, responsibilities of census commissions or staff in this process.

Short-term recommendations (before the pilot census)

199. Dissemination strategies for preliminary results and methods for collecting data should be discussed and documented. Also the responsible bodies in the process of collecting and disseminating data and their roles should be determined.

200. The web application for capturing preliminary results as well as all process of dissemination of preliminary results should be tested in the pilot census.

Final results

201. The census law stipulates that the final results will be available within the period from 1 January 2014 until 31 December 2015.

202. The Agency expressed that the results will be available in different format and tools, including online.

Assessment

203. Since the first mission, there is not much progress in preparation of dissemination strategies.

Mid-term recommendations (before enumeration)

204. Dissemination strategies should be identified with users' consultation. Consultation of users is an essential part of census operation to determine demand for potential census topics, to deliver relevant products and services with suitable format and to adapt a range of products and services to meet current emerging needs. Dissemination plan should meet the needs of different types of users.

205. Tools for dissemination should be determined by the Agency and entities including the possibility of producing thematic analytical reports, census atlas and micro data.

EVALUATION OF THE RESULTS

206. As indicated in the Census Law, a post enumeration survey (PES) will be carried out immediately after the enumeration based on a representative sample of EAs in order to evaluate the coverage and quality of census data. The Agency is responsible for carrying out all phases of the PES including determination of the methodology, organization of the fieldwork and analysis of the PES data in collaboration with the entities statistical institutes.

207. The methodology for the PES was prepared by a consultant almost one year and a half ago. According to his report, the purpose of the PES is to estimate coverage and content errors by entity and urban localities and also for age groups and sex. The methodology indicates that PES will be conducted in 200 EAs (around 1 percent sample of expected number of 20.000 EAs) for measuring coverage errors and 1 over 10 households within one EA will be included in PES to estimate content errors. Methodological documents include detail explanations of PES operation regarding objectives, definition of concepts, sampling design, roles of agency and entities and methodology for measuring coverage and content errors.

208. The methodological document explains that the Agency is responsible for the preparation, organisation and analysis of the PES while entities would contribute to the publicity campaign of PES and municipal commissions can make proposal for controllers and supervisors to the FBiH and RS.

209. Since the first mission, the Agency appointed a section for statistical methodology, standards, planning, quality and coordination as independent body for undertaking PES activities in collaboration with the entities through working group on PES. The working group

is recently established and composed of representatives from FBiH and RS. It is planned that the group will start to work soon on PES activities.

210. Since the first mission, the Agency requested technical assistance from TA to review the methodology and organisation of PES activities and plans to test the PES questionnaires and methodology in the pilot census.

Assessment

211. The methodological documentation provides general overview of PES activities, its phases and responsibilities of the Agency, the entities and municipal commissions. It is also a good starting point that the Agency appointed a special team for PES activities to enhance the operational independence between the census and PES.

212. Discussions with the representative of the section responsible for PES bring the issue of clarifications for the responsibilities of the section, working group and cooperation with the entities to ensure its independent operation.

213. The Agency explained that PES methodology would be tested in the pilot census. However, PES questionnaires, instructions and methods for fieldwork are not yet drafted.

Short-term recommendations (before the pilot census)

214. The Agency and entity statistical institutes should take urgent decision on testing PES activities in the pilot census. Once this decision is taken, there will urgent activities to undertake such as drafting a detail activity plan for PES, preparation of PES questionnaire, pre-testing of the questionnaire, PES manuals for enumerators and supervisors, organization of field work and other issues must be finished before the pilot census.

215. It is recommended to test the adequacy of the entire PES plan and its organization in the pilot census. The purpose of testing PES in pilot census can be to test questions and the overall field methodology before real application of the PES, to test the matching rules, reconciliation procedures and analytical procedures.

216. A comprehensive plan including cost estimates of PES activities and manpower requirements should be prepared to allocate sufficient funds for PES activities.

