

# THE 2009 INTEGRATED REPORT ON SREBRENICA MISSING INCLUDING A PROGRESS REPORT ON DNA-BASED IDENTIFICATION

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## 1. BACKGROUND INFORMATION

The enclave of Srebrenica fell on 11 July 1995. At that time a number of men tried to escape the area by walking through the forest. Many of the men were then killed on the way or after surrendering or being captured. Others were separated from their families in Potočari and later executed. Several women, children and old men were also killed. Many dead bodies were buried in mass graves, which were often disturbed soon after, while bodies of others were left in the forest. The total number of victims is not known; however, several sources confirm it to be approximately 8,000 (e.g. Parsons of ICMP, 2007).<sup>1</sup> Exhumations conducted by the ICTY and the local Bosnian Commissions for Tracing Missing Persons have uncovered thousands of sets of human remains out of the (broadly defined) Srebrenica territory. Of these more than 5,500 individuals have so far been identified through the DNA analysis and matching (ICMP, November 2008 update).<sup>2</sup>

Information sources that reliably cover the fall of Srebrenica allowing for a detailed statistical analysis of victims, and in particular making it possible to obtain the total number of Srebrenica victims, and its basic demographic distributions, are limited. The ICRC (International Committee for the Red Cross) and PHR (Physicians for Human Rights) lists of missing persons from Bosnia and Herzegovina (BH) and ICMP lists of DNA identifications of the exhumed remains belong certainly to the best existing sources in this regard.

Two lists, the 1997-1998<sup>3</sup> ICRC and 1999 PHR editions, were used by OTP (Office of the Prosecutor, ICTY) in producing the initial 2000 list of missing and dead persons from Srebrenica (i.e. Brunborg and Urdal's list; Annex 1). Since July 1998 (when the 4<sup>th</sup> 1998 edition of the ICRC list was published), the ICRC has systematically up-dated their list for Bosnia; the latest 8<sup>th</sup> edition was published in 2007. In addition to the published lists, records of still missing persons are available from the ICRC website on the Internet ([http://www.familylinks.icrc.org/mis\\_bos.nsf/](http://www.familylinks.icrc.org/mis_bos.nsf/)). Despite the fact that the vast majority of ICRC records of missing persons from Bosnia was collected before 1998, and that the post-1998 entries to the ICRC list of missing persons were limited, there are several hundreds of new records on the 2005 ICRC list when compared with the previous editions of the ICRC list. After 2005 the increase has been small. Whereas the ICRC has continued its activities in

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<sup>1</sup> ICMP stands for the International Commission for Missing Persons in Sarajevo. The Commission is an international organization mandated to complete the DNA-based identification of victims of the 1990s wars in the former Yugoslavia, and in Bosnia and Herzegovina in particular. The source for the 8,000 figure of ICMP is a statement by the ICMP Director of Forensic Science Program, Tom Parsons, 30 November 2007. ERN: 0614-8923-0614-8923.

<sup>2</sup> The update is called "LIST OF DNA MATCHING REPORTS - (from November 2001 to November 2008) - Srebrenica Related Only" and is dated 24 November 2008. Registered under ERN D000-2588-D000-2588 and R065-5266-R065-5519.

<sup>3</sup> The 1997-1998 ICRC list of missing persons for Bosnia and Herzegovina is actually a merge of two lists: version 3 of the ICRC list from January 1997 and version 4 from July 1998.

Bosnia and Herzegovina until the present time, the PHR closed its Srebrenica project in 1999 and this source is not up-dated any longer.

In addition to the regular ICRC lists of missing persons from Bosnia and Herzegovina, in October 2008 the OTP received the 2008 ICRC list of Srebrenica missing. This list represents the latest ICRC update on the Srebrenica missing. We have used it, together with other ICRC lists, for this report.

ICMP started issuing DNA identifications in November 2001. As identification method the ICMP matches DNA profiles obtained from exhumed bone samples with DNA profiles of the blood samples collected from relatives of missing persons. Data on DNA identification are available in the lists of individuals identified with this procedure. Every identified person has an associated file containing several documents, including the ICMP Protocol in which the DNA profiles and matching results are presented, discussed and evaluated. At request of the OPT ICMP has provided systematic updates of the identification of Srebrenica victims. One of the most recent updates was received in November 2008 and contained records of about 5,500 identified persons. This update is the basis for the analysis presented in this report.

In addition to the above-mentioned lists, several other sources have been studied for this report, including the BH 1991 Population Census, the BH Voters Registers from the 1997, 1998 and 2000 municipal elections, BH official registration of internally displaced persons and refugees, other records of IDPs (internally displaced persons), and military records from the Army of Bosnia and Herzegovina (ABiH). All sources and methodological details of our analysis are reviewed in the annexes to this report (Annex 2 through 6).

By March 2009 eight demographic expert reports and several Srebrenica victim lists have been presented to the ICTY Trial Chambers in cases such as General KRSTIĆ (IT-98-33), BLAGOJEVIĆ et al. (IT-02-54), POPOVIĆ et al. (IT-05-88), and SLOBODAN MILOŠEVIĆ and PERIŠIĆ (IT-04-81). Details of these reports are given in Annex 1. The objective of the reports was to use the most reliable sources on missing and identified persons to arrive at a reliable estimate of the number of people who were killed or who are still missing after the fall of Srebrenica. We have paid particular attention to data on missing persons as sadly these persons are believed to have died in extremely tragic circumstances. The human remains of missing persons have been systematically exhumed from mass graves. The objective and the methodology of the 2009 OTP report are basically the same as those used in the previous OTP reports, although some methodological improvements have been made. The data quality has also improved in 2009 as compared with previous reports.

The eight reports and the associated victims lists document the progress the OTP has made in 2000-2008 in relation to the victimization of the 1995 Srebrenica incidents. We started our work by compiling the 2000 list of missing persons who disappeared during or around the fall of Srebrenica in July 1995 (hereafter: Srebrenica missing). In 2000 the records of Srebrenica missing could be sufficiently supported by evidence documenting their death for only a few cases (68, to be precise). In the course of our work on Srebrenica victims since in 2000 we have gradually moved from documenting missing persons to analysing evidence from exhumations, in particular DNA-based identifications. At the present time, in March 2009, we are able to reliably document that about 70% of Srebrenica missing from the OTP lists of missing have been exhumed from mass graves (or found as surface remains) in Eastern Bosnia in the Srebrenica area and identified through DNA profiling and matching. The remains of the iden-

tified bodies have been returned to the relatives who have buried them according to their traditions. The number of identifications is still increasing and will remain doing so in the future, but probably at a declining rate.

The findings confirm that a majority of the missing, if not all, are dead. All, or most of them, died violent deaths, many being brutally executed.

The present report (hereafter: the 2009 report) is a summary integrating the experience of all eight demographic expert reports on the missing and identified persons from the 1995 fall of Srebrenica and the lists of victims presented so far. As already mentioned, the methodology used in the 2009 report remains largely the same as in the previous reports, but with several improvements. Sections 1-3 include main findings and final conclusions, whereas Annexes 1-6 discuss sources and methods in detail. A separate list includes the names of all Srebrenica victims (the 2009 OTP list).

The 2009 report on the Srebrenica missing and DNA-based identification of the missing comprises the following sections:

1. Background information
2. Main findings
3. Final Conclusions

#### Annexes

Annex 1. The OTP Srebrenica expert reports and lists of Srebrenica victims

Annex 2. Definition of terms for Srebrenica victims

Annex 3. Sources

- A3.1 ICRC lists of missing persons from Bosnia and Herzegovina
- A3.2 ICMP lists of DNA identified persons from Bosnia and Herzegovina
- A3.3 1991 Population Census for Bosnia and Herzegovina
- A3.4 1997-98 and 2000 Voters Registers from Bosnia and Herzegovina
- A3.5 Official BH Registration of Internally Displaced Persons and Refugees, DDPR-2000
- A3.6 ABiH military records of dead and missing soldiers and other military personnel
- A3.7 Auxiliary sources on survivors: the 1997 records of "Srebrenica refugees"
- A3.8 Sources not used: RS and FIS Mortality Databases and the Bosnian Book of Dead

Annex 4. Methodology

Annex 5. Data matching: general introduction

Annex 6. Data matching by source

- A6.1 Matching of the 2005 OTP list of Srebrenica missing with the 1998 ICRC List of Srebrenica Missing
- A6.2 Matching of the 2005 OTP list of Srebrenica missing with the 1991 Population Census
- A6.3 Matching of the 2005 OTP list of Srebrenica missing with the Voters Registers and other sources on survivors
- A6.4 Matching of the 2005 OTP list of Srebrenica missing with the military records of ABiH and other sources on deaths

- A6.5 Matching of the November 2008 Srebrenica Update of ICMP with the previous ones
- A6.6 Matching of the 2005 OTP List of Srebrenica Missing with the November 2008 ICMP Update on the Srebrenica Identified

The 2009 OTP List: Srebrenica Missing and Dead Including the 2009 Progress Report on the DNA-Based Identification by ICMP

- 1 - List of Srebrenica Missing, (OTP 2005), Integrated with the 2008 ICMP Records of Srebrenica Identified
- 2 - List of Additional Srebrenica Missing, (ICRC 2008), Integrated with the 2008 ICMP Records of Srebrenica Identified
- 3 - List of DNA Identified, (ICMP 2008), - Additional Names
- 4 - List of DNA Identified, (ICMP 2008), - Less Likely Matches
- 5 - List of Srebrenica Missing, (OTP 2005) - Excluded records
- 6 - List of Srebrenica Missing, (OTP 2005) - Cancelled records

## 2. MAIN FINDINGS

In the 2009 report on the victims of the fall of Srebrenica the output of two major activities is discussed: first, the revision of the 2005 OTP list of Srebrenica missing, and second, the cross-referencing of the revised list of Srebrenica missing with the DNA identification of Srebrenica victims by ICMP. The results of these two activities are presented in the form of summary statistics in this section, and as lists of Srebrenica missing integrated with DNA identifications by ICMP. The lists are attached separately (as the 2009 OTP List) but belong together with this report.

The sources and methodology used in the preparation of this report are discussed in Annexes 2 through 5. Noteworthy, our approach has remained the same since the presentation of the first OTP report on Srebrenica missing in 2000. In brief, we have been using ICRC lists of missing persons for Bosnia and Herzegovina, and recently a separate 2008 ICRC list for Srebrenica, for compiling the OTP list of Srebrenica missing. A set of formal criteria have been applied in order to extract relevant ICRC records for the OTP lists; the criteria are described in Annex 2. Note, however, that it was not necessary to use any criteria in the context of the 2008 ICRC list of Srebrenica missing, as this list provides information about persons who went missing in relation to the fall of Srebrenica. Consequently, this list has been integrated as a whole with all other relevant records.

The sources used for this report are summarized in Annex 3. Not only the ICRC and ICMP lists are discussed in Annex 3 but several other sources as well, including, among others, the 1991 Population Census for Bosnia and Herzegovina, the Voters Registers of 1997-98 and 2000, the BH Register of Internally Displaced Persons and Refugees, ABiH (Army of Bosnia and Herzegovina) records etc. All these sources were consulted in order to make sure that only relevant records were included in the OTP lists, meaning that the date and place of disappearance (or last seen alive) were correct and consistent with the fall of Srebrenica. Moreover, the data sources were used to ascertain that there were no survivors on the OTP lists. In Annexes 4-6 of this report, details are given about how these sources were utilized and which detailed results were obtained in our assessment, processing and analysis of the sources.

Each of the existing OTP lists of Srebrenica missing has been cross-referenced with an ICMP list of DNA identifications of human remains exhumed from mass graves or collected from the surface in the Srebrenica area. To make their list the ICMP uses reports from the relatives of victims, who at the donation of blood for DNA analysis stated whether or not a given person disappeared in the context of the fall of Srebrenica in 1995. Thus, the cross-referencing of the OTP lists of Srebrenica missing with the ICMP lists of Srebrenica identified should be seen as comparing two independent sources on victims of the same incident. The outcome of this comparison is, however, *more* than just a confirmation of individuals who died during or around the fall of Srebrenica. For cases appearing on both these lists, evidence exists on the identity of the bodies of victims and the places where the bodies were found. In the majority of cases these places can be linked to particular incidents of violent killings, with known date, place, cause of death and perpetrators.

The cross-referencing of the OTP lists of Srebrenica missing with the ICMP DNA identifications of these victims is done by matching of these lists. The methodology of matching, also called record linkage, is described in Annexes 4 and 5 of this report and detailed results of matching by sources are discussed in Annex 6.

In the remainder of this section we summarise the main findings of our analysis.

## 2.1 BASIC STATISTICS ON SREBRENICA MISSING AND IDENTIFIED

**Table 1. Number of Srebrenica Missing and Srebrenica Identified<sup>4</sup>**

Source	Number of Missing	Number of Identified	Percent Overlap
2005 OTP List	7,663	5,053	65.9
2008 ICRC List	29	8	27.6
Total	7,692	5,061	65.8

The overall number of missing persons related to the fall of Srebrenica in 1995 is 7,692 (Table 1). This is 31 higher than the 7,661 missing persons reported in the 2005 OTP list. The number is a result of the integration of the 2005 OTP list of Srebrenica missing with the ICRC list of Srebrenica missing from October 2008 (Annex 6.1). The 2008 ICRC list comprises 7,613 cases, of which a majority overlaps with the 2005 OTP list. However, 30 records do not overlap and are new compared with the 2005 OTP list. Of the 30 records one has a date of disappearance (DoDis) in 1992, which is inconsistent with the 1995 fall of Srebrenica and therefore, even though reported by the ICRC, it was excluded from the integrated OTP list (Annex 6.1). The reported year of disappearance, 1992, could, however, be due to a misprint or perhaps that the person went missing for the first time in 1992 and once again in 1995. The remaining 29 ICRC records were accepted (Table 1).

Table 1 shows that 65.8 percent of all missing persons related to the fall of Srebrenica have been confirmed as dead through the DNA identification, as of November 2008.

Note as well that the overall total of the 2005 OTP list has been revised too, from 7,661 as presented in 2005 to 7,663 now. One record, previously excluded as a possible survivor, has been added since ICMP produced a positive DNA match for this person (Annex 6.6). Two records previously excluded as duplicates have been added as ICMP produced two *different* positive matches for these two persons (Annex 6.6). Finally, one record has been removed from the 2005 OTP list as this case was reported by ICRC in October 2008 as a person being alive. The new total on the 2005 OTP list is therefore 7,663 (Table 1).

The November 2008 ICMP update contains 10,066 records of matched bone sample profiles, including both main cases and re-associations<sup>5</sup>; Of these 5,525 records are marked as “Main Case” in the original data, with 354 marked as new since July 2008 (Annex 6.5). We found one main duplicate case, which was excluded. A further 31 records were marked as re-associations and “main case in process”. These 31 cases concern DNA profiles that are unique compared to all other main cases and should be added to the already marked main cases of

<sup>4</sup> The statistics for the 2008 ICRC list show the number of missing and identified that are additional to the 2005 OTP list.

<sup>5</sup> A re-association is a bone-to-bone DNA match, which relates to two different body parts of the same individual.

5,524. The number of unique identifications in the November 2008 ICMP update on Srebrenica identified is, therefore, 5,555 cases (5524+31).

**Table 2. Overlap of the 2009 OTP List of Srebrenica Missing and the November 2008 ICMP Update on Srebrenica Identified<sup>6</sup>**

Source of the 2009 OTP list	Total Missing	Overlap between Missing and Identified			Total Identified
		Conclusive Overlap	Possible Overlap	Non-Overlap	
2005 OTP List	7,663	5,053	281	213	5,547
2008 ICRC List	29	8	-	-	8
Total	7,692	5,061	281	213	5,555

Of the 5,555 cases, 5,053 have been conclusively matched with the 2005 OTP list of missing and dead from Srebrenica, and 8 cases have been matched with the records added from the Srebrenica-related update received from ICRC in October 2008 (Table 2 and Annex 6.6). A further 281 main cases have been marked as possible matches, that is while we can not say conclusively that these have been matched with the 2005 OTP list, there is also insufficient grounds to conclude that they have not been matched with the 2005 OTP list. The remaining 213 records can reasonably be considered new and additional names to the 2005 OTP list, as they have conclusively not been matched with the 2005 OTP list.

As summarized in Table 3a, (concentrated exclusively on information from the 2008 and 2005 ICRC lists), until October 2008 the ICRC reported 3,474 (45.2 %) of the victims known to be dead, i.e. have been closed by ICRC until October 2008.<sup>7</sup> Together with cases of still missing with bodies already found, the number of dead was higher and equalled 3,730 (48.5 %). The remaining individuals (3,962) were still missing (51.5 %).

