



Quality report
for the statistical survey
LABOUR FORCE SURVEY,
2011

Republika Srpska Institute of Statistics,
Banja Luka, 2012

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1. Introduction into the statistical survey and its output – Survey methodology

1.1. Purpose and periodicity of survey implementation

Labour Force Survey (LFS) is carried out all over the world and it represents the most comprehensive source of data on the status of persons at labour market. Methodological basis of the Survey is founded on the recommendations of the International Labour Organisation (ILO), which allows for international comparability of results.

The Republika Srpska Institute of Statistics started carrying out the Labour Force Survey in 2006. It is carried out annually.

Labour Force Survey is a household-focused statistical survey, designed to ensure the provision of data on basic categories of population aged 15 and over, which in turn provide for an insight into characteristics of labour market of a country. The main aim of the Survey is to provide data on the three basic, mutually exclusive categories of population: employed, unemployed and inactive persons.

In addition to demographic, socio-economic and educational data, the Survey also serves to collect data on employment, unemployment and underemployment, as well as data on occupation, working hours, duration of employment, additional employment, education and further training, job seeking, etc. Collected data allow for the calculation of major indicators of the situation at labour market and the state of economy of a country, including rates of activity, employment and unemployment.

Data obtained through the Labour Force Survey are based on the Labour Force Concept and they are not methodologically comparable with data obtained from other statistical or administrative sources.

Labour Force Survey also includes an ad-hoc module “Transition from work to retirement”, which was carried out in all the European Union member states in 2011.

1.2. Legal basis and responsibility of statistical institutions

Labour Force Survey is carried out pursuant to the Statistical Programme of Republika Srpska for the period 2009-2012, which is based on the Law on Statistics of Republika Srpska (“Official Gazette of Republika Srpska”, No. 85/03).

1.3. Observation unit

Observation unit in the survey is a household randomly selected into the sample.

A household is any family or other union of persons who state that they live together and spend their income together to pay for the basic living expenses, notwithstanding whether all its members are permanently present at the place of residence of the household or some of them are temporarily living in another settlement or abroad, for the purposes of employment, education or other reasons.

A household can be:

- a) two or more persons, irrespective of their family relations, sharing the same housing unit, who usually buy and consume food jointly (multi-member household), and
- b) one person living in a housing unit alone, or living with other people without taking part in the joint purchase and consumption of food (one-member household).

The Survey does not cover collective households (homes or hotels for singles, boarding homes for students or pupils, homes for children and youth with special needs, homes for vulnerable children, homes for retirees, old and infirm persons, other nursing and care homes, convents, monasteries, boarding schools, etc.).

Survey unit is a member of the selected household, and it represents every person who lives and consumes food in the household, as well as every person who is temporarily absent from the household at the time of survey implementation, because he/she is:

- a) a student or pupil supported by parents, regardless of the length of absence;
- b) on a tourist trip or visiting relatives or friends, or on a business trip, i.e. railway worker, salesman, sailor, etc.;
- c) detained or placed in a specialized institution (psychiatric clinic, asylum, sanatorium, home for the elderly, etc.), staying less than 12 months;
- d) absent from the household for 12 or more months due to employment within the borders of BH or due to employment with a local employer outside the borders of BH.

Household members do not include:

- a) guests, whether relatives or not, who have other permanent place of residence (guests are members of another household);
- b) persons working as domestic assistance staff, if they live separately;
- c) detained persons and persons placed in specialized institutions (psychiatric clinic, asylum, sanatorium, home for the elderly, etc.), staying more than 12 months.

A person born after the reference week is not considered a household member. On the other hand, a person who was alive during the reference week but who died afterwards is considered a household member.

1.4. Data collection

Data are collected directly from all members of the sampled household, through an interview. Each household member provides answers in the Survey himself/herself, while parents or guardians provide answers for children under the age of 15. Exceptionally, household head or the best informed person in the household may provide answers for all members of the observed household.

Reference period is the period during which the data collection was carried out. Most of the data refer to the economic activity of persons in a specific calendar week, from Monday to Sunday, which is called the reference week. Some of the data refer to other periods (four weeks, or a year compared to the reference week).