217. There is a need to discuss and clarify how operational independence between the census and PES can be enhanced. Therefore the Agency and entity statistical institutes (may be with assistance of consultants) should have clear practical guideline to ensure its independence operation. Here are some examples; a) EAs selected for PES should be known only by the PES team until the last moment of the census operation. b) Census questionnaires have to be collected and send to the Agency before starting PES fieldwork. c) The PES data should be accessible only to the PES team.

Mid-term recommendations (before enumeration)

218. The Agency should prepare methodological documents for data capture, matching records of PES and census, reconciliation visits, methods for estimating coverage and content errors and test these methodologies in pilot census.

Long-term recommendations

219. In complement to the PES, it is recommended to use demographic methods based on the comparison of census results with other relevant sources including previous censuses, current household surveys and/or administrative registers in the evaluation and validation phase of the census.

ANNEXES

FOLLOW-UP OF RECOMMENDATIONS BY ORDER OF PRIORITY

Recommendations first mission	Follow up second mission (end June)
Short-term urgent recommendations (by end of June)	
<p>Finance: secure the multi-year census budget</p>	<p>The budget has been adopted for 2012 and 2013, year of the enumeration (32 million KM in 2013). However, two problems remain:</p> <ul style="list-style-type: none"> - possibility to pay overtime work, which is limited by law but also diversely regulated in the two entities. This may create difficulties when staff of the three agencies will work together in the data processing centre. - the minister of Finance shall define a technical mechanism to create a unique account managed by the Agency as requested by the census law, and to delegate the funds to the entities.
<p>Questionnaires: finalize the questionnaires before the pilot census: review ethnic/religion questions, pre-test before the pilot census in all languages, validate layout with data capture company.</p>	<p>Questionnaires are not finalized: discussions are still on going on the formulation of several questions. Formulation of questions on ethnicity and religion was not revised in accordance with the recommendation for strictly open questions. This recommendation is even more considered as important by the SC after hearing from representatives of the civil society. In addition, question on mother tongue should clearly allow for multiple answers, as recommended in the CES Recommendations. Questionnaires have not yet been tested and are not translated. It is not planned to conduct pre-test before the pilot census.</p>

<p>Cartography: establish an inter-institutional group of experts on census mapping to take immediate actions on the definition of census spatial units and code schemes; the criteria to demarcate enumeration areas, procedures for quality control, boundary line between entities. Prepare an updated weekly timetable of activities on census mapping activities until October 2012.</p>	<p>The inter-institutional group of experts on census mapping was not created. No timetable of mapping activities is available. However, the companies have started to work in FBiH and produce good quality maps. Mapping is expected to be completed by the end of the year in the Federation. In RS, the situation is more worrying as the Geodetic administration lacks resource to complete mapping, and maps already available show serious lack of update. In Brcko District preparatory activities for mapping are well advanced. Maps were updated in 2010 and a quick map updating in selected areas would be sufficient to carry out the general enumeration. However, decisions should be taken on codes to be used for the out-of-date addresses, and for the missing street names.</p> <p>The main urgent issues to be solved in cartography are:</p> <ul style="list-style-type: none"> - Common definitions in the Entities of spatial units, codes, criteria to demarcate EAs, tools for quality control (minimum common requirements <i>output oriented</i>) - Definition in each Entity of a realistic timetable of activities to produce census maps for the pilot census and general enumeration in line with the common definitions taken between Entities
<p>Communication: Carry out study on the knowledge, perceptions and attitudes to the census and to the national statistical agency. Begin building partnerships with civil society organisations, politicians and other stakeholders for the outreach activities.</p>	<p>ToR were drafted in the EU TA project. A company should be selected beginning of July to conduct quantitative and qualitative surveys on knowledge, perceptions and attitudes to the census.</p>
<p>Short-term recommendations (before the pilot census)</p>	