**Table 3. Number of Cases on the 2009 OTP List of Missing and Dead Persons Related to the Fall of Srebrenica By Victim Categories**

(a) ICRC Perspective

2008 Status of Cases	Number of Missing	Percent of Missing	Number of Identified	Percent Overlap
Closed cases, dead	3,458	45.0	3,105	89.8
Still missing info about death	246	3.2	120	48.8
Still missing	3,890	50.6	1,808	46.5
Cases on 2005 OTP list only*	98	1.3	28	28.6
Total	7,692	100.0	5,061	65.8

\* For the 98 cases, the following status was reported in 2005:

<i>Closed cases, dead</i>	<i>16</i>	<i>of which identified</i>	<i>9</i>
<i>Info death</i>	<i>10</i>	<i>of which identified</i>	<i>1</i>
<i>Still missing</i>	<i>72</i>	<i>of which identified</i>	<i>18</i>

<sup>6</sup> The statistics for the 2008 ICRC list show numbers that are additional to the 2005 OTP list.

<sup>7</sup> Statistics discussed in this paragraph were obtained from both the 2008 and 2005 ICRC lists, i.e. including the information from the note (\*) under Table 3a.

## (b) Integrated ICRC and ICMP Perspectives

2008 Status of Cases	Number of Missing	Percent of Victims
Identified (DNA)	5,061	65.8
Closed cases, dead	360	4.7
Still missing info about death	135	1.8
Still missing	2,136	27.8
Total	7,692	100.0

It should be noted that the *actual* number of confirmed deaths in the Srebrenica list is much higher than the number of the ICRC *closed cases, dead*. This observation is based on the recent ICMP identifications from the November 2008 update. As shown in Table 3a, positive DNA identifications were available for all ICRC categories; most of them for “Closed cases, dead” (3,105), but also for still missing with or without information about the death (120 and 1,808 identified, respectively).

An integration of the 5,061 DNA identifications with the ICRC categories is shown in Table 3b. According to this table, a total of 5,421 cases (= 5,061 + 360) or 70.5% percent out of the 7,692 records of Srebrenica missing may now be seen as documented death cases, for which both bodies and circumstances of death are known. The remaining 2,271 cases (29.5 percent) were still missing as of October 2008.

**Table 4. Srebrenica Identified by Site of Exhumation, November 2008 ICMP Update**

Order	Mass Graves	ICMP Identified	OTP Matched	Overlap
1	Branjevo Military Farm (Pilica)	117	103	88.0
2	Cerska	133	119	89.5
3	Dam Near Petkovci	16	14	87.5
4	Glogova 1	214	196	91.6
5	Glogova 2	156	142	91.0
6	Godinjske Bare	5	5	100.0
7	Konjević Polje 1	8	8	100.0
8	Konjević Polje 2	2	2	100.0
9	Kozluk	304	275	90.5
10	Kozluk (surface)	14	14	100.0
11	Nova Kasaba 1996	31	31	100.0
12	Nova Kasaba 1999	49	45	91.8
13	Orahovac 1 (Lažete 1)	107	101	94.4
14	Orahovac 2 (Lažete 2)	150	143	95.3
15	Ravnice 1	30	29	96.7
16	Ravnice 2	165	151	91.5
18	Čančari Road 2	105	92	87.6
19	Čančari Road 3	122	115	94.3
21	Čančari Road 5	267	249	93.3
23	Čančari Road 7	100	93	93.0
25	Čančari Road 9 (Kamenica 9)	159	147	92.5
26	Čančari Road 10 (Kamenica 10)	354	318	89.8
27	Čančari Road 11	132	122	92.4
28	Čančari Road 12	104	101	97.1
29	Čančari Road 13	59	55	93.2
30	Hodžići Road 1 (Snagovo 4)	80	72	90.0
31	Hodžići Road 2 (Snagovo 3)	89	74	83.1
32	Hodžići Road 3	37	32	86.5
33	Hodžići Road 4	66	61	92.4
34	Hodžići Road 5	53	52	98.1
35	Hodžići Road 6 (Snagovo 1)	59	55	93.2
36	Hodžići Road 7 (Snagovo 2)	93	81	87.1

Continued:

Order	Mass Graves	ICMP Identified	OTP Matched	Overlap
37	Liplje 1	151	141	93.4
38	Liplje 2	165	143	86.7
39	Liplje 3	55	49	89.1
40	Liplje 4	269	229	85.1
41	Liplje 7	93	80	86.0
44	Zeleni Jadar 2 (Zeleni Jadar 4)	16	15	93.8
45	Zeleni Jadar 3 (Zeleni Jadar 1)	27	26	96.3
46	Zeleni Jadar 4 (Zeleni Jadar 8)	61	56	91.8
47	Zeleni Jadar 5	158	140	88.6
48	Zeleni Jadar 6	113	101	89.4
49	Blječeva 1	43	39	90.7
50	Blječeva 2	71	65	91.5
51	Blječeva 3	61	56	91.8
52	Budak 1	53	50	94.3
53	Budak 2	45	41	91.1
54	Bišina	34	32	94.1
55	Sandići	15	15	100.0
56	Potočari	6	5	83.3
57	Srebrenica Hospital	3	2	66.7
59	Kaldrnice	5	5	100.0
60	Brežljak	5	5	100.0
61	Motovska kosa	4	4	100.0
62	Križevići	7	7	100.0
63	Vlasenička Jelovačka Česma	9	9	100.0
67	Pusmulići	1	0	0.0
68	Šcher	1	1	100.0
69	Krušev Dol-Vukotin stan	1	1	100.0
70	Remaining Sites/Surface	703	647	92.0
-	<b>Total Srebrenica Sites</b>	<b>4,852</b>	<b>4,414</b>	<b>91.0</b>
-	<b>Total All Sites</b>	<b>5,555</b>	<b>5,061</b>	<b>91.1</b>
-	<b>Percent Srebrenica Sites</b>	<b>87.3</b>	<b>87.2</b>	<b>-</b>
-	<b>Percent Remaining/Surface</b>	<b>12.7</b>	<b>12.8</b>	<b>-</b>

Table 4 shows the distribution of exhumation sites of the Srebrenica identified, that is all those reported in the ICMP update of November 2008 and those of the identified matched with the missing reported in the latest 2009 OTP list of Srebrenica missing. The overall number of Srebrenica identified is 5,555 (ICMP) and the number of the identified confirmed on the OTP list of Srebrenica missing is 5,061 persons (see below).

A majority of the identified (87.3 %) were exhumed from Srebrenica mass graves, many of which were investigated during the ICTY Srebrenica investigation in Bosnia and Herzegovina in 1996-2001 as discussed in the OTP exhumations reports on Srebrenica by Dean Manning and most recently by Dušan Janc, respectively a former and a current OTP investigators. For a comprehensive record of all previous exhumation reports and the latest results, see the 2009 Janc report on Srebrenica exhumations (ERN X019-4231-X019-4295).

Only about 12.7 % of the identified were exhumed from remaining sites or were collected from the surface. It is striking that these two fractions remain almost identical among cases of the identified matched with the OTP missing persons. This once again confirms that the two lists, the OTP Srebrenica missing and the ICMP Srebrenica identified, are two independent but extremely consistent representations of one the same phenomenon, i.e. the victims of the 1995 fall of Srebrenica. The ICMP records of the identified fully corroborate the cases reported on the OTP list of missing persons from Srebrenica.

A second observation with regard to the overview of grave sites is that by November 2008 a high percentage of the identified, in many cases between 90 and 100 percent, have been already confirmed (i.e. matched) on the OTP list of Srebrenica missing (see the “Overlap” in Table 4).

## 2.2 CONSISTENCY WITH THE 2000 OTP LIST

According to the 2009 integrated OTP list of Srebrenica missing, the total number of victims related to the fall of Srebrenica in 1995 is at least 7,692 (Tables 1 through 3). This number is 217 higher than the overall total of 7,475 individuals as reported in the 2000 OTP list of Srebrenica missing. The two OTP lists were compiled applying exactly the same methodology and largely the same sources, although more sources and more recent versions of the data sources were used in the 2009 report. The ICRC list of missing persons was still our main source, however. The 1997 and 1998 versions of the ICRC list were used for the 2000 OTP list, the 2005 ICRC list for the 2005 OTP list, and finally the 2005 and 2008 ICRC lists for the 2009 OTP list, in addition to the 1999 PHR list for all three OTP lists. The OTP lists were compiled separately from each other using similar criteria. A large number of records, 7,266, appear on both lists (2000 and 2009), while 426 records were new to the 2009 OTP list (Table 5).<sup>8</sup>

The OTP lists from 2000 and 2009 were compiled independently. The overlap of these two lists is large, with 97.2 percent of cases in the 2000 OTP list also included in the 2009 OTP list (7,266 out of 7,475, see Table 5).

The largest relative overlap is seen for identified persons, with a 96 percent overlap between the 2000 and 2009 OTP lists. The closed cases dead is the second largest overlapping category (93 %), and still missing the third largest overlap ((92 % overlap).

**Table 5. Cases Reported in Both the 2000 and 2009 OTP Lists by Category**

2008 Status of Cases	Missing 2000 List*	Missing 2009 List	Percent Overlap of 2000 List
Identified (DNA)	4,858	5,061	96.0
Closed cases, dead	334	360	92.8
Still missing info about death	116	135	85.9
Still missing	1,958	2,136	91.7
Total	7,266	7,692	94.5

\* Only those 2000 cases are listed that overlap with the 2009 OTP list

Out of 7,475 cases on the 2000 OTP list, 7,262 are as well on 2009 list

The number of additional missing persons listed on the 2005 OTP list is about 426. The number of 2000 records that are not on the 2009 OTP list is 209. Many in the latter group are old PHR entries that are now reported by the ICRC. Some of these records were also dropped by the ICRC from their 2005 list, for reasons such as, for example, withdrawal by families, and technical reasons such as duplicates and replacing deficient records.

<sup>8</sup> An almost identical consistency is seen between the 2000 and 2005 OTP lists; the 2005 and the 2009 lists are only marginally different.

### 2.3 ALLEGED SURVIVORS AND FALLEN SOLDIERS

In our search for Srebrenica survivors, we have systematically applied several approaches:

- Cases of missing persons confirmed alive by ICRC were excluded from the OTP lists of Srebrenica missing
- Cases of missing persons that were also found in OTP sources on survivors, such as the Voters Registers of 1997-98 and 2000, lists of internally displaced persons, refugees registered in Bosnia and Herzegovina (DDPR), and any other list of "Srebrenica refugees" (from 1997), were excluded too.
- Additionally, any indication of Srebrenica survivors that came to our attention from any document, data source, press report, book, report, witness recollection (be it a statement or testimony of the person) etc. brought to our attention by others (including both the Prosecution and the Defence) were checked one by one and excluded if confirmed surviving.

Details of the above mentioned approaches are discussed in Annex 6.3. The outcome of our checks for survivors can be summarized as follows:

- One record of a missing persons from the 2005 OTP list of Srebrenica missing was deleted from the 2005 OTP list for being reported in the 2008 ICRC list on Srebrenica missing as a "closed case alive".
- The 12 individuals identified in our 2005 report as possible survivors were reviewed again in 2009. One of them had been confirmed as an identified person by ICMP. For this reason we revised the status of this record and included it in our 2009 OTP list as a missing and identified person.
- All 29 additional records from the 2008 ICRC list were searched one by one in all sources on survivors (Voters Registers 1997-98, 2000, DDPR-2000 and the so-called "Srebrenica refugees" from 1997). No evidence was found on these records being reported in any source on survivors.
- The 1997 lists of "Srebrenica refugees" were checked for potential survivors. A list of 102 potential survivors matching the OTP records of the Srebrenica missing was sent to the Ministry of Interior of the Government of Bosnia and Herzegovina with a request to check whether or not there exists evidence regarding their survival or death (RFA 2679).<sup>9</sup> In response to this we received three lists:<sup>10</sup>
  - exhumed and identified bodies (37 names)
  - missing persons (56 persons)
  - persons of whom it is known that they reached the so-called "free territory" (9 persons)

We analyzed these lists and concluded that all but 9 persons out of 102 potential survivors were confirmed dead or missing. Eight persons were also confirmed as identified by the ICMP (based on the November 2008 up-date). With regard to the 9 individuals seen in the free territory, three of them are reported as identified by ICMP. Regarding the remaining six, we are unable to further confirm them in other sources on survivors (Voters Registers and DDPR). Thus, these six cases must be seen as *inconclusive* at the present time and in the future we will try to sort them out in subsequent rounds of matching with the ICMP records of identified persons.

<sup>9</sup> The RFA 2679 is registered under ERN 0645-8815-0645-8817 and is dated 23 December 2008.

<sup>10</sup> The response of the BH Government to the OTP RFA 2679 is registered under ERN 0645-8818-0645-8829 and is dated 22 January 2009.

All in all, the 2009 list of potential survivors attached to this report contains 12 names: 11 names are from the 2005 OTP list and one from the 2008 ICRC list of Srebrenica missing.

In July 2008, we thoroughly studied the ABiH records of fallen soldiers (primarily from the Tuzla military region in conjunction with all other records available in our ABiH database), using the 2005 OTP list and the July 2008 ICMP Srebrenica update. The method and results of this study are described in great detail in Annex 6.4. The results should be considered as minimum numbers; the use of more recent ICMP updates will increase the overlap of ABiH records with the OTP list of missing and identified persons.

The overall total of matches of ABiH records with the OTP list of Srebrenica missing was 5,371. This comprises about 70% of the OTP list. Matches of the ICMP list of Srebrenica identified with the 2005 OTP list were produced by the Demographic Unit (DU) just after the July 2008 update arrived at the OTP, using the usual names and date of birth matching approach as described in the demographic expert reports dated 21 November 2005 and 11 January 2008. The overall total of the ABiH records reported by ICMP in their July 2008 update on the DNA-based identification of Srebrenica victims is 3,438, which is 64 % of the military records found on the 2005 OTP list.<sup>11</sup> An overview of the exhumation sites reported by ICMP for the identified ABiH cases on the 2005 OTP list is attached in Table (6.4)1 in Annex 6.4 and is reproduced below.<sup>12</sup> Table (6.4)1 contains the July 2008 based statistics by site and type for all identified on the ICMP list, and for the identified missing from the 2005 OTP list.

Table (6.4)1<sup>13</sup> confirms that the proportion of identified ABiH cases in relation to the identified OTP missing is about 70% (71% for ICTY sites and 73% for all sites). Moreover, it points out that the number of identified ABiH cases exhumed from ICTY grave sites (2,686) is much larger than the number of identified ABiH cases from non-ICTY grave sites (751). The sum of the two gives the overall total of 3,437 identified ABiH cases. Basically, 78% of all identified ABiH cases were exhumed from ICTY sites as opposed to 22% from non-ICTY sites.

Based on the above we concluded that even though military records are represented at about 70 % in the OTP list, there is evidence that the same individuals were exhumed in large numbers from mass graves in the Srebrenica area. About 78 % of the graves were Srebrenica graves as opposed to the remaining sites or surface remains. All this indicates that a majority of these individuals died violent death in non-combat circumstances. More DNA identifications of ABiH records are expected in the future.

<sup>11</sup> In the October 2007 update of the ICMP, there were 2,798 cases of military records matched with the identified missing persons. Some 640 ABiH cases have been identified between October 2007 and July 2008.

<sup>12</sup> Category "Other sites" comprises cases that are not yet assigned as ICTY or non-ICTY sites, the latter being "surface" or "related" as classified in the Dean Manning exhumation report of December 2007, and sites other than those on the Manning's list.

<sup>13</sup> The results in Table (6.4)1 are based on the July 2008 up-date of ICMP on DNA identifications of Srebrenica victims.