The reference week for the LFS 2011 was between 4th and 10th April 2011. This was the week before the fieldwork/interviewing period. Interviewing was carried out between 11th and 25th April 2011.

Fieldwork was organised at regional offices of the Republika Srpska Institute of Statistics. There were 60 interviewers and 15 controllers engaged in the data collection. Data entry was carried out by 9 persons, it was organised at the Institute's headquarters and it took one month.

The following methodological instruments were used for the Survey implementation:

- a) Questionnaire LFS - 2011 (ARS 1)
- b) Questionnaire on non-response (ARS 2)
- b) Instructions for completing the questionnaire (ARS 3)
- γ) List of sampled dwellings and households (ARS 4)
- δ) Reports during the Survey (ARS 5)
- η) annexes:
 1. List of countries
 2. List of municipalities
 3. Classification of Economic Activities
 4. Classification of occupations

1.5. Coverage

Demographic data are collected for all household members who live in selected dwellings, while data on work activity are collected for household members aged 15 and over, who are defined as the unit of the survey.

The survey covers 3,564 households.

The sample is designed as a stratified two-stage random sample.

The last census of population in BH was conducted in 1991. As large migrations of population occurred afterwards and the survey was based on a sample of selected households as observation units, it was necessary to provide updated data based on which the sample could be selected. With the help of UNDP, the

project Updating of the sample framework in BH was formulated and implemented. This project was funded by the UK government, through its Department for International Development (DFID). The project served to collect data on all households from the selected 1,500 enumeration areas. Data were collected for 80,069 households. These households make up the Expanded master sample, which represents the basis for the sample selection for all household-based surveys carried out on the territory of BH. However, a part of the Extended master sample was used as a framework for the LFS. To be precise, the framework included 67,974 households, that were contacted directly and agreed to provide data. From this framework (which, in its design, was stratified by entities and Brčko District), 10,501 households were selected for BH, of which 5,935 for the Federation of BH, 3,564 for Republika Srpska and 1,002 for Brčko District. Stratification in the selection of households for the LFS was also done by settlement type (urban and other), thus, this is a stratified two-stage random sample with six strata.

1.6. Definitions

Working age population covers all persons aged 15 and over.

Employed persons are persons aged 15 and over who:

- worked for at least one hour for a salary or wage during the reference week, regardless of their formal status, or
- did not work during the reference week, but had a job to return to.

The segment of employed persons consists of: employees receiving salary (employed persons who receive salary or wage for their work), self-employed persons (employers who manage a business entity and employ one or more employees, as well as persons who work for their own account but do not have employees), and unpaid family workers (household members working in the family business).

Underemployed persons are persons who work shorter than prescribed working hours, but are willing to work longer hours and ready to accept more work in the following two weeks.

Unemployed persons are persons aged 15 and over who:

- during the reference week, did not perform any activity for a salary or fee and did not have a job to return to;
- spent four weeks (reference week and preceding three weeks) actively seeking employment or, having found a job, will start working in the near future;
- could start working (would be available to take a job) in the following two weeks, should they be offered employment.

Labour force or economically active population comprises employed and unemployed persons.

Inactive population comprises all persons aged 15 and over who did not work during the reference week and who during the four weeks (reference week and previous three weeks) did not take any measures to seek employment, as well as persons who would not have been ready to start working in the following two weeks were they offered a job.

Discouraged inactive persons are persons who did not seek employment during the reference period, because they were convinced that they could not find a job, even though they were willing and ready to start working in the following two weeks were they offered a job.

The abovementioned statuses are statuses of surveyed persons as defined by definitions of the International Labour Organisation (ILO), while working statuses of surveyed persons according to their own opinion represent subjective working statuses.

Activity rate represents percentage of labour force to working age population.

Employment rate represents percentage of employed persons to working age population.

Unemployment rate represents percentage of unemployed persons to labour force.

1.7. Data processing

Editing and processing of statistical materials are organised centrally, i.e. at the headquarters of the Republika Srpska Institute of Statistics.

During the processing of statistical materials, non-response is classified into three groups: non-response of the entire household, non-response of one household member, and non-response to individual questions.