<p>Pilot Census: prepare the pilot census in order to test the complete organisation in the pilot census, including the role of census commissions, maps, training materials, PES and data processing. In the selection of areas where to conduct the pilot census, take into account the representation of the constituent ethnic groups in order to test the suitability of census questionnaires for all communities and include sensitive areas – e.g. entity boundary line communities, mixed areas etc. – to test some of the communication tools.</p>	<p>The pilot census was actually more understood by the statistical institutions as a test of some components of the census rather than a complete rehearsal of the operation, including organisational dimension.</p> <p>Decision was taken to postpone the pilot census to 15 October. Municipalities will be included, following the recommendations, but only via a contact person.</p> <p>Selection of EAs for the pilot takes into consideration urb/rural, and entity boundary areas, but not specifically representation of ethnic groups.</p>
<p>Enumeration: develop precise instructions regarding the enumeration of persons living abroad.</p>	<p>Enumeration instructions are not completely finalised. Regarding the enumeration of persons living abroad, it was reported that examples were given but the mission will be able to assess after translation of the instructions.</p>
<p>Project Management: Develop a detailed timetable for each statistical institution, as part of the general timetable, and follow up regularly its implementation, based on regular reports from the working groups and staff involved.</p>	<p>A timetable was developed by the agency but not formally adopted by the three institutions. It was reported that the directors follow up during their regular meetings but no evidence of a formal follow up of deliverables was given. In addition, the decision process seems unclear and subject to frequent back and forth. This may be the most critical issue to solve in order to be able to prepare and implement the census.</p>
<p>Finance: organise the budget by sub-domain of the census breakdown each sub-domain into categories of expenses (staff, equipment...)</p>	<p>It was reported that the budget was being reviewed according to the recommendation. The new version should be sent to the SC by July 15.</p>
<p>Enumeration: prepare a detailed list of manuals and instructions to be drafted and to update the timetable accordingly.</p>	<p>No detailed list of manuals was prepared. Only two manuals are planned at present, one for methodology and one for field workers, whatever their role (enumerators, instructors, municipal commissions...).</p>

<p>Evaluation: develop the methodology and materials for the PES to be tested in the pilot census.</p>	<p>Methodology for PES was written one year ago by a consultant. A working group has been set up to develop materials on this basis but did not meet yet. The Agency requests a mission of the consultant to help developing materials.</p>
<p>Procurement: list all procurement needs and evaluate the time needed for drafting the specifications and completing the process. In particular, procurement for printing should start as soon as possible and include clauses for emergency reprint.</p>	<p>The procurement list will be developed by the logistic group, which was set up but did not meet yet. However, the most urgent procurement procedures in IT were initiated.</p>
<p>Cartography: draw an up-to-date inventory of the preparation of census maps for each municipality in both entities.</p>	<p>Not implemented. The inventory would be a tool to monitor the progress of the mapping preparatory activities.</p>
<p>Communication: based on the study conducted, develop a comprehensive evidence based communication and outreach strategy with defined objectives, target groups, methodology, tools, messages, timeline and budget. Prepare workshops for interested journalists</p>	<p>The study has not yet begun. A quantitative survey and focus groups will be outsourced to an external company. It is expected that the study will be finalized by the end of July.</p> <p>The outreach strategy will include mapping of relationships with a whole range of stakeholders, government, local communities, CSOs and other target groups according to the risks. The strategy and action plan has been delayed and inevitably collides with summer holiday. It is therefore realistic to finalize it latest by November 2012.</p> <p>The Agency and the Institutes have established a coordination group for communication, but the group has not met yet. It is strongly recommended to have regular meetings already now.</p> <p>No plans have been shown for training of journalists.</p>
<p>Logistics: establish a Census Logistic groups.</p>	<p>Logistics working group has been established but has not yet met.</p>