**Table (6.4)1. Overview of DNA Identification Cases by Type and Name of Exhumation Grave Site: All Identified, Identified among the 2005 OTP Missing and among the ABiH Records Matched with the 2005 OTP Missing**

Type of Site	Site Name	All Identified	OTP Missing	ABiH Records	Percent ABiH in OTP Miss
Mass Grave	Branjevo Military Farm	109	98	65	66.3
Mass Grave	Cerska	132	117	88	75.2
Mass Grave	Petkovci Dam	16	14	10	71.4
Mass Grave	Glogova 1	214	195	152	77.9
Mass Grave	Glogova 2	157	142	116	81.7
Mass Grave	Godinjske bare	5	5	2	40.0
Mass Grave	Konjević Polje 1	8	8	7	87.5
Mass Grave	Konjević Polje 2	2	2	2	100.0
Mass Grave	Kozluk	303	273	145	53.1
Mass Grave	Kozluk (surface)	14	14	8	57.1
Mass Grave	Nova Kasaba 1996	31	30	26	86.7
Mass Grave	Nova Kasaba 1999	49	45	37	82.2
Mass Grave	Orahovac 1 (Lazete 1)	107	101	60	59.4
Mass Grave	Orahovac 2 (Lazete 2)	149	141	94	66.7
Mass Grave	Ravnice 1 and Ravnice 2	185	170	129	75.9
Mass Grave	Čančari Road 2	105	90	60	66.7
Mass Grave	Čančari Road 3	114	110	65	59.1
Mass Grave	Čančari Road 5	264	244	174	71.3
Mass Grave	Čančari Road 7	96	89	58	65.2
Mass Grave	Čančari Road 10 (Kamenica 10)	349	309	210	68.0
Mass Grave	Čančari Road 11	131	120	87	72.5
Mass Grave	Čančari Road 12	101	98	66	67.3
Mass Grave	Čančari Road 13	59	55	30	54.5
Mass Grave	Hodžići Road 2 (Snagovo 3)	58	45	31	68.9
Mass Grave	Hodžići Road 3	36	32	28	87.5
Mass Grave	Hodžići Road 4	65	60	43	71.7
Mass Grave	Hodžići Road 5	53	52	28	53.8
Mass Grave	Hodžići Road 6 (Snagovo 1)	59	54	37	68.5
Mass Grave	Hodžići Road 7 (Snagovo 2)	91	78	65	83.3
Mass Grave	Liplje 1	147	138	104	75.4
Mass Grave	Liplje 2	165	143	106	74.1
Mass Grave	Liplje 3	54	47	36	76.6
Mass Grave	Liplje 4	265	225	183	81.3
Mass Grave	Liplje 7	108	92	75	81.5
Mass Grave	Zeleni Jadar 2 (Zeleni Jadar 4)	15	14	11	78.6
Mass Grave	Zeleni Jadar 3 (Zeleni Jadar 1)	27	26	21	80.8
Mass Grave	Zeleni Jadar 4 (Zeleni Jadar 8)	54	50	38	76.0
Mass Grave	Zeleni Jadar 5	156	135	109	80.7
Mass Grave	Zeleni Jadar 6	112	99	80	80.8
Mass Grave	Blječeva 2	72	66	52	78.8
Mass Grave	Blječeva 3	60	53	41	77.4
Mass Grave	Budak 1	54	51	39	76.5
Mass Grave	Budak 2	42	37	26	70.3
Mass Grave	Sandići	18	18	12	66.7
Mass Grave	Bišina	33	32	27	84.4
Mass Grave	Potočari	7	6	4	66.7
Mass Grave	Brezjak	5	5	4	80.0
Mass Grave (mixed remains)	Blječeva 1	43	37	30	81.1
Surface Remains	Baljkovica	10	9	6	66.7
Surface Remains	Corvići	1	1	1	100.0
Surface Remains	Jasikovaca	23	22	19	86.4
Surface Remains	Križevačke Njive	5	3	1	33.3
Surface Remains	Motovo	2	2	1	50.0
Surface Remains	Pobudje	4	4	4	100.0
Surface Remains	Rahunici	27	25	24	96.0
Surface Remains	Svilile	10	9	8	88.9
Surface Remains	Voljeva Glava	8	8	7	87.5
Surface Remains	Vlasenica (Vlasenicka Jelovacka Cesima)	9	9	8	88.9
Surface Remains	Kruševo Dol	1	1	0	0.0
Surface Remains	Prohići	1	1	1	100.0
Surface Remains	Kamenica	2	2	2	100.0
Surface Remains	Križevčići	8	8	6	75.0
NA	Surface remains and other Sites	588	536	428	79.9
<b>Total</b>	<b>Total</b>	<b>5198</b>	<b>4705</b>	<b>3437</b>	<b>73.0</b>

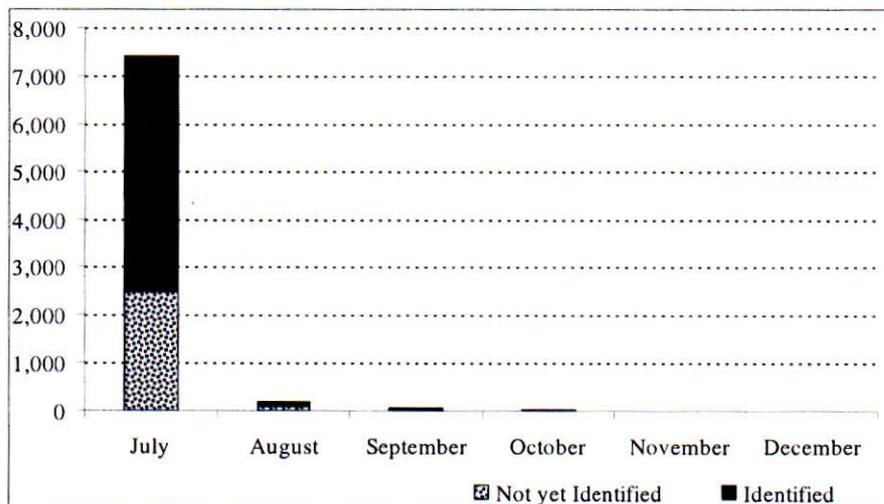
## 2.4 DETAILED RESULTS

The period analysed in this report, from July to December 1995, is relatively broad relative to the events in July 1995. Exactly 7,683 victims (99.9%) were reported to the ICRC as disappearing in this period (Table 5). In addition to these 7,683 victims, 2 cases of missing persons were from May-June 1995 and 7 from January-April 1996; all these cases came from the latest 2008 ICRC list of Srebrenica missing. The 9 cases comprise 0.09 % of the overall total of 7,692 Srebrenica missing.

**Table 5. Srebrenica-Related Missing and Dead by Month of Disappearance**

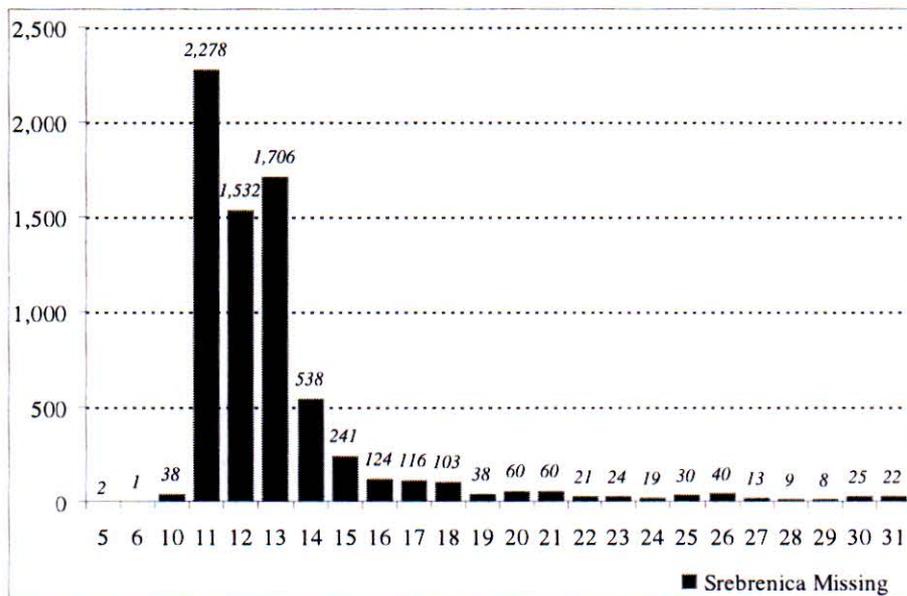
Year of Disappearance	Month of Disappearance	Number of Missing	Percent of Missing	Cumulative Percent	Number of Identified	Percent of Identified
1995	July	7,398	96.2	96.2	4,924	66.6
1995	August	180	2.3	98.5	81	45.0
1995	September	65	0.8	99.4	38	58.5
1995	October	28	0.4	99.7	9	32.1
1995	November	8	0.1	99.8	5	62.5
1995	December	4	0.1	99.9	1	25.0
1995	Total July-December	7,683	-	-	-	-
1995	Total May-June	2	0.0	99.9	1	50.0
1996	Total January-April	7	0.1	100.0	2	28.6
All	Overall Total	7,692	100.0	-	5,061	65.8

**Figure 1. Srebrenica-Related Missing and Dead by Month of Disappearance**

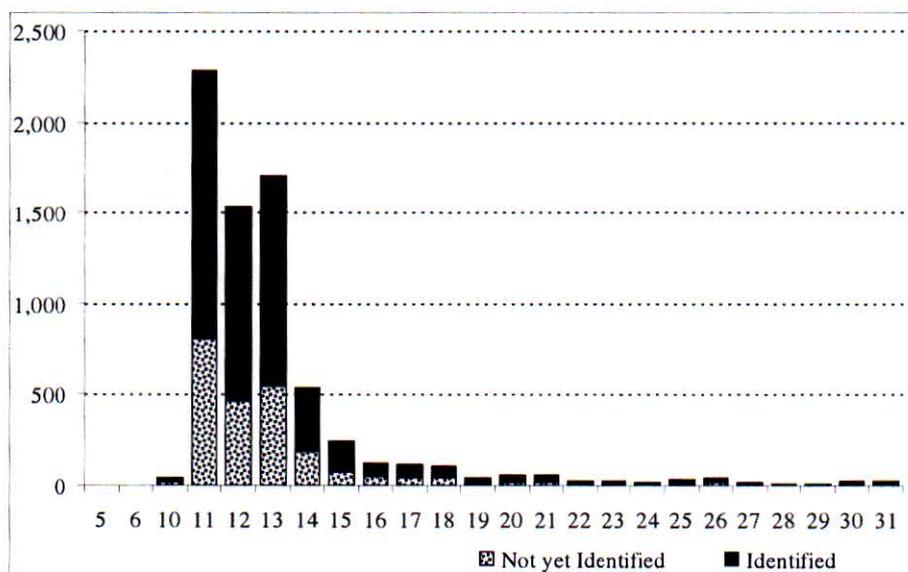


The results shown in Table 5 and Figure 1 confirm that the fall of Srebrenica and the following massacre was a rapid and short-term incident. 96.2 % of the missing were reported as disappearing in July 1995. By the end of August 1995 almost 99% of the victims had been reported missing; i.e. 7,578 out of 7,692. In absolute terms, “only” 105 victims (1.4 %) disappeared in the period September - December 1995, and the remaining 9 persons (0.09 %) right before July 1995 or right after December 1995.

A large number of the missing has already been identified by ICMP, in total 5,061 persons (65.8 %) of the 7,692 missing (Table 5, Figure 1). The fraction of the identified persons varies with month, the highest so far being for July 1995 (66.6 percent).

**Figure 2a. Srebrenica-Related Missing and Dead by Day of Disappearance in July 1995**

Note: Excluding 350 persons for whom the day of disappearance was not reported

**Figure 2b. Srebrenica-Related Identified and Not-Yet-Identified Missing and Dead By Day Of Disappearance in July 1995**

Note: Excluding 350 persons for whom the day of disappearance was not reported, of which 228 were identified

Figure 2 focuses on the daily distribution of disappearances during the month of July (7,398 out of the overall total of 7,692 missing). Most individuals disappeared on the 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> of July 1995 - 5,516 out of 7,692 cases (71.7% of all disappearances; Figure 2a).

Among the disappearances in July 1995, 66.6 % have so far been identified by ICMP (4,924). In the period 11-18 July 1995 (Figure 2), when most people went missing (6,638 out of 7,398 in July; 89.7 %), the average daily fraction of identified is 65.2 percent.

The next topic analysed in this report is the place of disappearance. Tables 6a and 6b and Figure 3 present results on places of disappearance of the missing from Srebrenica. Table 6a gives a general overview of the municipality of disappearance<sup>14</sup> and Table 6b of the detailed places of disappearance. In Table 6b only places with 20 or more disappearances are shown individually. All other places are combined into the category “Total < 20”. In this table a distinction is made between place of disappearance of those still missing and those already known to be dead.

**Table 6a. Number of Srebrenica-Related Missing by Municipality of Disappearance**

Municipality of Disappearance	Srebrenica Missing		Cumulative Percent	Identified	
	Number	Percent		Number	Overlap (%)
SREBRENICA	3,527	45.9	45.9	2,325	65.9
BRATUNAC	3,083	40.1	85.9	2,161	70.1
ZVORNIK	683	8.9	94.8	373	54.6
VLASENICA	202	2.6	97.4	130	64.4
ROGATICA	107	1.4	98.8	42	39.3
KLADANJ	31	0.4	99.2	13	41.9
SEKOVICI	19	0.2	99.5	2	10.5
HAN PIJESAK	8	0.1	99.6	1	12.5
BAJINA BASTA	7	0.1	99.7	5	71.4
KALESIJA	6	0.1	99.8		0.0
OLOVO	4	0.1	99.8		0.0
BIJELJINA	3	0.0	99.8	2	66.7
VISEGRAD	2	0.0	99.9	1	50.0
BATKOVIC	1	0.0	99.9	1	100.0
KRNJACA	1	0.0	99.9		0.0
LOZNICA	1	0.0	99.9	1	100.0
TARA MT.	1	0.0	99.9	1	100.0
VALJEVO	1	0.0	99.9	1	100.0
LJUBOVIJA	1	0.0	99.9	1	100.0
UNKNOWN	4	0.1	100.0	1	25.0
TOTAL	7,692	100.0	-	5,061	65.8

Table 6a confirms that a majority of individuals were reported as disappeared in just five municipalities: Srebrenica, Bratunac, Zvornik, Vlasenica and Rogatica (7,602 or about 99 % of all Srebrenica missing). Of these, 5,031, or 66.2 percent, of the have been identified.

Table 6b indicates that 7,380 individuals, i.e. about 96 % of all missing, disappeared from 23 places. Most of them, 3,162 persons (41.1%), disappeared from Potočari and in the forest. Another 2,340 persons (30.4%) disappeared from the three locations Kravica, Konjevic Polje and Kamenica. For missing from these five places the proportion of identified is almost the same (between 68 and 72 percent).

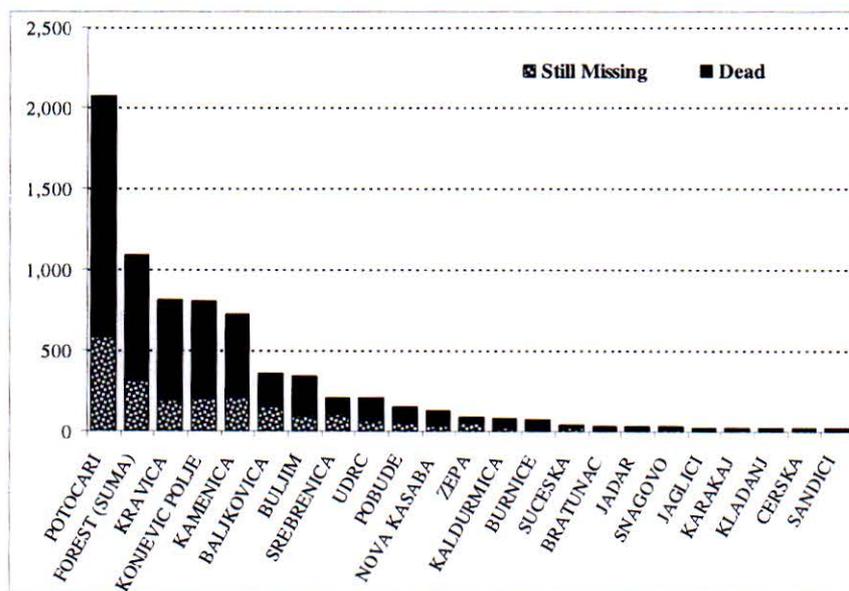
<sup>14</sup> The integration of the 2005 OTP list with the 2008 ICRC Srebrenica list resulted in a few new locations, such as e.g. Batkovici, Tara Mt., or Olovo, that were not in our definition of locations for this report (comp. Annex 2).

**Table 6b. Number of Srebrenica-Related Missing by Place of Disappearance**

PLACE OF DISAPPEARANCE	(DNA) Identified	Closed Cases Dead	Still Missing (1)	Still Missing (2)	Total	Proportion Dead/Missing	Percent Dead/Total
POTOCARI	1,409	90	3	573	2,075	2.6	72.2
FOREST (SUMA)	730	49	0	308	1,087	2.5	71.7
KRAVICA	585	39	93	95	812	3.3	76.8
KONJEVIC POLJE	567	38	0	199	804	3.0	75.2
KAMENICA	497	21	1	205	724	2.5	71.5
BALJKOVICA	172	32	7	147	358	1.3	57.0
BULJIM	236	13	7	85	341	2.7	73.0
SREBRENICA	99	2	3	101	205	1.0	49.3
UDRC	127	11	1	65	204	2.1	67.6
POBUDE	100	9	0	45	154	2.4	70.8
NOVA KASABA	90	6	0	34	130	2.8	73.8
ZEPA	35	8	1	45	89	0.9	48.3
KALDURMICA	49	7	1	19	76	2.8	73.7
BURNICE	56	8	0	10	74	6.4	86.5
SUCESKA	20	0	1	20	41	1.0	48.8
BRATUNAC	22	4	0	7	33	3.7	78.8
JADAR	26	2	0	5	33	5.6	84.8
SNAGOVO	16	1	1	12	30	1.3	56.7
JAGLICI	18	1	0	6	25	3.2	76.0
KARAKAJ	17	2	0	3	22	6.3	86.4
KLADANJ	11	0	1	10	22	1.0	50.0
CERSKA	12	3	0	6	21	2.5	71.4
SANDICI	17	3	0	0	20	-	100.0
<b>TOTAL 20+</b>	<b>4,911</b>	<b>349</b>	<b>120</b>	<b>2,000</b>	<b>7,380</b>	<b>2.5</b>	<b>71.3</b>
TOTAL <20	150	11	15	136	312	1.1	51.6
<b>OVERALL TOTAL</b>	<b>5,061</b>	<b>360</b>	<b>135</b>	<b>2,136</b>	<b>7,692</b>	<b>2.4</b>	<b>70.5</b>
<b>20+ / OVERALL TOTAL</b>	97.0	96.9	88.9	93.6	95.9	-	-

*Notes:*

1. Only places with 20 or more missing are shown
2. "Still Missing (1)" covers cases of still missing with info on death available
3. "Still Missing (2)" covers cases of still missing with no info on death available
4. Proportion of Dead/Missing includes under "Dead" both "Identified" and "Closed Cases Dead"
5. Percent Dead/Total includes under "Dead" both "Identified" and "Closed Cases Dead"

**Figure 3. Srebrenica-Related Missing and Dead by Place of Disappearance**

1. Only places with 20 or more victims are reported
2. "Still Missing" cover cases of still missing with or without info on death (1) & (2)
3. "Dead" include both the "Identified" and "Closed Cases Dead"

The ratio of those confirmed dead to all reported missing persons,<sup>15</sup> (which shows the progress of the identification of victims for any given place of disappearance), is well above 70 % for most places (16 out of 23 individual locations listed in Table 6b), and on average 70.5 % for all places. There is no indication that the progress has been faster for places known for mass graves (such as Potočari) than for “Forest”.