For non-response of the entire household (whether it was not found at the address or it refused to participate in the survey for some reason), imputation was not done. Instead, corrections were introduced by weighting

(correction of the initial weight with non-response). Also, imputation was not done for non-response of one household member (refusal of a household member to participate in the survey, especially in the part ARS 2b; there were no such cases in 2011). For non-response to individual questions, imputation was done, depending on the type of questions. It was performed only on those variables relevant to the preparation of publications, such as length of job seeking, average working hours, etc.

Usually, the average/median procedure is applied for continuous variables in observed groups, e.g. for a particular age group, particular educational attainment, particular occupation, etc. When it comes to categorical variables, historical data (if available, for example the survey from the previous year), logical reasoning (if there are not many of these cases) or hot-deck method is used for categorical variables. In certain cases, subsequent control via telephone is performed.

The calculation of initial weights is the first phase in the assessment of unknown parameters of the population. The initial weight represents the reciprocal value of the probability of selection of a particular unit into the sample. If n_h units from a stratum h with N_h units were selected into the sample, the probability of selection of a unit of this stratum equals n_h/N_h , while the initial weight equals N_h/n_h . Due to non-sampling errors, correction factors of initial weights are calculated. Correction factors serve, for instance, to selectively increase initial weights of those units which belong to the response, so that they also represent units in the population that are classified as non-response. The basic assumption of such correction is that sample units that did not respond in their key parameters are similar to those included in response. If in case of a stratified sample in the stratum h we have response of m_h units out of n_h units selected into the sample, then the correction factor of the initial weight equals n_h/m_h .

Correction for non-response was made on each of the strata. Due to the lack of reliable external sources, no additional corrections, such as calibration and post-stratification, were made.

The programme used for the entry of survey data contains controls which make it impossible to enter computationally or logically incorrect data into the database. These are mainly alerting "HARD" controls that stop the entry until correct data are entered. Such entry method provides the database with logically and computationally correct data.

1.8. Data publishing

The thematic bulletin LFS-2011 contains the analysis of annual data from the Labour Force Surveys carried out in 2009, 2010 and 2011. Data are presented in absolute and relative values (absolute numbers, rates). Preliminary results (the data of their publishing) of the Labour Force Survey 2011 were published 112 days after the end of the reference period, on 31st July 2011 (in the Release). Final results (the date of their publishing) of the Labour Force Survey 2011 were published 204 days after the end of the reference period, on 30th October 2011. Data were also published in the Statistical Yearbook and in the publication "This is Republika Srpska".

1.9. Key variables

- activity during the reference week,
- temporary absence from work,
- reason for absence from work,
- date of commencement of work on the main job,
- reasons for not seeking a job,
- occupation on the main job,
- prevailing activity on the main job,
- employment status,
- usual place of work,
- number of working hours,
- duration of job seeking,
- status before beginning to seek a job,
- type of school attended,
- field of school attended.

1.10. Key statistics

- unemployment indicator (share of unemployed persons in active population),
- employment indicator (share of employed persons in working-age population),

- activity indicator (share of active population in working-age population),
- inactivity indicator (percentage of inactive persons in working-age population),
- number of unemployed persons (persons who do not have a job, but are actively seeking it; they would be ready to start working if they were offered a job),
- number of employed persons (persons who performed certain work for at least one hour during the reference week, for which they were paid in cash or in kind, persons who were employed but were absent from their workplace during that week, and household members who help run a family business without direct fees),
- number of active citizens (represents the sum of number of employed and unemployed persons, i.e. it represents the measure of labour supply in a country),
- status of employed persons (presents the distribution of employed persons according to their status on the labour market: employed persons receiving a wage (employees), self-employed persons and unpaid unpaid family workers; each category is presented as a percentage of total employment),
- employment by group of sections of activity (presents the distribution of employed persons by section of activity: agriculture, industry and services; employment for each section is presented as a percentage of total employment),
- youth unemployment (four indicators: youth unemployment rate, ratio of youth unemployment rate to adult unemployment rate, share of unemployed youth in the total number of unemployed persons, share of unemployed youth in the total youth population),
- long-term unemployment (persons who have been seeking employment for a year or longer; two main indicators are long-term unemployment rate as the ratio between long-term unemployed persons and active population and percentage of long-term unemployed persons in the total number of unemployed persons),
- unemployment based on educational level (two indicators: distribution of unemployed persons by educational level and unemployment rates by educational level).