Mid-term recommendations (before enumeration)	
Risk management: develop a risk management plan in order to identify possible risks and prepare solutions.	There is no global risk management plan shared by the three institutions. The FBiH Statistical Institute has developed such a plan and maintains it updated.
Staff: Secure availability of staff for the preparation and the conduct of the census. Make provision to have enough reserve of enumerators from all ethnic communities residing in the unit of local self-governments.	The Agency obtained the possibility to hire 21 staff in agency, but only this autumn and not only for the census. The two entities statistical institutes deplored that they did not receive additional staff.
Enumeration: prepare comprehensive manuals for each participant in the census activities, not only describing the assigned tasks but also explain how and when the tasks are to be performed, inputs, deliverables and reporting. Include collection of information on refusals in the enumeration procedure. - Develop a system for monitoring enumeration.	Only two manuals are planned at present, one for methodology and one for field workers, whatever their role (enumerators, instructors, municipal commissions...). This is insufficient to ensure proper acquisition of their duties by all participants. On the basis of the results of the Pilot Census exercise, a more sophisticated and comprehensive system should be developed for monitoring the fieldwork coverage.
Cartography: Preparation of census maps in the areas of the boundary line between Entities	The accurate definition of the boundary line between Entities seems not possible in the next future. However, the enumeration could take place also in these areas with enumerators from both Entities. This should be discussed in the recommended inter-institutional group of experts on census mapping, not yet established. It is recommended to prepare an inventory of the populated areas at the boundary line.
Field organization: The line of responsibilities and line of reporting should be clearly stated and explained in the manuals for each participant in census activities.	The line of responsibilities and line of reporting was discussed but not formally decided.
Collective living quarters: prepare a list of collective living quarters in both Entities, by municipality.	It was confirmed that such a list will be prepared, but no information was given on the methodology.

<p>Data processing: improve the capacity of the Agency to manage new technologies for data processing through well-organized training programme.</p>	<p>There is a plan for training on SQL server, and OCR. TA of the EU project will probably take care of it (TBC). Currently the setting-up of the IT infrastructure needed for the OCR/IMR process is postponed to mid-July. The consortium that won the tender is composed by Scytl (main), TIS and Ping (a local company). All the developing linked with the OCR/IMR process will be performed by TIS. It is foreseen a backup data entry system for those questionnaires that are damaged or not properly printed but is not yet clear who is going to develop it.</p>
<p>Long-term recommendations (before data processing)</p>	
<p>Users' consultation: identify categories of potential users and organise consultation of the users to determine demand for relevant products and services with suitable format and to adapt a range of products and services to meet current emerging needs. Dissemination: prepare a dissemination plan, considering online dissemination, thematic analytical reports, census atlas and micro data to meet the needs of different types of users.</p>	<p>No update was given on these topics. The SC understands that top priority is not given to these questions but recommend to start planning the development of a strategy and implementations actions. In particular, users can be a strong support in the preparation of the census, and communication strategy should consider including them in target groups.</p>

EXAMPLES FOR POSSIBLE FORMULATION OF THE QUESTIONNAIRE

Set of question 1-6 referring persons' residence to obtain required information for establishing the persons' usual residence.

The formulation of the Question 1

1. For person being enumerated, the place of enumeration is:

Please tick only one box

A. His/her place of permanent residence,

Lives since his/ her birth or Has moved in with intention to live there permanently

→ Question 2

B. His/her place of Temporal residence, Temporary living more or less than 12 months

→ Question 3B

C. Found in the place of enumeration and has no other place of permanent or temporary residence

→ Question 3B

Or without use of terminology “**permanent residence**” and “**temporal residence**”, but just using explanations on their meaning

1. In the place of enumeration, person being enumerated,:

Please tick only one box

A. Lives since his/ her birth or Has moved in with intention to live there permanently

→ Question 2

B. Temporary lives more or less than 12 months

→ Question 3B

C. Is found there and has no other place of permanent or temporary residence

→ Question 3B

The formulation of the Question 1 in the local language, taking into account the terminology and definitions used in the Census Law, suppose to be as following one.