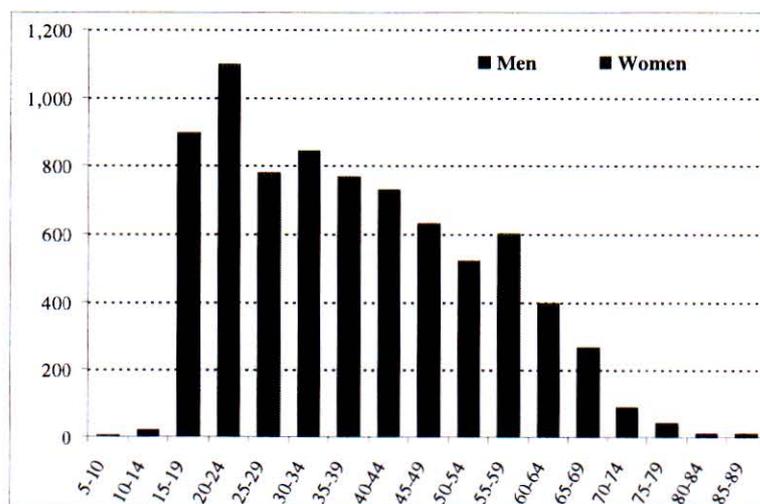
**Table 7. Srebrenica-Related Missing and Dead by Ethnicity and Sex**

<b>Ethnicity</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>	<b>Percent</b>
Muslims	6,560	37	6,597	85.8
Croats	1	0	1	0.0
Serbs	4	0	4	0.1
Others	58	0	58	0.8
Unknown	1,001	31	1,032	13.4
<b>Total</b>	<b>7,624</b>	<b>68</b>	<b>7,692</b>	<b>100.0</b>
<b>Percent</b>	<b>99.1</b>	<b>0.9</b>	<b>100.0</b>	<b>-</b>

As shown in Table 7, almost all of the Srebrenica-related missing and dead are men (7,624 or 99.1%), only 68 being women (0.9%). The vast majority of them, at least 85.8 %, are of Muslim ethnicity, as reported by themselves in the 1991 Population Census.

The absolute number of missing Muslims, 6,597, must be seen as a lower estimate, as the ethnicity shown in Table 7 is taken from the linking of the 2009 OTP list with the 1991 Population Census. However, records of 1,032 missing persons could not be linked with the Census for various reasons, mostly insufficient or deficient data. Although the ethnicity of the unlinked individuals is unknown, it can be quite safely assumed that the proportion of Muslims among them is about the same as for those who were linked. We have no indications that there is any selectivity with regard to ethnicity of those that were successfully linked to the census. This brings the total number of missing Muslims to 7,619, or 99.1 percent of all missing.

**Figure 4. Sex and Age Distributions of Srebrenica-Related Missing and Dead**



<sup>15</sup> "Dead" includes both "Identified" and "Closed Cases Dead". "Still Missing" covers cases of still missing with or without information on death ("Still Missing" (1) & (2)).

**Table 8. Sex and Age Distribution of Srebrenica-Related Missing and Dead**

Age	Men	Women	Percent Men	Percent Women
5-10	0	2	0.0	0.0
10-14	20	0	0.3	0.0
15-19	893	4	11.6	0.1
20-24	1,087	11	14.1	0.1
25-29	775	2	10.1	0.0
30-34	840	2	10.9	0.0
35-39	763	4	9.9	0.1
40-44	729	2	9.5	0.0
45-49	628	2	8.2	0.0
50-54	517	2	6.7	0.0
55-59	593	6	7.7	0.1
60-64	390	4	5.1	0.1
65-69	258	7	3.4	0.1
70-74	83	4	1.1	0.1
75-79	35	6	0.5	0.1
80-84	9	4	0.1	0.1
85-89	4	6	0.1	0.1
Total	7,624	68	99.1	0.9
Overall Total			7,692	100.0

Table 8 and Figure 4 show the age and sex distribution of the Srebrenica victims. The statistics confirm that most of the missing persons were men of ages 15-69 (7,473 or 97.2 percent).

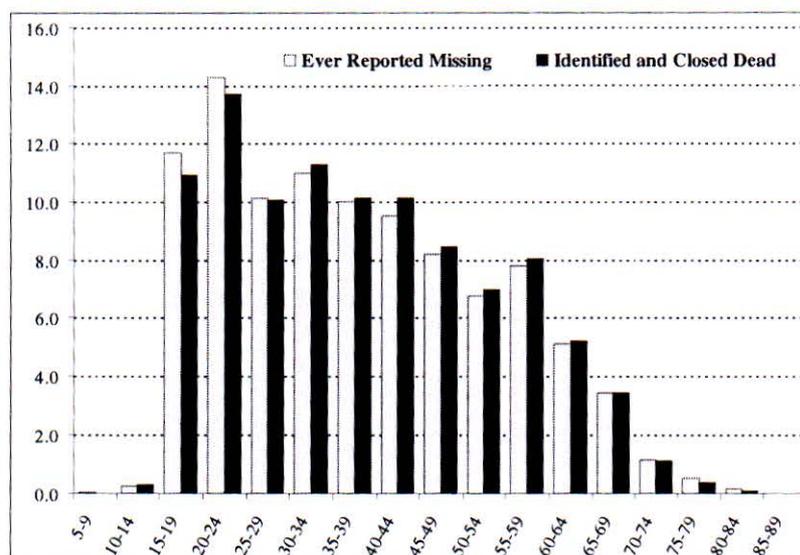
**Figure 5. Age Distribution of Srebrenica-Related Missing and Dead Persons: All Missing versus Confirmed Dead (In Percent)**

Figure 5 shows the relative age distribution of all (ever reported) missing persons from the 2009 OTP list (7,692) and of persons identified as dead as of November 2008 (DNA identifications and ICRC closed cases dead: 5,421). The age distributions are strikingly similar.

**Table 9. Age Distribution of Srebrenica-Related Missing and Dead by Place of Disappearance and Category (continued on the next page)**

**(a) All Places**

Age	Identified	Closed Cases	Still Missing (1)	Still Missing (2)	Total	Percent	Proportion Dead/Missing	Percent Dead/Total	Percent Missing/Total
5-9	0	0	0	2	2	0.0	0.0	0.0	100.0
10-14	14	2	0	4	20	0.3	4.0	80.0	20.0
15-19	533	58	27	279	897	11.7	1.9	65.9	34.1
20-24	673	71	25	329	1,098	14.3	2.1	67.8	32.2
25-29	510	34	12	221	777	10.1	2.3	70.0	30.0
30-34	568	43	17	214	842	10.9	2.6	72.6	27.4
35-39	520	29	20	198	767	10.0	2.5	71.6	28.4
40-44	525	22	13	171	731	9.5	3.0	74.8	25.2
45-49	432	26	9	163	630	8.2	2.7	72.7	27.3
50-54	362	15	6	136	519	6.7	2.7	72.6	27.4
55-59	417	17	3	162	599	7.8	2.6	72.5	27.5
60-64	259	23	2	110	394	5.1	2.5	71.6	28.4
65-69	175	11	1	78	265	3.4	2.4	70.2	29.8
70-74	54	5	0	28	87	1.1	2.1	67.8	32.2
75-79	16	3	0	22	41	0.5	0.9	46.3	53.7
80-84	3	1	0	9	13	0.2	0.4	30.8	69.2
85-89	0	0	0	10	10	0.1	0.0	0.0	100.0
Total	5,061	360	135	2,136	7,692	100.0	2.4	70.5	29.5

1. "Still Missing (1)" covers cases of still missing with info on death available
2. "Still Missing (2)" covers cases of still missing with no info on death available
3. "Dead" comprises both "Identified" and "Closed Cases Dead"
4. "Missing" comprises both "Still Missing (1)" and "Still Missing (2)"

**(b) Potočari**

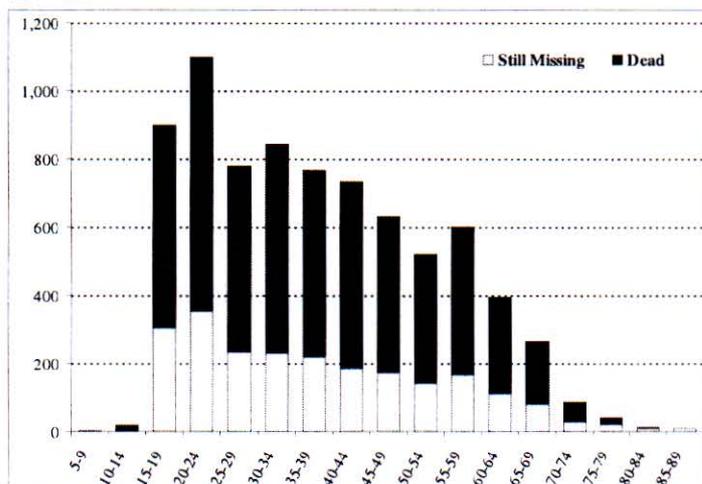
Age	Identified	Closed Cases	Still Missing (1)	Still Missing (2)	Total	Percent Total	Proportion Dead/Missing	Percent Dead/Total	Percent Missing/Total
5-9	0	0	0	2	2	0.1	0.0	0.0	100.0
10-14	7	0	0	1	8	0.4	7.0	87.5	12.5
15-19	59	11	0	41	111	5.3	1.7	63.1	36.9
20-24	33	3	0	18	54	2.6	2.0	66.7	33.3
25-29	44	2	0	16	62	3.0	2.9	74.2	25.8
30-34	41	5	1	25	72	3.5	1.8	63.9	36.1
35-39	60	4	1	23	88	4.2	2.7	72.7	27.3
40-44	79	4	0	29	112	5.4	2.9	74.1	25.9
45-49	131	6	0	46	183	8.8	3.0	74.9	25.1
50-54	203	8	0	75	286	13.8	2.8	73.8	26.2
55-59	303	13	0	112	428	20.6	2.8	73.8	26.2
60-64	231	16	0	89	336	16.2	2.8	73.5	26.5
65-69	155	11	1	59	226	10.9	2.8	73.5	26.5
70-74	49	5	0	19	73	3.5	2.8	74.0	26.0
75-79	11	2	0	14	27	1.3	0.9	48.1	51.9
80-84	3	0	0	1	4	0.2	3.0	75.0	25.0
85-89	0	0	0	3	3	0.1	0.0	0.0	100.0
Total	1,409	90	3	573	2,075	100.0	2.6	72.2	27.8

**(c) Forest**

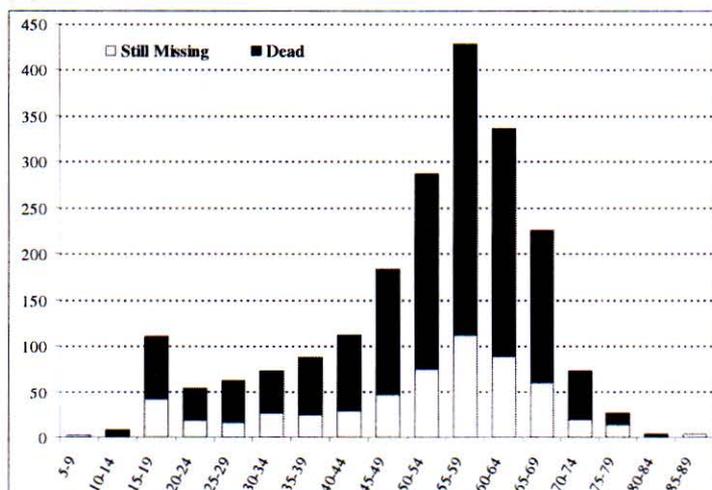
Age	Identified	Closed Cases	Still Missing (1)	Still Missing (2)	Total	Percent Total	Proportion Dead/Missing	Percent Dead/Total	Percent Missing/Total
5-9	0	0	0	0	0	0.0	-	-	-
10-14	1	0	0	1	2	0.2	1.0	50.0	50.0
15-19	89	8	0	49	146	13.4	2.0	66.4	33.6
20-24	114	10	0	57	181	16.7	2.2	68.5	31.5
25-29	88	8	0	40	136	12.5	2.4	70.6	29.4
30-34	121	6	0	41	168	15.5	3.1	75.6	24.4
35-39	90	5	0	36	131	12.1	2.6	72.5	27.5
40-44	86	5	0	25	116	10.7	3.6	78.4	21.6
45-49	62	1	0	33	96	8.8	1.9	65.6	34.4
50-54	41	2	0	12	55	5.1	3.6	78.2	21.8
55-59	24	1	0	10	35	3.2	2.5	71.4	28.6
60-64	10	1	0	2	13	1.2	5.5	84.6	15.4
65-69	1	0	0	1	2	0.2	1.0	50.0	50.0
70-74	3	0	0	1	4	0.4	3.0	75.0	25.0
75-79	0	1	0	0	1	0.1	-	100.0	0.0
80-84	0	1	0	0	1	0.1	-	100.0	0.0
85-89	0	0	0	0	0	0.0	-	-	-
Total	730	49	0	308	1,087	100.0	2.5	71.7	28.3

**Figure 6. Age Distribution of Srebrenica-Related Missing and Dead by Place of Disappearance and Category (In Absolute Numbers)**

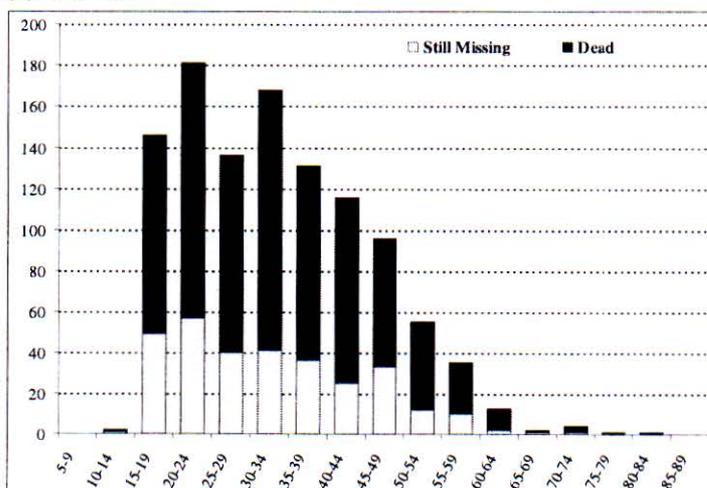
**(a) All Places**



**(b) Potočari**



**(c) Forest**



1. "Still Missing covers cases of still missing with and without information on death, (1)&(2)
2. "Dead" includes both "Identified" and "Closed Cases Dead"

Table 9 and Figure 6 show that those who went missing from Potočari were on average older than persons missing from other places.

Clearly, the majority of the missing persons from Potočari were aged from 45 to 69 years, whereas those missing from other places, in particular from the Forest, were much younger, i.e. mainly between 15 and 49 years of age. The same pattern is seen for both the still missing and the dead cases.

On average, 70.5 % of the missing persons have so far been identified and/or confirmed as dead. The remaining 29.5 % have not yet been identified as dead, but the proportion keeps increasing. For the age groups from 10 to 74 years, the fraction of confirmed deaths was close to or higher than 70.5 %. Only for the oldest group, 75 or more years, the fraction was lower.

## 2.5 THE SCALE OF VICTIMIZATION OF THE FALL OF SREBRENICA

The last item discussed in this section is the death<sup>16</sup> ratio (or proportion) of the missing persons relative to the population size in their 1991 municipality of residence (MoR). This ratio is a relative measure that shows the proportion of dead (and still missing) of a given population. Ideally, the deaths and the population at risk should be measured at the same time. The resulting measure would then be the death (or mortality) rate. This is unfortunately not possible in the case of Srebrenica, for reasons explained below. Instead, we calculated the proportions of Srebrenica-related deaths in relation to the 1991 Census population (as of 31 March 1991) in the affected municipalities. In this analysis we focus on Muslim men as almost all of the missing were Muslim men (99.1 %).