1.11. Questionnaire

The questionnaire is available at the website of the Republika Srpska Institute of Statistics <http://www.rzs.rs.ba>.

The LFS questionnaire consists of two parts – ARS 1a, which is completed for all household members, and ARS 1b, which is completed for all persons who meet the criteria set out in the column 21 of ARS 1a.

These two parts of the Questionnaire are technically different. In ARS 1a data are written down horizontally, one row per one household member, while in ARS 1b data vertically, one column per one household member.

1.12. Contact information

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2. Relevance

Labour Force Survey meets the needs of data users (Ministry of Labour of Republika Srpska, Republika Srpska Employment Office, Gender Centre of Republika Srpska, Council of Ministers of Bosnia and Herzegovina, etc.), as it results in internationally comparable data, which are used for the preparation of strategic documents (Development Strategy, Employment Strategy, etc.), as well as for the preparation of various analyses and projects (e.g. reducing long-term unemployment, underutilization of labour force, reducing the poverty of employed persons, increasing the quality of work, gender equality at labour market, etc.).

2.1. Quality and performance indicator – Rate of available ESS statistics (R1)

The rate of available statistics represents the ratio between available statistics and statistics required (prescribed) by ordinances and regulations (primarily ordinances and regulations of the European Commission and other relevant international organisations).

The rate of available statistics is 100.0% $[(196/196 \times 100)]$, as all the variables required by the Regulation have been implemented. Labour Force Survey (LFS/2011) was implemented on the basis of the European Commission Regulations No. 577/98, 1897/2000 and 377/2008, and the only inconsistency refers to the implementation frequency. In BH and Republika Srpska, LFS is carried out once a year, while the regulation requires for it to be implemented continually, i.e. monthly.

3. Accuracy

3.1. Sampling errors

3.1.1. Method of sampling error calculation

Sampling errors are presented for the following statistics and/or variables: total population, working-age population, labour force, employed persons, unemployed persons, inactive persons, persons under the age of 15, persons from 15 to 64 years of age, activity rate, employment rate and unemployment rate.

3.1.2. Sampling error – Quality and performance indicator – Coefficient of variation (A1)

Confidence intervals, standard errors and coefficients of variation – ARS 2011

thous.

	Estimate	Standard error	Lower 95% confidence interval limit	Upper 95% confidence interval limit	Coefficient of variation, %
1. Total population (3+6+7)	1052	42	969	1135	4,0
2. Working-age population	898	35	829	968	3,9
3. Labour force (4+5)	430	19	392	467	4,5
4. Employed persons	324	16	294	355	4,8
5. Unemployed persons	105	7	92	118	6,3
6. Inactive persons	469	18	433	505	3,9
7. Persons under the age of 15	153	8	137	170	5,4
8. Persons from 15 to 64 years of age	689	30	631	747	4,3
Rates (%)					
Activity rate	47,8	0,8	46,3	49,3	1,6
Employment rate	36,1	0,9	34,4	37,8	2,4
Unemployment rate	24,5	1,1	22,3	26,6	4,5

3.1.3. Explanations

Sampling errors occur due to the fact that the Survey is implemented on a sample or its part, not on the entire target population (for LFS, it would involve all persons aged 15 and over in Republika Srpska). Coverage of the entire population (census implementation) would require much more time and significantly higher financial resources. It is also a fact that there are numerous possible samples for one survey, with each sample resulting in certain estimates of key indicators and these estimates would be more or less different. Sampling errors, which, unlike the non-sampling ones, are measurable, indicate the level of reliability of assessed indicators, that is, they provide the measure of variation of indicator assessments from all possible samples. Coefficient of variation (CV) and confidence interval are used as checks of the reliability of assessed indicators.

The following symbols are adopted for the LFS:

1. **()** The data is less reliable if $10\% \leq CV < 20\%$
2. **(())** The data is unreliable if $20\% \leq CV < 30\%$
3. **•** The data is extremely unreliable if $CV \geq 30\%$.