1. Za lice koje se popisuje, mesto popisa je:

(odaberite samo jedan odgovor)

A. Njegovo prebivalište, Živi tu od rođenja ili Se doselilo sa namjerom da stalno tu živi

→ Pitanje 2

B. Njegovo boravište, Privremeno živi više ili manje od 12 meseci

→ Pitanje 3B

C. Lice se našlo u mestu popisa i nema prebivalište ili boravište u drugom mestu

→ Pitanje 3B

III (bez upotreba termina “prebivalište” i “prebivalište”, nego samo upotrebiti objašnjenja šta oni znače)

1. U mestu popisa lice koje se popisuje:

(odaberite samo jedan odgovor)

- A. Živi tu od rođenja ili Se doselilo sa namjerom da stalno tu živi → Pitanje 2
- B. Privremeno živi više ili manje od 12 meseci → Pitanje 3B
- C. Našlo se u mestu popisa i nema prebivalište ili boravište u drugom mestu → Pitanje 3B

2. Is the person present in the place of permanent residence at the critical moment of the Census (midnight 14 October 2012)?

Yes → Question 8 No → Question 3A

Possible formulation **Question 3**

3A. Reason for absence from the place of permanent residence

3B. Reason for presence in the place of temporal residence /place of enumeration

(copy the code of reason from the List of persons, column 10)

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Or all reasons can be given in Question 3 in P-1 form and than is not necessary to repeat them in P-2

3A. Reason for absence from the place of permanent residence

Please tick only one box in Column 1 or Column 2

3B. Reason for presence in the place of temporal residence /place of enumeration

Please tick only one box in Column 1

Column 1: In other place in BiH

01. Work

02. Education

03. Family reason

Column 2: Abroad

05. Working abroad for foreign employer or self-employed

06. Working abroad in diplomatic, consular and other offices of BiH, or international organizations, etc.

07. Absent abroad as a family member of persons with rea-

Less than once a week 

At least once a week 

AGENDA OF THE STEERING COMMITTEE SECOND MISSION

Tuesday, 26. June, Banja Luka, Institute for Statistics of RSIS

9.00 – 10.00 (RSIS premises) **IMO team + RSIS Management**

Radmila Cickovic, director, **Radosav Savanovic**, deputy director, **Bogdana Radic**, assistant director, sector for population statistics, education, social statistics and jurisdiction, **Radoslav Latincic**, assistant director, information technologies and publications sector

10.00 – 12.00 (RSIS premises) **Guido Pieraccini, IMO expert, + IT group**

Mladen Radic, head of the department for information structure development, technical and operation support, **Mladen Maric**, head of the department for data entry, application development and data base application

10.00 – 12.00 (RSIS premises) **Bent Noerby Bonde, IMO expert, + communication group**

Vladan Sibinovic, head of the department for database of publication and statistical publications, RSIS, **Vanja Vilipic**, senior statistician for social protection, health and gender statistics, RSIS

12.00 – 14.00 (RSIS premises) **Katerina Daskalovska, IMO expert, + Questionnaires and enumeration group**

Milka Miholjic, head of population statistics department, RSIS; **Dara Petkovic**, senior statistician for natural changes of population, RSIS

12.00 – 14.00 (RSIS premises) **Meryem Demirci, IMO expert, + Pilot Census + data processing**

Bogdana Radic, assistant director, sector of population, education and social statistics and justice administration statistics, RSIS; **Rajko Vranjes**, senior advisor for the Census and Population Projections, RSIS; **Mladen Maric**, head of department for data entry, application development and data base administration

10.00 – 13.00 (Field visits to enumeration areas in the neighbourhood of Banja Luka) – **Roberto Bianchini + representatives of Republic Administration for Geodetic and Property Affairs of RS (RGU) + representatives of RSIS - Cartography group**