Between the outbreak of the war in April 1992 and the fall of Srebrenica in July 1995, there were several flows of the population into and out of Srebrenica due to the conflict in the surrounding areas. Some of those enumerated in Srebrenica in the 1991 Population Census left, while most of them probably stayed until July 1995, being joined by people who came from neighbouring areas and who had been enumerated there. Some of the people who were enumerated in Srebrenica on 31 March 1991 died from natural or other causes before the fall of Srebrenica and were thus not part of the population at risk of being killed. The local authorities and international humanitarian organisations are said to have compiled lists of people in the enclave but we have not been able to locate such lists and we doubt their existence. It is assumed that about 40,000 people were in the town of Srebrenica before it fell, but the exact size of this population is not known. The lack of data on the exact population at risk makes it difficult to calculate the proper mortality rates, so we had to choose another methodology, i.e. ratios, or proportions, of deaths.

This method underestimates the proportion dead, however. On one hand, those who went missing and were not enumerated in 1991 are *not* included in the *numerator* when the proportion is calculated. On the other hand, those who were enumerated in 1991 but died or left Srebrenica before July 1995, *are* included in the *denominator*. Both of these factors *reduce* the proportion dead relative to the proportion if the exact population at risk had been known.

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<sup>16</sup> The term "death ratio" is used in this section to express the proportion of both the still missing *and* the confirmed deaths in their respective 1991 population.

Our use of proportions to measure the scale of victimization of the fall of Srebrenica is fully justified and its results not hypothetical in nature. The proportions are calculated from the linking of the missing persons (numerator) with the 1991 Census population (denominator), which was achieved for 86.6 percent of the missing and dead, see the discussion below. This measuring approach is fully correct methodologically and gives the relative size of the affected 1991 population (affected by the process of going missing in 1995). Disregarding whether or not the reference 1991 population was physically present at the time of the fall of Srebrenica in July 1995, the proportions provide a highly appropriate picture of the impact of the fall of Srebrenica on the initial population living in this area at the outbreak of the war.

Note as well, the use of linked data means that only those records of the missing persons are taken for the proportions that have been associated (i.e. matched) with the 1991 Census records from relevant municipalities. Thus, for example, the reference 1991 population of Muslim men from a given municipality (e.g. Srebrenica) is taken as the denominator for the records of missing Muslim men (nominator) that were reported in the 1991 Census as living in this particular municipality (i.e. Srebrenica) in March 1991.

As mentioned above we matched the missing persons from the 2009 OTP list with the 1991 Census records. After employing a number of techniques to detect and correct errors in the data, particularly misprints of names in the Census, we managed to match fully 86.6 percent of the missing persons. This gave us access to the Census records for these persons, in particular ethnicity and the municipality of residence in 1991. Moreover, it seems quite safe to assume that the matched persons constitute an unbiased representative sample of the total population of missing persons, which implies that the remaining 13.4 percent of the missing persons have the same ethnicity and residence distribution etc. as the matched persons.<sup>17</sup> Furthermore, the high proportion of missing persons found in the 1991 Census proves that the persons on the missing list are not fictitious.

**Table 10. Srebrenica-Related Missing and Dead Males by Ethnicity and Municipality of Residence in 1991**

**a) Observed Counts**

1991 Mun. of Residence	Muslims	Croats	Serbs	Others	Unknown	Total
SREBRENICA	3,635	1	0	38	0	3,674
BRATUNAC	1,576	0	0	7	0	1,583
VLASENICA	796	0	0	2	0	798
ZVORNIK	346	0	2	6	0	354
HAN PIJESAK	83	0	0	2	0	85
<b>Total 5 Municipalities</b>	<b>6,436</b>	<b>1</b>	<b>2</b>	<b>55</b>	<b>0</b>	<b>6,494</b>
Remaining Municipalities	124	0	2	3	0	129
Unknown	0	0	0	0	1,001	1,001
<b>Overall Total</b>	<b>6,560</b>	<b>1</b>	<b>4</b>	<b>58</b>	<b>1,001</b>	<b>7,624</b>

<sup>17</sup> An argument against this is that some of the missing persons we did not manage to match may have been enumerated in other republics of the former Yugoslavia (or elsewhere), particularly in Serbia which is only a few kilometres away from Srebrenica, on the other side of the river Drina. The number of such persons is not likely to have been very high, however.

## b) Adjusted Counts

1991 Mun. of Residence	Muslims	Croats	Serbs	Others	Unknown	Total
SREBRENICA	4,195	1	0	44	0	4,240
BRATUNAC	1,819	0	0	8	0	1,827
VLASENICA	919	0	0	2	0	921
ZVORNIK	399	0	2	7	0	409
HAN PIJESAK	96	0	0	2	0	98
<b>Total 5 Municipalities</b>	<b>7,428</b>	<b>1</b>	<b>2</b>	<b>63</b>	<b>0</b>	<b>7,495</b>

Note: Figures in this table have been adjusted for the unmatched records (1001 for men) according to the original distribution of the matched records by their 1991 municipality of residence and ethnicity

To get a better picture of the scale of the atrocities, we computed the proportion of men that went missing after the fall of Srebrenica relative to the number of men of Muslim ethnicity who were enumerated in the 1991 Census, broken down by age and pre-war municipality of residence.

**Table 11. Proportion of Srebrenica-Related Missing and Dead Muslim Men Relative to the 1991 Census Population, by Municipality of Residence in 1991 and Age in 1995<sup>18</sup>**

Age 1995	SREBRENICA/BRATUNAC	VLASENICA	ZVORNIK	HAN PIJESAK	Total 5 Mun
10-14	0.4	0.4	0.4	0.0	0.2
15-19	31.8	17.7	11.4	1.1	13.8
20-24	37.5	22.9	10.3	2.0	16.2
25-29	32.4	17.7	9.3	1.1	13.2
30-34	40.5	21.0	8.5	2.0	15.1
35-39	38.1	23.9	12.9	2.0	15.3
40-44	44.9	24.7	14.6	2.9	17.4
<b>45-49</b>	<b>50.4</b>	<b>31.0</b>	<b>20.4</b>	3.2	21.4
50-54	50.2	33.1	20.3	2.0	24.2
55-59	46.7	24.1	21.9	3.8	22.2
60-64	40.3	27.7	14.9	3.4	17.8
65-69	33.1	21.1	16.8	2.9	14.5
70-74	26.1	9.2	15.1	2.3	9.5
75-79	18.0	12.0	13.4	3.0	9.6
80-84	12.5	4.5	0.0	2.0	3.8
85-89	7.9	0.0	4.1	0.0	2.4
<b>Total</b>	<b>34.2</b>	<b>19.4</b>	<b>11.3</b>	1.9	14.2

<sup>18</sup> The proportions of missing Muslim men can be also calculated from the non-adjusted figures (Table 10a). These proportions are included below. They are slightly lower than those in Table 11 but no fundamental changes are seen.

Age 1995	SREBRENICA	BRATUNAC	VLASENICA	ZVORNIK	HAN PIJESAK	Total 5 Mun
10-14	0.4	0.3	0.4	0.0	0.0	0.2
15-19	27.5	15.3	9.9	0.9	10.8	12.0
20-24	32.5	19.8	8.9	1.7	7.8	14.0
25-29	28.1	15.2	8.0	1.0	8.7	11.5
30-34	35.1	18.2	7.4	1.7	4.2	13.1
35-39	33.0	21.0	11.1	1.7	9.0	13.3
40-44	38.9	21.2	12.7	2.5	9.9	15.1
45-49	<b>43.6</b>	26.7	17.6	2.8	8.6	18.5
50-54	43.5	<b>28.5</b>	18.1	1.8	7.7	<b>21.0</b>
55-59	40.5	20.9	<b>19.0</b>	<b>3.3</b>	<b>13.8</b>	19.2
60-64	34.9	23.9	12.9	2.9	7.1	15.4
65-69	28.7	18.9	14.5	2.5	5.6	12.7
70-74	22.6	7.9	13.0	2.0	8.7	8.2
75-79	15.6	10.3	11.6	2.6	5.6	8.3
80-84	10.8	3.8	0.0	1.8	0.0	3.3
85-89	6.8	0.0	3.6	0.0	0.0	2.1
<b>Total</b>	<b>29.6</b>	<b>16.8</b>	<b>9.8</b>	1.6	7.5	12.3

We found that the majority of the missing men lived in Srebrenica in 1991 or in one of the neighbouring municipalities that were captured by Serb forces early in the war, Bratunac, Vlasenica, Zvornik, and Han Pijesak, see Table 10. For these five municipalities, Table 11 shows the proportions of Muslim men that disappeared from the enclave in 1995, by age. Srebrenica is the municipality with the highest proportion of missing Muslims, as expected, with fully 34.2 percent. The proportions of missing for the other municipalities decline with the geographic distance from their major settlements to Srebrenica. Bratunac (19.4 %), the municipality with the second highest proportion, has a long border with Srebrenica, whereas Zvornik is farther away. Consequently, we would expect that persons from Zvornik to a larger extent fled to other Muslim-held areas in Bosnia.

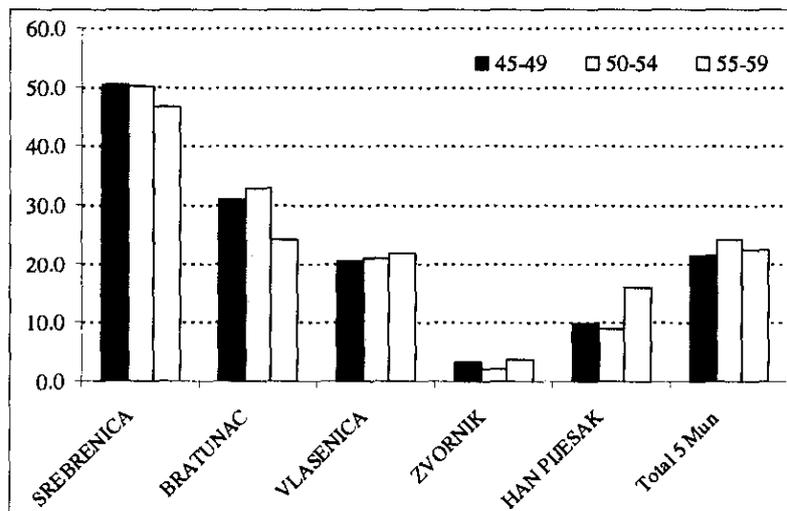
Three age groups were particularly seriously affected: 45-49, 50-54 and 55-59 years, see Figure 5. The highest death ratios, about 50.4 % of the 1991 population, are noted for Muslim men aged 45-49 from Srebrenica.

Noteworthy, these missing proportions should be considered low estimates, because of demographic and other events that occurred between the Census on 31 March 1991 and the fall of the enclave on 11 July 1995, which reduced the population at risk of disappearing:

- Deaths from natural causes, especially among the elderly.
- Deaths from war-related causes, especially among young men.
- People migrating or fleeing from Srebrenica.
- Men of military age fighting in the army elsewhere.

On the other hand, people who had gone to Srebrenica from other municipalities have been included in the population at risk in the municipalities they came from, since the matching procedure yielded information about their 1991 residence.

**Figure 7. Srebrenica-Related Missing and Dead by Age Group and Municipality of Residence in 1991, 2009 Report**



Only a few young children (10-14 years of age) from the four municipalities went missing, but the proportions are very high for Srebrenica boys (31.8 % for ages 15-19 years) and young men (37.5 % for ages 20-24 years). In Srebrenica the proportion of missing is extremely high for Muslim men of almost *all* ages: 1/3 of all Muslim men between 15 and 70 went missing in

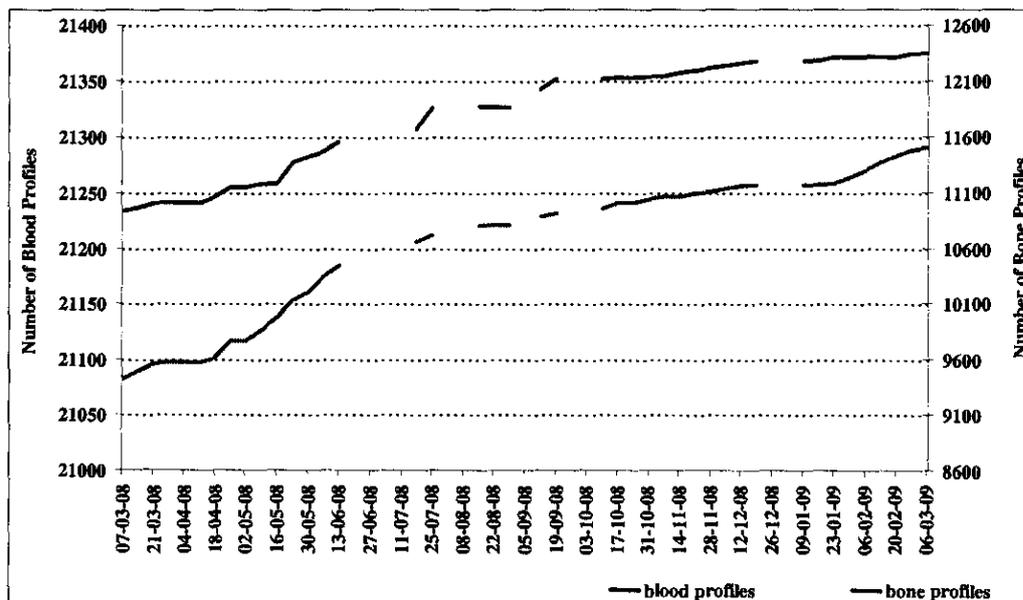
1995. The proportion is in fact the highest, 50.4 % for middle-age men 45-59 years old. This may seem surprising, since such "old" men should be less likely to be suspected of being soldiers and singled out for execution.

There are several possible explanations why the missing proportions are higher for middle-aged than for young men: older men probably had lower propensities to leave at the beginning of the war because most of them were fathers and had families. It is much harder to flee with a family with children than by oneself. Younger men are generally healthier which increased the likelihood that they would manage to make the 70-km trek through the woods to Tuzla. Moreover, many of the men aged 20-40 years would more likely be fighting elsewhere, or may have been killed or captured, and consequently not be at risk of disappearing from the enclave. The youngest boys, aged 15-19 in 1995, were also less likely to be in the army, which may explain their elevated risk of disappearance compared to their preceding cohorts.

## 2.6 ICMP TRACKING CHARTS AND WEEKLY PROGRESS IN THE DNA IDENTIFICATION OF SREBRENICA VICTIMS

In this section ICMP weekly statistics on the DNA profiling and matching are discussed. This data, coming from the "ICMP Tracking Charts" (see Annex 3.2), has been systematically submitted by ICMP to the OTP, almost on a weekly basis. Some of the items from the tracking charts can be interpreted in the context of the weekly progress in the DNA identification of Srebrenica victims. A selection of these items is summarized below.

**Figure 8. Overall Number of (Unique) Blood and (Non-Unique) Bone DNA Profiles in the ICMP Database. By Week from 7 March 2008 to 6 March 2009**



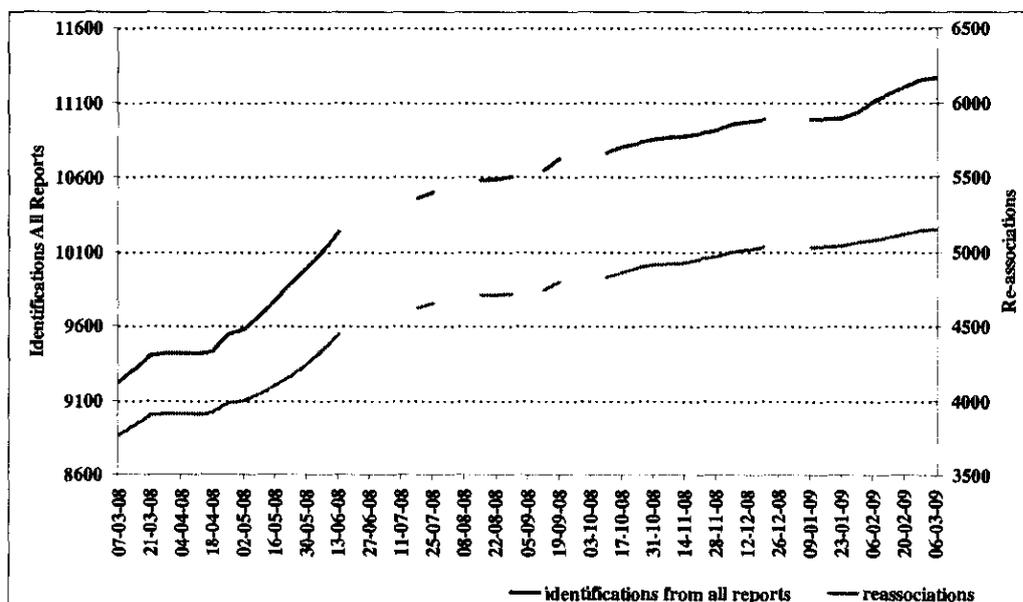
The overall number of unique DNA blood profiles in the ICMP is 21,374, as of March 2009, which represents 7,789 missing persons related to the fall of Srebrenica (Figure 8). The number of DNA bone profiles equals 11,497. However, not all bone profiles represent different individuals, as some are re-associations (Figure 9). All bone profiles are systematically matched by the ICMP staff with all available blood profiles in the ICMP database in order to

identify missing persons. During the past 12 months up to March 2009, only a slight increase (140) was observed in the number of blood profiles, but a far more pronounced increase was seen in the number of bone profiles (2,068).