3.1.4. Activities to reduce sampling errors

Sampling errors on key indicators (employment, unemployment and activity rate) are entirely acceptable. Higher reliability of other indicators and higher reliability of key indicators but on a more detailed level would be possible in the current situation, but only if the sample was enlarged.

3.2. Non-sampling errors

3.2.1. Coverage errors

Coverage errors refer to differences between target population and population selected into the sample.

3.2.1.1. Quality and performance indicator– Overcoverage rate (A2)

Since the sample was selected on the basis of the Master framework which was updated two years ago, with updating not being based on information from the field collected during the survey implementation, there were 30 dwelling units in the LFS 2011 which were abandoned or empty.

3.2.1.2. Undercoverage error

There were no such cases in the Labour Force Survey 2011.

3.2.1.3. Measures to reduce sampling errors

Annual updating of the Master framework based on the fieldwork information, i.e. after the survey implementation. Currently, information about address changes and abandoned dwelling units is not included in the Master framework.

3.2.2. Measurement errors

3.2.2.1. Controls to detect measurement errors

Before data entry, paper questionnaires are visually reviewed and if there are certain irregularities in the data, which cannot be corrected based on other data, the person performing this control contacts the household via telephone in order to find out the true information based on which he/she corrects the data in the questionnaire.

When data are entered into the electronic database (Blaise 4.7.-programme for surveys), they are controlled for the second time using defined logical and computational controls. If entered data do not meet the pre-defined controls, the data entry stops until correct data are entered (so-called "hard" controls). If necessary, in this phase households are again contacted via telephone, in order to correct the data. There are only few controls which serve only as a warning, while allowing data entry which is not in line with the pre-defined controls (so-called "soft" controls). At the very beginning of questionnaire data entry, it is necessary to check whether the given household is included in the planned survey sample. It is not possible to enter one questionnaire twice. The number of questionnaires with provided answers and the number of questionnaires marked as non-response must be equal to the number of households in the full sample of households for this survey. The questionnaire itself contains certain links between data, which are defined through controls, e.g. a person aged 14 cannot have a higher education diploma, etc.

3.2.2.2. Reasons for the occurrence of measurement errors

Reasons for the occurrence of measurement errors may be:

- design of instruments used for the survey implementation (questionnaires, manuals, lists of households). In the Labour Force Survey 2011, there were three cases in which the list of households did not contain names of household heads
- non-response of data providers,
- interviewers influencing respondents' answers (control detected no such cases) and errors made by interviewers while writing down the answers. The most common errors made by interviewers were when they wrote down answers in wrong columns. More precisely, in the second part of the questionnaire, separate column is filled out for each household member over 15 years of age. In a few cases (approximately 20 questionnaires), the column for one of the household members contained data referring to another household member. Controllers detected and corrected all such errors during the control phase.

3.2.2.3. Procedures in cases of measurement errors

A person responsible for the methodological support eliminates errors. For this purpose, he/she uses other data from the questionnaire, which prove to be useful when correcting inaccurate data, as well as notes written by the interviewer. If this is not sufficient, the household is contacted via telephone. If the given household does not have a telephone number, the interviewer who is responsible for the household visits the household again in order to correct inaccurate data.

3.2.2.4. Quality and performance indicator – Data editing rate (A3)

There are no accurate records of corrections in the data editing phase.

3.2.2.5. Measures to reduce measurement errors

A two-day training for interviewers represents an important phase in this survey, because it allows interviewers to properly treat all the questions from the form, which results in fewer incorrect responses. Interviewers are provided with a complete set of methodological materials, with all the necessary explanations. During fieldwork, controllers are at interviewers' disposal. These controllers provide support to interviewers in all situations when this is necessary. Controllers and interviewers keep in touch even when fieldwork is completed. Special attention is paid to interviewers who were engaged in the implementation of LFS for the first time.

3.2.3. Non-response errors

3.2.3.1. Quality and performance indicator – Non-response rate of reporting unit (A4)

Non-response rates by type of settlements

Type of settlements	Non-response rate (%)	Responding households	Non-responding households	Total
Urban	18.5	1,115	253	1,368
Rural	10.1	1,975	221	2,196
Total	13.3	3,090	474	3,564

3.2.3.2. Quality and performance indicator – Non-response rate of variable (A5)

Since there is no procedure to record the non-response number per specific variable, the rate can only be estimated and we estimated it at 0.1%.