Velibor Vitor, head of IT department, RGU; Representative of the Cadastre office, Banja Luka (a name will be confirmed later); **Radoslav Latincic**, assistant director, information technologies and publications sector RSIS, **Natasa Dragic**, senior statistician for register of spatial units and GIS. RSIS

13.00 – 14.00 (*premises of Republic Administration for Geodetic and Property Affairs of RS*)
Roberto Bianchini + **RGU representatives** + **group for cartography**

Velibor Vitor, head of IT department, **RGU**; Representative of the Cadastre of Banja Luka (name will be confirmed later); **Radoslav Latincic**, assistant director, information technologies and publications sector RSIS, **Natasa Dragic**, senior statistician for register of spatial units and GIS, RSIS

Wednesday, 27. June, Sarajevo – Institute for Statistics of FBiH (FIS)

9-10:30 Meeting with the political advisors of the EU Delegation (all SC members)

11.00 – 12.00 (*FIS premises*) **IMO team** + **FIS Management**

Hidajeta Bajramovic, director, **Galiba Karacic**, executive secretary, **Hidaeta Colovic**, assistant director, sector for population and social statistics, **Munira Zahiragic**, advisor in the director's cabinet,
Semso Surkovic, senior advisor for support to the communication and web servers

12.00 – 14.00 (*FIS premises*) **Guido Pieraccini, Meryem Demirci** + **IT group**

Nermina Sarajkic, head of the department for the development of data entry applications, FIS ; **Semso Surkovic**, advisor for support to the communication and web servers, FIS; **Razija Bicakcic**, advisor for the development of applications , FIS

12.00 – 14.00 (*FIS premises*) **Bent Noerby Bonde** + **Communication group**

Zehra Kaba, head of the department for publications , FIS; **Mevla Softic**, head of the public relations department and library, FIS; **Mahir Kolos**, advisor for dissemination, FIS

12.00 – 14.00 (*FIS premises*) **Katerina Daskalovska, IMO expert, + Questionnaires and Enumeration group**

Hidaeta Colovic, assistant director, sector for population and social statistics, FIS; **Jasmina Velic**, head of the department for population statistics and register, FIS; **Jasmina Konakovic**, advisor for the census of population, households and dwellings, FIS; **Emina Ajkunic**, senior statistician for natural changes of

population and migrations, FIS; **Nusreta Imamovic-Kaljanac**, head of the department for industry, construction and energy department, FIS

14.00 – 16.00 (*FIS premises*) **Meryem Demirci + Pilot Census, Data processing**

Hidaeta Colovic, assistant director, sector for population and social statistics, FIS; **Jasmina Velic**, head of the department for population statistics and register, FIS; **Nermina Sarajkic**, head of the department for the development of data entry applications, FIS; **Jasmina Konakovic**, advisor for the census of population, households and dwellings, FIS; **Emina Ajkunic**, senior statistician for natural changes of population and migrations, FIS;

11.00 – 14.00 (*Field visits to enumeration areas in one of Sarajevo municipalities with the FIS representatives + representatives of Geodetic Administration of Federation of BiH + representative of the contracted company Angermaier, ltd. Sarajevo*)

Roberto Bianchini + Cartography group

Valentino Vlastic, representative of Geodetic Administration of Federation of BiH, **Amir Karabegovic**, general manager, contracted company Angermaier, ltd. Sarajevo; **Munira Zahiragic**, advisor in the director's cabinet, FIS; **Belmira Hadziabdic**, head of the department for the register of spatial units, FIS

14.00 – 15.00 (*FIS premises*) **Roberto Bianchini + representative of Geodetic Administration of FBiH + Cartography group**

Valentino Vlastic, representative of Geodetic Administration of Federation of BiH, **Munira Zahiragic**, advisor in the director's cabinet; **Belmira Hadziabdic**, head of the department for the register of spatial units, FIS