The number of identifications obtained from this material grew fast in March 2008 - March 2009 (2,035). However, not all of these identifications represent different individuals. As shown in Figure 9, the overall number of re-associations grew from 3,766 in March 2008 to 5,147 in March 2009 and was contained in the total number of 11,261 identification reports issued by then.

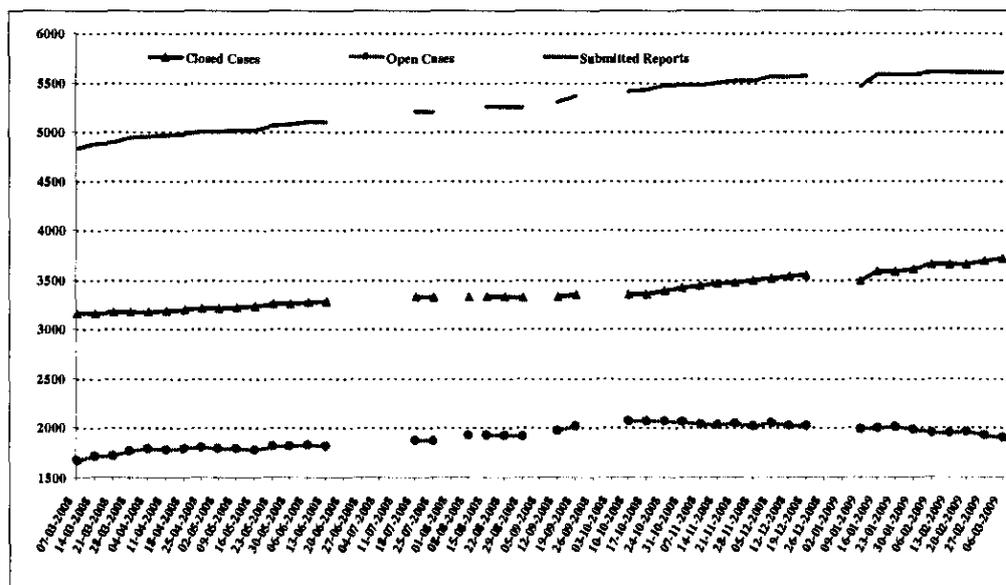
From these general figures it is clear that the ICMP progress in DNA profiling and matching has been considerable and systematic in the past 12 months before this report was written. . Generally, all the issued reports represented 5,942 persons in March 2009. A majority of these reports were positive identifications, while a few were negative. The most straightforward figures are from the number of submitted reports<sup>19</sup> (positive identifications of different individuals) shown in Figure 10. In March 2009, there were 5,605 positive identifications available, an increase of 777 since March 2008. Interestingly, the number of open cases seems to be fading off as compared with the number of closed cases, which has grown systematically during the entire period.

**Figure 9. Re-associations versus (All Reports) Identifications, by Week from 7 March 2008 to 6 March 2009**



<sup>19</sup> Submitted Reports (representing different individuals) are reports sent by ICMP to the BH Government, BCMP (Bosnian Commission for Missing Persons), BH Institute for Missing Persons, etc.

**Figure 10. Components of the Submitted ICMP Reports: Closed versus Open Reports.  
By Week from 7 March 2008 to 6 March 2009**



All in all, from the weekly ICMP statistics, a significant progress can be seen in their DNA identifications. It is, however, not easily predictable how the progress will continue in the future as the main factor behind these figures are the recently completed and new exhumations, which will provide new bone samples for analysis.

### 3. FINAL CONCLUSIONS

The 2009 OTP report marks 10 years of research into the victimization of the fall of Srebrenica in July 1995. Therefore, it takes a long perspective on the work completed so far. The purpose of this report is to give a comprehensive overview of reliable statistics on the victims of the fall of Srebrenica in July 1995, and of the development in these statistics since the first OTP Srebrenica report was written in 1999-2000, until the present, which was completed in April 2009. A summary of our results is attached below in Tables 12 and 13.

**Table 12. Overview of Progress in the (DNA) Identification of Srebrenica Missing**

Date of OTP Report	Srebrenica Missing (OTP)	Srebrenica Identified (ICMP)	Accepted Overlap	Excluded Overlap	New Victims (Identified)	Excluded Potential Survivors	Accepted Victims (Integrated)	Percent Identified (1)	Percent Identified (2)
12.02.2000	7,475	68	66	-	2	9	7,477	0.9	0.9
16.11.2005	7,661	2,591	2,488	-	103	12	7,764	32.5	33.4
11.01.2008	7,661	4,263	3,837	261	165	12	7,826	50.1	51.1
09.04.2009	7,692	5,555	5,061	281	213	12	7,905	65.8	66.7

**Notes:**

1. 2 of 68 identifications in 2000 (all *not* by ICMP) were reported by ICRC as missing in 1992 and were not on the OTP list
2. "Srebrenica Missing" is the total of cases on the OTP lists of Srebrenica Missing
3. "Srebrenica Identified" represent all ICMP identifications (main cases - different individuals)
4. "Accepted Overlap" are the reliable matches between ICMP Identified and OTP Missing
5. "Excluded Overlap" are uncertain matches between "ICMP Identified" and "OTP Missing"
6. "Integrated Victims" is the sum of "OTP Missing" and "New Victims"

Table 12 focuses on the development of the number of Srebrenica missing as compared with the number of Srebrenica identified. In 2000, only 0.9 % of all Srebrenica missing were confirmed as known deaths. In 2009, fully 66.7 %, or exactly 2/3, of the missing were confirmed dead by means of DNA identification of remains exhumed from mass and other graves in the Srebrenica territory. The remarkable shift that is seen in the identification of Srebrenica victims is thanks to the work of ICMP. More identifications will become available in the future as new DNA reports are issued by ICMP and additional victims are identified every week.

Table 12 also shows that the number of missing and dead persons on the OTP lists has increased from 7,477 in 2000 to 7,905 in 2009. The current OTP number of Srebrenica missing was obtained exclusively by adding additional cases of DNA identified persons reported by the ICMP to the OTP lists. In 2009, 213 additional persons were added, who had not been reported as missing to ICRC or PHR..

It is remarkable that the OTP number has evolved towards the 8,000 figure that has been frequently reported by several organizations operating in the area of exhumations and identification of Srebrenica victims. The 2007 ICMP estimate of 8,100 (Parsons, 2007) is one of the best documented figures and is fully consistent with the results the OTP obtained over the years since 2000.

Importantly, the number of potential survivors on the OTP lists has always been low (9 to 12), despite of the many efforts to identify any survivors among the missing.

Table 13 focuses on the distribution of victims into confirmed deaths and still missing persons. The confirmed deaths in this table comprise two categories: DNA identified persons from ICMP updates on Srebrenica and "closed cases dead" reported by ICRC in their lists of missing from Bosnia and Herzegovina. ICRC is likely to be also reporting some non-DNA identifications, which are not part of the ICMP data sets. Altogether these two components amount to 5,394 confirmed deaths in 2009, which is 70.1 % of all victims from the 2009 OTP list of Srebrenica missing.<sup>20</sup> This number is a striking contrast to the 2000 number of 68 confirmed deaths, which is equivalent to 0.9 % of the missing.

At present 2,298 persons, or 29.9 % of the missing, have still not been found and identified.

**Table 13. Overview of Progress in Confirmed Deaths versus Still Missing Persons on the OTP Lists of Srebrenica Victims**

Date of OTP Report	Srebrenica Missing (OTP)	Srebrenica Identified (ICMP)	Srebrenica Dead (ICRC)	Overlap Identified & Dead	Integrated Identified and Dead	Still Missing	Percent Identified & Dead	Percent Still Missing
12.02.2000	7,475	66	68	66	68	7,407	0.9	99.1
16.11.2005	7,661	2,488	2,054	1,725	2,817	4,844	36.8	63.2
11.01.2008	7,661	3,837	2,054	1,797	4,094	3,567	53.4	46.6
09.04.2009	7,692	5,061	3,474	3,141	5,394	2,298	70.1	29.9

Notes:

"Srebrenica Identified" represent here the accepted overlap of ICMP and OTP records

"Integrated Identified and Dead" equals: "ICMP Identified" plus "ICRC Dead" minus "Overlap"

Other main findings of this report are the following:

<sup>20</sup> "Percent Identified" (1 and 2) from Table 12 only relates to the DNA identifications and thus it is lower than 70.1% reported in Table 13.

- The overall number of missing persons reported in the 2009 OTP list of Srebrenica missing is 7,692 as of March 2009 and is 217 higher than in the 2000 OTP report. This is a minimum number.
- Together with the new cases of Srebrenica victims (213; DNA identifications of ICMP), the 2009 overall total of Srebrenica missing and dead is 7,905 persons.
- Whereas the percent of still missing persons was about 99 % in 2000, it dropped to about 30% in 2009, and is expected to decline further in the future.
- The death of about 70% of the victims has now been confirmed.
- This includes 5,061 persons identified by ICMP and 3,474 cases declared closed and dead by ICRC. Some 3,141 individuals were reported by both of these institutions. Thus, the integrated overall number of the (ICMP) identified persons and (ICRC) closed cases dead is 5,394.
- For at least 5,274 identified victims, specifically for the 5,061 plus 213 new, their remains have been exhumed from mass graves and other grave sites in the Srebrenica area, including locations on the surface, and identified afterwards by DNA analysis.
- The 5,274 identified individuals comprise 66.7 % of all Srebrenica missing.
- A majority of the remains (up to about 87.2 %) were found in the mass graves that were covered by the 1990s ICTY investigation of Srebrenica exhumations in Eastern Bosnia and Herzegovina. Only (up to) 12.8 % of exhumed persons were found in other graves or on the surface.
- Potential survivors (12) have been removed from the 2009 OTP list of Srebrenica missing
- Cases of ABiH soldiers and other military personnel confirmed to be in the OTP list of Srebrenica missing, about 70% of the OTP list, remain on the OTP list as there exists evidence that a majority of them were exhumed from mass graves in the Srebrenica area. This confirms that these individuals died violent deaths in non-combat circumstances.
- The fall of Srebrenica was a short-term intense event, with 96.2 of the victims disappearing in July 1992. By the end of August, almost 99% of victims were reported missing.
- Most disappearances were concentrated on 11, 12 and 13 July 1992 (71.7% of all disappearances).
- A majority of victims disappeared from only five municipalities: Srebrenica, Bratunac, Zvornik, Vlasenica and Rogatica (99 % of all missing).
- Two place of disappearance were particularly frequent: Potočari and "Forest" (41.1%).
- Almost all victims were Muslim men at age 15-69 years (at least 6,443, 97.3 % of all missing excluding those of unknown ethnicity).
- The number of women among the missing was 68.
- The number of children below age 18 was 409, of which 405 were boys and 4 girls.
- The number of elderly at age 70 or more years was 151, of which 131 were men and 20 women.
- Muslim men from five municipalities (Srebrenica, Bratunac, Vlasenica, Zvornik, and Ham Pijesak) suffered the largest losses during the fall of Srebrenica (about 6,494 missing)
- The scale of victimization of Muslim men from five municipalities in the Srebrenica area was assessed in this report by presenting age-specific proportions of death.
- Three age groups were particularly seriously affected: 45-49, 50-54 and 55-59 years.

- In the municipality of Srebrenica the proportion of missing is extremely high for Muslim men of almost *all* ages: 1/3 of all Muslim men between 15 and 70 who lived in Srebrenica in 1991 went missing in 1995. The proportion is the highest for middle-age men 45-59 years old (50.4 %).

## ANNEXES

## ANNEX 1. THE OTP SREBRENICA EXPERT REPORTS AND LISTS OF SREBRENICA VICTIMS

- Report 1: Helge Brunborg and Henrik Urdal, 2000: Report on the Number of Missing and Dead from Srebrenica. Expert report for the case of General KRSTIĆ (IT-98-33). The Hague, 12 February 2000. Presented as well in SLOBODAN MILOŠEVIĆ (IT-02-54) and BLAGOJEVIĆ et al. (IT-02-60). ERN (Eng) 0092-6372-0092-6384, ERN (BCS) 0093-9724-0093-9737. Exhibit 276.
  - The list of victims associated with this report was the following:
    - (1.1) SREBRENICA MISSING: Persons Reported Missing and Dead after the Take-Over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995. The Hague, 2 May 2000. ERN (Eng) 0103-9876-0104-0148, Exhibit 271.
- Report 2: Helge Brunborg, 2003: Addendum on the Number of Missing and Dead from Srebrenica. Addendum to the KRSTIĆ expert report. Prepared for the case of BLAGOJEVIĆ et al. (IT-02-60). The Hague, 12 April 2003. ERN (Eng) 0291-7582-0291-7590, (BCS) 0308-0316-0308-0326. (Exhibit: P02410).
- Report 3: H. Brunborg, E. Tabeau and A. Hetland, 2004, Rebuttal report on: H. Brunborg and H. Urdal, 2000: Report on the Number of Missing and Dead from Srebrenica, from KRSTIĆ (IT-98-33). Rebuttal report for BLAGOJEVIĆ et al. (IT-02-60). The Hague, 25 August 2004. ERN (Eng) 0360-1034-0360-1060, (BCS) 0360-1034-0360-1060. (Exhibit: P02412).
- Report 4: E. Tabeau, A. Hetland, N. Loncaric, and H. Brunborg, 2004, The 2004 Addendum to the List of Missing and Dead Persons from Srebrenica. Research Report prepared for the cases of BLAGOJEVIĆ (IT- 02-60-T) and MILOŠEVIĆ / BOSNIA (IT-02-54). The Hague, 25 January 2004. ERN (Eng) 0500-1401-0500-1481, BCS 0500-1401-0500-1481. (Exhibit: P02411).
  - The report contains two lists:
    - (4.1) The 2004 Addendum to the List of Missing Persons from Srebrenica: New and Additional Names of Those Who Went Missing in Relation to the Takeover of the Srebrenica Enclave by the Bosnian Serb Army on July 11<sup>th</sup>, 1995. ERN (Eng) 0500-1424-0500-1436. (Exhibit: P02411).
    - (4.2) The List of Identified Persons Exhumed from the Territory of Srebrenica and Other Municipalities in this Area. ERN (Eng) 0500-1437-0500-1476. (Exhibit: P02411).
- Report 5: Helge Brunborg, Ewa Tabeau and Arve Hetland, 2005: Missing and Dead from Srebrenica: The 2005 Report and List. Expert report for the case of VUJADIN POPOVIĆ et al. (IT-05-88), 16 November 2005. Presented as well in PERIŠIĆ (IT-04-81). ERN 0501-6180-0501-6209, Exhibit No. P02413.
- The lists of victims associated with the above-mentioned report were the following:
  - (1.1) SREBRENICA MISSING: Persons Reported Missing and Dead after the Take-Over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995.

- The Hague, 16 November 2005. (ERN (Eng) 0501-5985-0501-6177; Exhibit P02414).
- (1.2) SREBRENICA MISSING: Possible Survivors Excluded from Persons Reported Missing and Dead after the Take-Over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995. The Hague, 16 November 2005. (ERN (Eng) 0501-6178-0501-6179; Exhibit P02415).
  - Report 6: Helge Brunborg, Ewa Tabeau and Arve Hetland, 2005: Identified Persons among the Missing and Dead from Srebrenica. An Addendum to the Expert Report: Missing and Dead from Srebrenica: The 2005 Report and List, 21 November 2005. Presented as well in PERIŠIĆ (IT-04-81). ERN R089-6474-R089-6490; Exhibit No. P02416).
  - The lists of victims associated with this report were as follows:
    - (2.1) SREBRENICA IDENTIFIED: Identified Persons (ICMP) Included among Those Reported Missing and Dead after the Take-Over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995. The Hague, 16 November 2005. ERN R089-6406-R089-6469; Exhibit P02417).
    - (2.2) SREBRENICA IDENTIFIED: Identified Persons (ICMP) not Included among Those Reported Missing and Dead after the Take-Over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995. The Hague, 16 November 2005. ERN R089-6470-R089-6473; Exhibit P02418).
  - Report 7 (i.e. "List with Introduction"): Ewa Tabeau and Arve Hetland, 2007: SREBRENICA MISSING: The 2007 Progress Report on the DNA-Based Identification by ICMP. Update to the list P02414 of 16 November 2005: "Srebrenica Missing, Persons Reported Missing and Dead after the Take-over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995". Update prepared for the VUJADIN POPOVIĆ ET AL. case (IT-05-88), The Hague, 29 November 2007. ERN (Eng) R091-9552-R091-9750, (BCS) R091-9552-R091-9750. Exhibit 3006 (65 ter).
  - Report 8: Ewa Tabeau and Arve Hetland, 2008: Srebrenica Missing: The 2007 Progress Report on the DNA-Based Identification By ICMP. Expert report for the VUJADIN POPOVIĆ ET AL. case (IT-05-88), 11 January 2008. Presented as well in PERIŠIĆ (IT-04-81). ERN (Eng) 0626-5765-0626-5781, (BCS) 0626-5765-0626-5781. Exhibit 3159 (65 ter).
  - The list of victims associated with the above-mentioned report was the following:
    - (8.1) SREBRENICA MISSING: Persons Reported Missing and Dead after the Take-Over of the Srebrenica Enclave by the Bosnian Serb Army on 11 July 1995. The 2007 Progress Report on the DNA-Based Identification By ICMP. List of victims, 11 January 2008. ERN (Eng) R092-0124-R092-0322, (BCS) R092-0124-R092-0322. Exhibit 3159a (65 ter).