3.2.3.3. Procedures in cases of non-response

If data were missing, i.e. if answers to certain questions/variables were not provided, responsible persons from reporting units were contacted via telephone in order to complete the missing values. Exceptionally, if a connection via telephone was not established, values of variables were estimated based on historical information.

3.2.3.4. Procedures to reduce non-response rates

More precise methodological explanations referring to specific questions (variables).

3.2.3.5. Quality and performance indicator – Rate of imputed data (A6)

Missing values were imputed for questions (variables) for which surveyed persons did not know or did not want to provide an answer.

There is no procedure to record imputed data.

3.2.3.6. Quality and performance indicator – Number of errors, by type (A7)

There were no errors, which means that the methodology was applied properly and that there were no incorrect data in the press release. Thus, the analytical presentation and diagrams did not provide a false image of published data.

3.2.3.7. Quality and performance indicator – Average size of revision (A8)

Revision was not planned or implemented.

4. Timeliness and punctuality

4.1. Timeliness of release

4.1.1. Quality and performance indicator – Timeliness of preliminary results (T1)

End of reference week	Preliminary results	Number of days between the end of reference week and publishing of preliminary results
10 April 2011	31 July 2011	T+112

4.1.2. Quality and performance indicator – Timeliness of final results (T2)

End of reference week	Preliminary results	Number of days between the end of reference week and publishing of final results
10 April 2011	31 October 2011	T+112

4.2. Punctuality of release

4.2.1. Quality and performance indicator – Punctuality of release (T3)

Preliminary and final data are published withing planned deadlines; 31st July 2011 for preliminary results and 31st October 2011 for final results.

4.3. Reasons for significant delays and measures to improve timeliness and punctuality of release

There were no delays, thus, all publications were released within specified deadlines.

5. Accessibility and clarity

5.1. Accessibility

Users of statistical data can easily and quickly access the Labour Force data, as these are published at the Institute's website and in printed publications (Bulletin, Release, Statistical Yearbook and publication "This is Republika Srpska").

5.1.1. Dissemination channels

Number	Dissemination channels	Used
1	Website – online publishing	YES
2	Written requests of users according to their specification	YES
3	Data published via telephone	YES
4	Digital media (CD, floppy disk, etc.)	NO
5	Data presented at press conferences	YES
6	Thematic bulletin	YES
7	Special printed publications	YES
8	Databases available to external users	YES
9	Statistically protected microdata	NO

5.1.2. 5.1.2. Quality and performance indicator – Rate of used dissemination channels (AC1)

The rate of used dissemination channels is 78% (7/9X100).

5.1.3. Methods of dissemination

The following methods of dissemination were used to publish results of the Labour Force Survey carried out in 2011:

Number	Method of dissemination	Used
1	Website – online publishing	YES
2	Websites of other institutions	YES
3	Websites of international institutions	NO
4	Written requests	YES
5	Telephone mediation	YES
6	Digital media (CD, floppy disk, etc.)	YES
7	Data presented at press conferences	YES
8	Yearbook	YES
9	This is Republika Srpska	YES
10	Release	YES
11	Thematic bulletin	YES
12	Special publications	NO
13	Eurostat's publications	YES
14	Publications of other international organizations (OECD, MMF)	YES
15	Databases for internal use	YES
16	Databases available to external users	YES

5.1.4. Quality and performance indicator – Rate of used dissemination methods (AC2)

The rate of used dissemination methods is 87.5% (14/16X100).

5.1.5. Quality and performance indicator – Number of accesses to the online database (AC3)

There is no procedure to record the number of accesses to the LFS data.

5.2. Clarity

In addition to data, publications also provide methodological explanations and definitions of main indicators and concepts.

5.2.1. Printed publications and Internet publication

- Release "LABOUR FORCE SURVEY 2011 – Preliminary results"
- Thematic bulletin "LABOUR FORCE SURVEY 2011 – Final results"

5.2.1.1. Disseminated results

Survey results are presented as absolute numbers, expressed in thousands and percentages. In addition to tables, the Release also presents data through graphs.