15.30 – 17.00 (*Angermeier premises*) **Roberto Bianchini + Amir Karabegovic**-
director of the Angermeier Company ltd. Sarajevo

Thursday , 28. June, Sarajevo – Agency for Statistics of BiH/Brcko Branch of the Agency for Statistics of Bosnia and Herzegovina

08.00 – 12.00 **Roberto Bianchini** Travel to Brcko

12.00 – Statistics for
Roberto Bianchini + representatives of Brcko Branch of the Agency for Bosnia and Herzegovina_ and the Cadstral Unit within the Department

Public Register of the Brcko District Government - meeting and the field visit Enumeration areas in the Brcko District (*the names and titles to be confirmed soon!*)

Afternoon RB's Return to Sarajevo

09.00 – 10.00 (*BHAS premises*) **IMO team + BHAS Management**

Zdenko Milinovic, director, **Slavka Popovic**, deputy director, **Fadil Fatic**, deputy director

10.00 - 11.00 (*BHAS premises*) **Jean-Michel Durr + Preparatory work group**

Admir Kulic, BHAS Census coordinator (head in the IT sector), **Suzana Marceta**, head in the sector for legal, general issues and accounting sector, **Nora Selimovic**, head in the demography and social statistics sector

10.00 - 11.00 (*BHAS premises*) **Bent Noerby Bonde + Communication group**

Sabrina Omerbasic, senior adviser in the dissemination sector, **Admir Kulic**, BHAS Census coordinator; **Victor Dinculescu**, Team leader, EUPHC Phase 2, BiH Census; **Maria Radulescu**, KE for PAC and dissemination

11.00 - 13.00 (*BHAS premises*) **Katerina Daskalovska + Questionnaires and Enumeration group:**

Nora Selimovic, head in the sector for demography and social statistics; **Sevala Korajcevic**, head in the sector for agriculture, environment and regional statistics, **Fuad Bahtanovic**, head in the sector for agriculture, environment and regional statistics,

11.00 - 13.00 (*BHAS premises*) **Guido Pieraccini + IT group**

Admir Kulic, BHAS Census coordinator (head in the IT sector), **Sevala Abaz**, head in the IT sector, **Sulejman Hasanovic**, head in the IT sector

13.00 - 14.00 Lunch break

14.00 ----- (*BHAS premises*) **Guido Pieraccini + IT group** - Continuation of the meeting

14.00 - 17.00 (*BHAS premises*) **Meryem Demirci + all BHAS Census Bureau members**

Friday 29 June, Sarajevo – Other relevant meetings organised by EUD

9.00 - 11.00 (*BHAS premises*) **Roberto Bianchini, JM Durr** + a representative of the Ministry of Civil affairs of BiH.

9.00 - 11.00 (*EU Delegation premises*) **Bent Noerby Bonde + representatives of media**

9.00 - 11.00 (*BHAS premises*) **Meryem Demirci + BHAS representative for evaluation**

Edin Sabanovic, assistant director, sector for statistical methodology, standards, planning, quality and coordination

9.00 - 11.00 (*BHAS premises*) **Guido Demirci + BHAS representative for IT**

9.00 - 11.00 (*BHAS premises*) **Katerina Daskalovska + BHAS representative for training**

11.00 – 16.00 Debriefing meeting of the Steering Committee

Monday 2 July (Pieter Everaers, Christophe Dietrich (CoE), Jean-Michel Durr)

- Meeting the directors of the Agency and entities and discuss the development of the census operation and the recommendations of the Operation
- Meeting with the EU Delegation
- Meeting with relevant BiH authorities in order to present the results of the SC missions in BiH and to advocate for the development of the Population Census in BiH according to UN and EC recommendations
- Meeting Pieter Everaers and Jean-Michel Durr to discuss the preliminary results of the second mission of the SC IMO
- Preparation and participation in the press conference, in EU Delegation, to inform about IMO activities and present the results of the SC 1st mission and the preliminary result of the SC 2nd mission