## ANNEX 2. DEFINITION OF TERMS FOR SREBRENICA VICTIMS

In this report, the terms “missing” and “disappeared” are used interchangeably. To qualify as a Srebrenica-related missing person, i.e. a person missing in connection with the fall of the enclave on 11 July 1995, the following definitions were applied:

- *Date of disappearance:* This phrase refers to the date a missing person was last seen alive.<sup>21</sup> This is, however, not necessarily the date the person may have been killed. Records with a reported disappearance or death between 11 July and 31 August 1995, or immediately before but not earlier than 1 July, were considered the most relevant, but also records with disappearances between 1 September and 31 December 1995 from locations in or near the enclave, were included in our analysis.
- *Place of disappearance:* This phrase refers to the place a missing person was last seen alive.<sup>22</sup> Again, this is not necessarily a reference to where the person may have been killed. A person may, for example, have left Srebrenica on 11 July and started to walk through the forest, been picked up by the RS Army and transported to a place, say Nova Kasaba, where he died. The place of disappearance in this example could be any of Srebrenica, “Forest” or Nova Kasaba, depending on who saw him last alive. For this project a list was compiled of “missing”-locations related to the fall of the enclave. This compilation was done in close co-operation with investigators knowledgeable of refugee flows from the enclave, and after consulting with people from the area on difficult cases.<sup>23</sup> For the OTP 2005 list the municipalities covering these locations, together with the date of disappearance, was used to decide whether a person disappeared in relation to the fall of Srebrenica. The following municipalities were considered relevant: Bijeljina, Bratunac, Han Pijesak, Kalesija, Kladanj, Rogatica, Šekovići, Srebrenica, Vlasenica and Zvornik. Brunborg and Urdal (2000) also included in their list a few records of citizens of Bosnia who disappeared in three municipalities in Serbia (bordering the Srebrenica area): Bajina Bašta, Ljubovija, and Valjevo. These three municipalities were also considered relevant.

A Srebrenica-related identified person is an individual believed to have died of a violent cause during or around the fall of Srebrenica in 1995, whose DNA profile has been successfully matched to the DNA profile of his/her surviving relatives. The DNA profile of the identified person was obtained from a bone sample (or samples) taken from his/her remains collected from exhumation sites (mass graves or surface sites) on the territory of Eastern Bosnia and Herzegovina, or occasionally of Western Serbia, in the proximity of the Srebrenica municipality. The organization mandated to conduct the DNA profiling, analysis and matching is the International Commission for Missing Persons in Sarajevo. The records of identified persons studied in this report are those from the DNA matching files of ICMP, and records from ICRC reported as “closed cases, dead”. The latter cases include non-DNA identifications.

<sup>21</sup> This could either be the date the informant her/himself last saw the person alive, *or* a date based on information provided by an eyewitness through the informant.

<sup>22</sup> This could either be the place the informant her/himself last saw the person alive, *or* information provided by an eyewitness through the informant.

<sup>23</sup> PHR asked the specific question “Did he/she disappear after the fall of Srebrenica in July 1995?”, and the answers to which were provided to us for each Srebrenica-related person. We have used this information in conjunction with date and place of disappearance to make the list of Srebrenica-related places of disappearance. ICRC did not pose any precise question to the informants but defined Srebrenica-related victims on the basis of the story given by the informant, which usually starts with: “During the fall of Srebrenica” or “After the fall of Srebrenica”. (Fax to ICTY from ICRC, Sarajevo, 7.12.99.) However, this information was not provided to ICTY for the missing persons.

### ANNEX 3. SOURCES

According to the objective of this report, which was to produce reliable statistics on the number of people who were killed or who are still missing after or around the fall of Srebrenica in 1995, the major data sources used in this report are on missing and identified persons. Several additional data sources were also used, including sources on pre- and post-war survivors, and on known deaths of military and civilian persons.

In our report the list of Srebrenica missing and dead is the first major type of output. The list is validated by linking it back to the 1991 Population Census. Further, this list is cross-referenced with sources of post-war survivors in order to eliminate possible survivors among the missing from our analysis. Finally, the list of Srebrenica missing is cross-referenced with the list of DNA identifications obtained by the ICMP. The overlap between the two provides the number of confirmed deaths among the Srebrenica missing. The non-overlapping records of the ICMP identified are added to the list of Srebrenica missing and in this way they contribute to producing a more complete picture of the victimization of the fall of Srebrenica.

The sources of our report on missing persons include several editions of the ICRC and PHR lists of missing persons for Bosnia and Herzegovina, the latest editions being from 2005 (ICRC) and 1999 (PHR), and the recently collected ICRC list of Srebrenica missing from October 2008. The 2008 ICRC list was the basis for our revisiting of the 2005 OTP list of Srebrenica missing, the result of which is presented as the OTP 2009 list.

The second major data source was the November 2008 update on the DNA identifications of Srebrenica victims by the ICMP. The ICMP records have been integrated with the 2009 OTP list of Srebrenica missing and dead.

The ICRC/PHR and ICMP lists were the major but not the only sources used, however. This report is also based on the following additional sources for Bosnia and Herzegovina with data on individuals:

- Population Census 1991
- Voters Registers from 1997, 1998 (merged: 1997-98), and 2000
- Database of Displaced Persons and Refugees (DDPR), 2000 version
- Early records of the so-called "Srebrenica refugees" from local authorities in Bosnia and Herzegovina, 1997
- ABiH records of deaths (or missing) of soldiers and other military personnel associated with the army, 1992-95

The 1991 Census served as a reference source linked with the ICRC and PHR lists and was searched through in order to check the personal details of individuals reported missing or dead in relation to Srebrenica, to obtain data on their ethnicity and place of residence reported in the 1991 Census, and to eliminate possible duplicates from the Srebrenica missing persons list. The Voters Registers 1997-98 and 2000, the DDPR 2000, and the 1997 records of "Srebrenica refugees" were used as sources on the post-war population that survived the conflict of 1992-95. These lists were used to identify possible survivors among those reported in the Srebrenica missing persons list.

Finally, ABiH military records were used to identify individuals on the OTP list of Srebrenica missing and dead who possibly might have died in combat situations. However, circumstances of death are not reported in the Army records and, thus, based on this source it is not possible to draw definite conclusions on the nature of death of these persons. On the other hand, it is a fact that a significant number of military records overlap with records of identified persons exhumed from the Srebrenica mass graves. This means many persons recorded by ABiH have also been exhumed from Srebrenica-related mass graves.

Our sources are presented in more detail below.

### ANNEX 3.1 ICRC LISTS OF MISSING PERSONS FROM BOSNIA AND HERZEGOVINA (BH)<sup>24</sup>

The 1991-95 armed conflicts in the former Yugoslavia led to one of the largest ICRC operations since the World War II (WWII). It involved about 80 National Red Cross/ Red Crescent Societies in a world-wide network. About 18 million messages were exchanged between families within BH, Croatia and FRY in 1991-1995, and 43,896 detainees in these countries were visited in this period.

In Bosnia and Herzegovina ICRC started to collect tracing requests for missing persons already during the war period 1992-95. In mid 1996, after the armed conflicts ended, a series of campaigns was launched regarding the registration of missing persons. By mid 1997, 20,000 tracing requests had been collected. ICRC still continues its registration activities. As late as in 2007, for example, 40 new tracing requests were registered. Generally, until 2007, 22,387 tracing requests have been collected and 9,555 cases resolved, dead or alive. About 12,500 individuals were still missing in 2007.

ICRC has regularly published volumes of missing persons lists. The 8<sup>th</sup> edition of the volume on BH was published in 2007. In addition to publishing these books, ICRC maintains a website where the names of (still) missing persons from Bosnia and Herzegovina are presented. The website, available at [http://www.familylinks.icrc.org/mis\\_bos.nsf/bottin](http://www.familylinks.icrc.org/mis_bos.nsf/bottin), is regularly updated.

In relation to the missing persons from Srebrenica, ICRC submitted a list of about 8,000 names to the BH Working Group on the Missing Persons in February 1996. In mid 1997 several hundred persons were confirmed as survivors and taken off the list, which was consequently reduced to 7,300 names. In October 2008 ICRC submitted the latest version of its list of Srebrenica missing to the OTP, which includes records for 7,640 persons (ever reported missing). Of this number, one record is a cancellation and 26 records are for persons found alive. Thus, the 2008 ICRC Srebrenica list includes information about 7,613 missing and dead individuals.

In the process of registering of missing persons a standardized questionnaire was used. The information from these tracing requests was later computerized by IT specialists in the ICRC offices in the region, in Sarajevo for Bosnia. The electronic data were regularly transferred to Geneva for further processing, cross-referencing with other sources, and publishing on the web. The data are systematically reviewed, closed cases (both dead and alive) are excluded, and there also cancellations for so-called "administrative reasons", i.e. technical errors, etc.

To establish the 2009 OTP integrated report we proceeded from the 2005 OTP list of Srebrenica missing and identified, re-examining these records by cross-referencing with more recent (2008) data on missing and identified.

The major source used for the compilation of the 2005 OTP list was the 2005 version of the ICRC list of missing persons for Bosnia and Herzegovina, dated 17 August 2005. A second major source, as for the 2000 OTP list, was the PHR Ante-Mortem Database, versions from

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<sup>24</sup> Sources: Special Report by ICRC; Feb 1998; ERN 0349-2128-0349-2143; and ICRC Annual Report 2007-public document downloaded from ICRC website.

May, July and October 1999 merged together and analysed jointly with the 2005 ICRC list. Due to a large overlap with the ICRC list, only a few exclusively PHR records (23) entered into the 2005 OTP list, whereas all remaining records were from the ICRC list.

Below we first summarize the 2005 ICRC and 1999 PHR lists of missing persons from Bosnia and Herzegovina and secondly we discuss the October 2008 ICRC list of Srebrenica missing.

### **The ICRC List of Missing Persons from Bosnia and Herzegovina, 2005 Edition**

The ICRC started the registration of missing persons from the territory of Srebrenica and neighbouring municipalities soon after the fall of the Srebrenica enclave in July 1995, primarily to register persons believed to be in detention. The registration of Srebrenica victims, as of all other victims of the Bosnian war, has continued until the present, although at a much lower pace. The work of ICRC in Bosnia and Herzegovina has so far resulted in the publication of eight editions of their list of missing persons (the 8<sup>th</sup> edition published in 2007). The editions 4<sup>th</sup> through 8<sup>th</sup> of the ICRC books contain records of still missing persons as well as known deaths.

The 2005 up-date of the ICRC list of missing persons for all of Bosnia and Herzegovina used for this report was provided directly by the Geneva Office of the ICRC on 17 August 2005 (ERN: D000-1714-D000-1714). This list has a wider coverage than the web-based list of “still missing” only, as it includes information regarding whether the body has been found for those still missing and about persons who are not missing any more. The data provided to OTP were arranged five groups:

- still missing with information about the body not yet available (14,105 records)
- still missing with information about the body already available (1,528)
- ICRC closed cases, i.e. confirmed deaths (6,093)
- alive persons, i.e. cases no more valid as part of the missing persons list (434)
- administrative exclusions (52)

Altogether these lists contain 22,212 records, of which 21,726 are related to still missing or dead persons and 486 are no more relevant.

The 2005 ICRC list, as all previous editions of the list, includes data on surname, first name, father's name, sex, date and place of birth, and date and place of disappearance (reported as “place – municipality”).

It is noteworthy that even though ICRC obviously has improved their records throughout the years since the publication of the first list in 1996, empty or incomplete fields are still seen on the 2005 ICRC list. The most frequently incomplete items are date of birth (6,403 or 28.8 % incomplete of 22,212 records, but only 12 without year of birth), and date of disappearance (2,624 or 11.8 % incomplete, but only one record without year of disappearance). The other variables are recorded for almost everybody – but that does not necessarily mean that they are always correct. Errors are seen in the spelling of names of persons and places. Moreover, from comparing several lists we know that there are errors, although mostly small, in variables such as date of birth. Such errors are common all over the world in data collected through questionnaires in surveys, censuses and elsewhere. It is, therefore, not surprising that there are errors in variables concerning tragic events collected in a chaotic and traumatic situation.

**The PHR Ante-Mortem Database on Missing Persons from the Srebrenica Area, 1999**

PHR started their registration process somewhat later than ICRC, in July 1996. Their objective was to produce an ante-mortem database that could later be used in the identification of exhumed bodies. The process included, therefore, very detailed questions about the missing persons, such as special physical characteristics and clothing, which were often emotionally difficult for the informants to answer. At the same time, the informants were often far better prepared for the interview situation than when they reported their relatives as missing to ICRC, with many providing identification papers for the missing persons. The PHR Ante-Mortem Database<sup>25</sup> has been and is still used today in the identification process of Srebrenica victims in the framework of the Podrinje Identification Project in Tuzla, which was established and co-funded by both local Bosnian state authorities together with the ICMP in Bosnia and Herzegovina.

As the ICRC, the PHR collected data on surname, first name, father's name, sex, date and place of birth, date and place of disappearance. The PHR also registered the ethnicity of missing persons and many other data items.

Although the objectives and the procedures for the two registration activities of ICRC and PHR at first seem somewhat different, the type of cases registered were very similar. Several core data items registered by PHR and ICRC were identical including names (first, family and father's), sex, date and place of birth, date and place of disappearance, information about the informants, etc. Both the ICRC and PHR activities were done to trace missing persons. More than 95 % of the records were reported by close relatives. Registration of persons known to be dead was accepted in several cases. The PHR list has fewer cases than ICRC, most likely because PHR started interviewing informants later than ICRC and worked actively to register persons in only two areas (Tuzla and Sarajevo). On the other hand, PHR collected far more information than ICRC about the physical appearance and body detail of victims as PHR intended to use the collected data in the post-mortem identification of victims. Their data have served many years in supporting the identification of human remains exhumed from mass graves in the Srebrenica area. Even today the PHR ante-mortem database has a prominent position among the databases of missing persons from Srebrenica and is still in use.

The version of the PHR Ante-Mortem Database (AMDB) that we used was updated in July 1999 but we also received some additional information from PHR in May and October 1999, totalling 7,269 persons, about 80 percent being Srebrenica-related. The data problems with this source are very similar to those in the ICRC list of missing persons, as discussed above for the 2005 ICRC list for BH.

Following up on the work completed by PHR in 1999, in 2003 and 2004 ICRC organized a systematic collection of additional data on the missing in which about 200 additional questions were asked to each respondent in order to advance the identification of mortal remains from exhumations. An anti-mortem database was created based on the AMDB of PHR, starting from the list of missing, for about 4,100 missing persons and with 12,200 respondents.

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<sup>25</sup> The Physicians for Human Rights provided the OTP with 3 diskettes with their records of missing persons from Srebrenica, 1992 – 1995; (in Excel format). The disks have been registered with the Evidence Unit under the ERN D000-0141-D000-0141.

Until 21 June 2005, this database has helped to identify 940 body remains. The ICRC ante-mortem database for BH contained 15,592 respondent entries by 2007.<sup>26</sup>

### The ICRC List of Missing Persons from Srebrenica, 2008 Edition

The ICRC registrations of missing persons related to the fall of the Srebrenica enclave in July 1995 were provided to the OTP on 6 October 2008.<sup>27</sup> The data were shared with the OTP as a follow up to the visit of two ICRC representatives, Caroline Tissot, ICRC Regional Delegate for Missing Persons for the former Yugoslavia, and Bertrand Kern, ICRC Kosovo Working Group for Missing Persons, to ICTY in August 2008.

The data comprise individual records of missing persons by status (still missing, confirmed dead, confirmed alive, cancellation). The records are composed of the same items as those in the overall ICRC lists of missing for Bosnia and Herzegovina. In total, 7613 victims (including still missing) are listed. There is one cancellation and 26 persons are reported to have been found alive (Table 1).