5.2.1.2. Level (level of detail) of dissemination

Data are presented by sex, age group, section of activities, education level, employment status, number of working hours, and duration of unemployment.

5.2.1.3. Metadata

Not subject to special analysis in the Labour Force Survey 2011.

5.2.1.4. Measures to improve clarity of disseminated results

Data are presented clearly.

5.2.2. Quality and performance indicator – Rate of metadata completeness (AC4)

Not subject to special analysis in the Labour Force Survey 2011.

6. Comparability and coherence

6.1. Comparability over time

6.1.1. Quality and performance indicator – Length of comparable time series (CC1)

Between 2006 and 2011, the Labour Force Survey was carried out once a year, in April. Currently, there is a time series of six years, therefore the indicator value is 6.

6.1.2. Breaks in time series

There have been no breaks in annual time series.

6.1.3. Other factors affecting comparability over time

There are no specific factors which could affect the comparability of time series, since the recommendation related to variables required by this Survey was fully implemented.

6.2. Geographical comparability

6.2.1. Comparability with other members of the European Statistical System

It is possible to compare the Labour Force Survey results in the European Statistical System because the Labour Force Survey (LFS 2011) was carried out pursuant to the Regulations of the European Commission No. 577/98, 377/2008 and 1897/2000. The only inconsistency is the one related to the implementation frequency. In BH and Republika Srpska, LFS is carried out once a year, while pursuant to the regulation this survey is to be carried out continually, i.e. monthly.

6.3. Seasonal adjustment

Labour Force Survey data have not been subject to seasonal adjustment.

6.4. Coherence between preliminary and final data

6.4.1. Dissemination policy for preliminary data

The policy of dissemination of preliminary results of the Labour Force Survey is implemented mainly because users require data on activity rate, employment and unemployment.

6.4.2. Quality indicator – Coherence between preliminary and final data (CC2)

Preliminary data of the Labour Force Survey 2011 are same as final data, therefore the indicator is not calculated.

6.4.3. Reasons for significant differences between preliminary data

There are no differences between preliminary and final data.

6.5. Coherence with results of the reference survey

6.5.1. Brief description of the reference study

Data on number of employed persons from the Labour Force Survey are comparable with data on number of employed persons collected through the regular semi-annual survey on employed persons and their wages (RAD-1) in business entities, as well as with data obtained through the survey on entrepreneurs and their employees (RAD-15). The number of employed persons in business entities is a result of the processing of data obtained through the semi-annual survey RAD-1 filled out by business entities based on required records. The survey covers business entities of all forms of ownership, government bodies at all levels, institutions and other organizations. Data on entrepreneurs are a result of the processing of data obtained through the survey RAD-15 and these are taken over from the Tax Administration of Republika Srpska. The survey on employed persons in business entities covers employed persons who entered into an employment contract, regardless of the type of contract and their working hours.

6.5.2. Quality and performance indicator – Compliance with the reference data (CC3)

Employed persons: $CC3 = \frac{x-y}{y} = (324,467 - 238,956)/238,956 = 0.36$

The number of employed persons obtained through the survey is 36% higher than the number of employed persons obtained through the related reference survey.

Unemployed persons: $CC3 = \frac{x-y}{y} = (105,095 - 150,344)/150,344 = -0.30$

The number of unemployed persons obtained through the survey is 30% lower than the number of unemployed persons obtained through the related reference survey, i.e. than that in the official record of unemployed persons maintained at the Employment Office of Republika Srpska.

6.5.3. Reasons for significant discrepancies

The definition of labour force in the Labour Force Survey relies on the objective and actual involvement of an individual in the labour market, while the one based on data from administrative records relies on their formal

registered status. Therefore, administrative data only encompass registered employed persons, while the LFS covers total employment. More precisely, the LFS covers the following categories not encompassed by administrative data sources: self-employed persons in agriculture, unpaid family workers, persons employed in defense, employees under service contracts, temporarily or occasionally employed persons, and persons employed in informal economy.

Methodological discrepancies between data from RAD-1 and RAD-15 and data obtained through the Labour Force Survey are reflected in the following:

- **Source of data:** administrative data are based on the collection of data on employed persons, which are based on personnel records of business entities and records of unemployed persons registered at employment offices; on the other hand, survey data are based on estimated data obtained through direct interviews in households randomly selected into the sample;
- **Reporting unit:** reporting units for the collection of administrative data are business entities, while the survey reporting unit is each member of a randomly selected household;
- **Observation period:** administrative data refer to the last day in a month, while survey data refer to the person's activity in the reference period
- **Method of data collection:** data from administrative sources are obtained through reports submitted by business entities, while survey data are collected through direct interviews with persons in households selected into the sample;
- **Collection frequency:** administrative data are collected semi-annually, while the LFS is carried out once a year in Republika Srpska.

7. Concessions – compromises between output quality components

Not subject to special analysis in the Labour Force Survey 2011.

8. Assessment of users' needs and perceptions

8.1. Classifying and understanding users

Key users of the Labour Force Survey data are:

Council of Ministers of BH, Government of Republika Srpska, ministries of labour and social policies; Directorate for Economic Planning; Directorate for European Integration; Labour and Employment Agency of Bosnia and Herzegovina, Employment Office of Republika Srpska; Chamber of Commerce, Agency for development of small and medium-sized enterprises of Republika Srpska, municipalities, municipal agencies for development of small and medium-sized enterprises, Integral Inzenjering, Mercator, Economics Institute, faculties, RTRS, BN TV, Alternativna TV, BHT1, Glas Srpske, Nezavisne Novine, Pres, etc.).

8.2. Measuring users' perceptions and user satisfaction

8.2.1. Quality and performance indicator – User satisfaction index (US1)

There is no specific user satisfaction survey for this product/Survey.

8.2.2. Quality and performance indicator – Time elapsed since the last user satisfaction survey (US2)

There is no specific user satisfaction survey for this product/Survey.

9. Costs and burden on respondents/reporting units

9.1. Costs of the Republika Srpska Institute of Statistics

9.1.1. Quality and performance indicator – Annual operating costs, average by main cost components (PCR1)

Costs of the Labour Force Survey in 2011

	Amount in KM
Remuneration of survey participants (gross)	79,584
Material costs	800
Total	80,384

9.2. Burden and costs of respondents/reporting units

9.2.1. Quality and performance indicator – Annual burden on respondents in hours and/or financial indicators (PCR2)

Time the reporting units need to participate in the survey is estimated as an indicator of burden on reporting units. The survey carried out in households takes approximately 35 minutes, i.e. approximately 11 minutes per respondent. The time necessary for the Labour Force Survey in households is estimated at 6,126 hours. Time spent in households which did not participate in the survey is not included.

9.3. Measures to reduce costs and burden

Measures to reduce costs and burden on reporting units:

- reduced number of contacts with reporting units,
- use of administrative data,
- Census of population would provide a full framework for the sample selection, so that same households would not have to participate in several surveys or statistical activities.

10. Confidentiality, transparency and protection

10.1. Confidentiality

The confidentiality of statistical data is stipulated in the Law on the protection of personal data ("Official Gazette of BH, No. 49/06) and staff implementing the survey is obliged to protect the confidentiality pursuant to the same law. Data confidentiality and protection of personal data are regulated in Chapter VII of the Law on Statistics of Republika Srpska, Articles 25, 26, 27, 28 and 29 ("Official Gazette of Republika Srpska", No. 85/06).

10.2. Transparency

Users are familiar with the method of use of the Labour Force Survey data. No errors have been detected in the published editions of the Labour Force Survey 2011, therefore there has been no need to correct these or publish them.

10.3. Protection

See chapter 10.1.

11. Conclusion

In the future period, it is necessary to:

- Establish procedures for complete records of corrections in the phase of data editing for all variables (not only for key variables);
- In cooperation with IT staff, develop a system for recording the number of accesses to the on-line data base and number of accesses to electronic bulletins and releases for specific statistical fields (statistical surveys);
- Through a specific User Satisfaction Survey, provide information about user satisfaction for specific statistical surveys.