**Table (3.1)1 Cases from the 2008 ICRC Srebrenica List by Category**

Category	Number of Cases	Percent
Still missing persons	3908	51.2%
Still missing with reports on death	246	3.2%
Solved dead	3459	45.3%
Solved alive	26	0.3%
Solved cancelled	1	0.0%
<b>Total, victims</b>	<b>7613</b>	<b>99.6%</b>
<b>Total</b>	<b>7640</b>	<b>100.0%</b>

The fraction of the closed cases-dead is about 45%, being the second largest category on the 2008 list. The largest category comprises the still missing persons with 54% of cases.

The quality of data in the 2008 list, although not perfect, is generally good and comparable with that of data from recent overall ICRC lists for Bosnia and Herzegovina (e.g. the 2005 ICRC list). All victim cases (7,613) on the 2008 ICRC list for Srebrenica include unique BAZ numbers,<sup>28</sup> practically all have the first, family and father's names available (father's name missing for one person), and all but one have the year of birth (YoB) reported. The complete date of birth (DoB) is, however, a problem: 2,580 records or 33.9% of the missing and dead lack day and month of birth but only 59 records (0.8%) miss the day. This makes the complete DoB one of the more incomplete items on the 2008 list. The same deficiency was seen in the 2005 ICRC list for Bosnia and Herzegovina.<sup>29</sup> Also the place of birth is largely incomplete, with 3,459 values or 45.4% of the missing reports unavailable.

<sup>26</sup> Source: Document "Bosnia and Herzegovina: Ten years on, thousands still missing" dated 21 Jun 2005 from ICRC website <http://www.icrc.org/Web/Eng/siteeng0.nsf/html/bihmissingfactsmay2005>, and ICRC Annual Report 2007.

<sup>27</sup> The ICRC Srebrenica list of 6 October 2008 (provided on a CD ROM) and accompanying cover letter are registered under the ERNs: D000-2585- D000-2585 (CD) and 0643-5354-0643-5354 (cover letter).

<sup>28</sup> Serial number of persons registered as missing in Bosnia and Herzegovina by ICRC.

<sup>29</sup> Reporting of sex is missing for 3,459 or 45.4% of the cases on the 2008 Srebrenica list, making this item even more deficient than the complete DoB. However, because the first name is available for all victims from the

We conclude that the data related to missing/death are relatively well reported. Date of missing/death is always complete on month and year. Day of missing/death is unavailable for 373 cases or 4.9% of the number of missing and dead. Place of missing/death (PoDis) is reported for all cases, and municipality of missing/death, which is an item derived from the PoDis, is given for all but four cases.

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2008 list, this deficiency can be easily “repaired” by “generating” the sex for each missing value on the basis of the sex distribution of first names obtained from the 1991 Census, or from directly linking of the ICRC records with the 1991 Census records and filling in the gaps by transferring data on sex from the Census to the ICRC records. The Demographic Unit OTP used both these procedures in repairing data on sex in ICRC lists, especially the 2005 ICRC list for Bosnia and Herzegovina, and this resulted in considerable improvement of these variables.

### ANNEX 3.2 ICMP LISTS OF DNA IDENTIFIED PERSONS FROM BOSNIA AND HERZEGOVINA

It has been one of the goals of this report to ascertain how many of the missing persons have been exhumed and identified so far. With regard to the exhumed bodies, this task appeared to be more complex than expected, however.<sup>30</sup> The number of identified persons also varies, depending on the identification method (DNA matching versus other methods of identification, such as presumptive identification cases based on ID documents, teeth, clothing, and other personal belongings of the exhumed victims). In the rest of this section we concentrate on DNA-based identification of Srebrenica victims by ICMP in Bosnia and Herzegovina, which is the most reliable source for assessment of the number of Srebrenica victims from exhumations.

A concise yet exhaustive overview of the exhumation and identification status in the former Yugoslavia, and in Srebrenica in particular, is not available from a single organization. For Srebrenica alone, which is by far the most advanced exhumations area, this information is scattered among several agencies. Information and documentation related to Srebrenica are available from the Cantonal Court in Tuzla, Podrinje Identification Project in Tuzla (PIP, a joint project of ICMP and local authorities in Bosnia), ICMP Identification Coordination Centre (ICC-ICMP) in Tuzla, ICMP Office for Bosnia in Sarajevo, and University Clinical Centre in Tuzla (UCC). In addition to these, the Institute for Missing Persons (IMP), funded by ICMP together with the Bosnian Government, and the BH State Commission for Tracing Missing Persons (CTMP), are in charge of much of the existing information about exhumations and identification of victims of the Bosnian armed conflicts. The IMP and CTMP are now in the process of creating a central database on exhumations and identifications. Unfortunately, this database does not yet exist in a usable electronic format.

Despite these difficulties we can conclude that of the about 22,300 missing persons reported in Bosnia, human remains of more than half have been exhumed and identified so far (more than 12,000).<sup>31</sup> A large part of these remains relate to Srebrenica, which is the best represented in the DNA matching and identification process. According to PIP, several thousands of body bags are still stored in Tuzla morgues. According to the ICMP estimate based on the

<sup>30</sup> One reason for this is that human remains of Srebrenica victims were in many cases moved between two or more graves sites. It is hard to estimate how many actual individuals these sets represent, based on the number of exhumed sets (or body bags). The study of re-associations of body parts has considerably advanced in last years by applying the DNA matching methodology to the exhumed bone samples. These new results need to be taken into account when producing an up-date on the Srebrenica-related sites and new estimates of the exhumed bodies, which is the main goal of a separate OTP project. Another reason for the difficulties in estimating precisely the number of exhumed persons is that not all Srebrenica sites have been exhumed yet.

<sup>31</sup> Until 19 December 2007, the FBH Commission for Tracing Missing Persons (also called the FBH Exhumations Commission) reported about 10,234 individuals exhumed and identified so far, of which 4,415 were identified persons exhumed from grave sites on the territory of Srebrenica and surrounding municipalities in the region of Eastern Bosnia and Herzegovina (graves containing 5 or more bodies). The RS Exhumations Commission reported in January 2004 that they were aware of 2,525 bodies exhumed and 54 re-exhumed, of which 911 had been identified (during 1995-98, but more identifications have probably been made since then). These two totals add up to 11,145 identified persons. In this period, the ICMP identified the exhumed human remains using the DNA matching and analysis. Until 31 December 2007 they had identified a total of 12,102 persons. It seems that overall at least 12,102 persons have been identified so far, out of 22,300 missing persons from Bosnia and Herzegovina, with a large group being related to the fall of Srebrenica (about 5,500 according to the November 2008 Srebrenica update of ICMP). The statistics discussed in this footnote were obtained by the Demographic Unit of OTP, based on all up-to-date submissions of relevant data by the FBH Exhumations Commission and by ICMP.

blood samples collected so far, the number of missing persons from Srebrenica is 8,100 (with a 95% confidence interval of 8,075-8,167).<sup>32</sup>

The most reliable source on the exhumed and identified persons is without doubt the ICMP.<sup>33</sup> We used data from ICMP to check the number of confirmed deaths, i.e. the identified, among the ICRC missing. The results of this exercise are discussed in Annex 6.6. Below we summarize the methodology of the ICMP operation.

The International Commission on Missing Persons (ICMP) believes that as a legacy of the 1992-1995 war there are an estimated 40,000 persons missing from the former Yugoslavia, of which about 22,300 are from Bosnia and Herzegovina. ICMP, which was created in 1996 at the G-7 summit in Lyon, France, assists families, regardless of their ethnic or religious origin, in determining the fate of their loved ones lost during this conflict.

Most of the missing family members are probably dead. The problem is how to identify them when, as in the case of those from Srebrenica, traditional forensic methods have only been able to identify five to eight percent of the exhumed bodies. To address this problem, the ICMP employs modern technology to ensure that the bodies can be identified quickly and accurately, by using DNA sampling and matching. Bone samples taken from dead bodies and blood samples taken from living relatives are matched. This provides a reliable basis for the identification of a missing person.

Each human being has a distinct DNA code. Humans inherit this distinct code from their parents, therefore their DNA will bear similarities with their relatives: The closer the relative, the closer the similarity. Laboratories analyse certain points of the genetic code to determine whether a body's DNA matches a living relative's. When a comparison is said to result in a match, it is considered very accurate (probability of 0.9999, or probability of a false match of 0.0001). In order to keep this probability high, blood samples are ideally taken from *three* relatives of every missing person. The ICMP will have to collect at least about 100,000 blood samples in order to identify all missing persons from the territory of the former Yugoslavia.

Once a match is made, the result is sent to a pathologist, who, if satisfied, will sign the death certificate. To ensure that the system works, bodies have to be recovered from graves and elsewhere and blood samples have to be taken of relatives. Family outreach centres for collecting blood samples have been established in Tuzla, Sarajevo, Mostar, Sanski Most and Banja Luka. There are also ICC-ICMP mobile teams that collect blood samples from all over BiH and other regions of the former Yugoslavia. Most of the staff have worked for a long time with the ICMP, and are well trained on how to approach people (relatives) and how to take blood samples.

The process of donating blood is entirely voluntary, and ensures complete confidentiality for the donor. Once either blood or bone samples have been taken, they are bar coded (done at the

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<sup>32</sup> The source for these numbers is ICMP; more exactly a statement by the ICMP Director of Forensic Science Program, Tom Parsons, dated 30 November 2007. ERN: 0614-8923-0614-8923.

<sup>33</sup> The review of the ICMP operation is based on materials from the ICMP website on the Internet and on interviews with staff members of the ICC-ICMP and PIP in Tuzla conducted during the missing of Ewa Tabeau (Demographic Unit, OTP) and Ronald Turnbull (Evidence Unit, OTP) to Bosnia in August 2004. Secondly, Ewa Tabeau has systematically been in touch with the ICMP head quarters in Sarajevo (through Andreas Kleiser, Tom Parsons, Irene O'Sullivan, and Samira Krehic; all of ICMP) regarding clarification of data issues in the subsequent Srebrenica updates used by the OTP in their work on this subject.

ICC-ICMP by computer) so that no one outside of the central office is aware of the details behind the sample. The DNA profile is separated out of the blood samples at the Tuzla University Clinical Centre.

Exhumations are the source for obtaining bone samples. Informants (e.g. witnesses or victims) report possible graves to the local Bosnian commission for missing persons, or to international organisations, such as SFOR, ICMP or ICTY. After a pre-visit to an exhumation site, with an assessment of the location and history of the site, the local court issues an exhumation warrant. It is at this point that the ICMP co-ordinates the proceedings. The digs are closely monitored by several agencies, to ensure that they are conducted legally and thoroughly. SFOR can provide information for the pre-visits and enhanced security for the site and surrounding area, if the dig is sensitive. The corpses go to one of the many morgues in the area of Sarajevo or Banja Luka, or in Tuzla for the Podrinje Identification Project (PIP).

PIP helps the DNA sampling project by extracting bone samples, as well as by carrying out more traditional forensic work, such as identifying bodies through old injuries and from clothing, which is also done at the Tuzla hospital. Small bone samples are taken, bar-coded for anonymity, and sent to a laboratory in Sarajevo, where the DNA is extracted.

The DNA profiles of the blood and bone samples are returned to the ICC-ICMP in Tuzla, where the matching is done. At the ICC-ICMP, all blood and bone samples are archived, all of them bar-coded, with names of donors being removed from the samples. The ICC-ICMP also maintains the ICMP databases, containing among others data about the following modules:

- Blood donors (i.e. relatives of the missing)
- DNA matches and reports on matches
- Closed cases (i.e. positive identification), with names and other available personal details.

All ICMP records are identified through unique bar codes. The bar codes are consistently used throughout all databases and serve to establish unique links between them. The most valuable databases are those of the blood donors (relatives of the missing), DNA matches and identified persons.

Importantly, from our visits to the PIP and ICC-ICMP in Tuzla in August 2004, several other visits to the ICMP head quarters in Sarajevo, and subsequent contacts by e-mail and telephone, we learned that the identification of Srebrenica victims has been done very thoroughly. Thus, records on the identified persons can be safely presented in court.

The ICMP has been providing the OTP with the so-called Srebrenica updates since September 2005. So far, seven such updates were received, the latest dated as of November 2008. The eight update was on its way to arrive by March 2009. Data items available from these updates are standardized and the same as in the overall "*ICMP Notice of DNA Reports*" (hereafter: "*ICMP Notice*"). The *Notice* is a document that covers the entire region of the former Yugoslavia, including Bosnia and Herzegovina. So far, three editions of the *ICMP Notice* have been received by the OTP, for the following periods:<sup>34</sup>

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<sup>34</sup> Printed copies of all three editions of the *ICMP Notice* are registered under the following ERNs:  
Nov 2001 - Mar 2005: ERN: R062-6078-R062-6562  
Nov 2001 - Apr 2006: ERN: R063-3275-R063-3923

- November 2001 - March 2005
- November 2001 – April 2006
- November 2001 – September 2007

Although, for our recent reports (including this one) we exclusively used the Srebrenica updates and not the general *ICMP Notice*, the format of data in the *ICMP Notice* is discussed below in order to explain what kind of data we have been working with.

Thereafter, there is a summary of the November 2008 Srebrenica update which we used for this report, including a discussion of possible duplicates and consistency of statistics obtained from the Srebrenica updates with official ICMP statistics released every year around 11 July.

### **The ICMP Document “Notice Of DNA Reports, 16 November 2001 - 30 September 2007”**

The ICMP document “Notice of DNA Reports, 16 November 2001 - 30 September 2007” is a list of several thousands entries.<sup>35</sup> The document contains three parts and covers exhumations related to the conflicts in Bosnia and Herzegovina (FBH and RS authorities) and Kosovo. Victims from exhumations in Croatia (or elsewhere by Croat authorities) are available from a separate table not listed here:

- Part I: Positive DNA Matching Reports, 12,102 records
- Part II: Negative DNA Matching Reports, 550 records
- Part III: Re-associations, 5,809 records

In all Parts, each record contains the following data items:

- Protocol Number, containing a numeric part and sometimes a suffix P (presumptive), R (re-association) or N (negative)
- Case Number, a combination of alphabetic and numeric characters with letters expressing site names and numbers relating to bone samples
- Site Location
- Site Coordinates
- Case Name, (surname, father’s name, first name); available only in Part I
- ICMP ID, a unique sequential number
- Jurisdiction
- Date of Submission to relevant authorities (dd/mm/yy)

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Nov 2001- Sep 2007: ERN R065-1247-R065-1861 (volume 1) and R065-1862-R065-2187 (volume 2)

Electronic copies of these editions are available from:

Nov 2001 – Mar 2005: ERN D000-1653-D000-1653 (Excel)

Nov 2001 – Apr 2006: D000-1931-D000-1931 (Excel)

Nov 2001- Sep 2007: ERN: D000-2216-D000-2216 (Excel)

<sup>35</sup> “The ICMP Notice of DNA Reports Submitted from November 2001 to September 2007” was originally published in December 2007. The book has been registered with the OTP Evidence Unit under ERN D000-2216-D000-2216, and the cover letter to it under R064-7118-R064-7118. The list is in Excel format. A printed version (dated 15 November 2007) is available as well under ERN: R065-1247-R065-1861 (volume 1) and R065-1862-R065-2187 (volume 2).

One important feature of this ICMP list is that the records in Part I contain full names, whereas the records in Parts II and III do not contain any names at all. Information about date of birth and place of birth is not included in any of these parts.

Protocol Number is the ID of a given DNA report. One report always covers one missing person. Protocol numbers are issued and assigned to missing persons automatically by the software used to analyse the DNA profiles. When a positive match is concluded between the DNA profile of a given blood sample and the DNA profile of a given bone sample, a new protocol number is issued. A positive DNA report can be also concluded for DNA matches of two or more different bone samples (i.e. re-associations); such a report receives a protocol number with suffix R (and the numeric part as in the main report). The numeric component of protocol numbers with suffix "R" is the same as that of the main DNA report for the identified missing person. Protocol numbers are also issued for requests for DNA analysis of presumptive identification cases (suffix P). Some of these cases are concluded as negative DNA matches but will still be issued protocol numbers (suffix N), even though no positive identification of a given missing person has taken place.

Note that if two protocol numbers have an identical numeric part, one of them has no suffix at all or has suffix P (presumptive), and the other one has suffix R (re-association), they are perfectly consistent. They relate to one and the same missing person for whom both a positive DNA match with a given blood sample(s) was found and also a positive DNA match of different bone parts.

Case Number is an ID of a given bone sample sent for analysis. A single Case Number can only relate to one missing person, but one and the same Case Number can be listed in the context of one or more Protocols.

ICMP ID is the ID of a given missing person. A single ICMP ID can be reported in the context of one or more cases (i.e. bone samples), but a single ICMP ID can only have a single related protocol number (i.e. the numeric part of it, suffixes disregarded).

Generally, one entry in the ICMP File represents a "Protocol-Person-Case" unit, i.e. the result of DNA matching as related to a given bone sample reported in a given DNA report for a given missing person. The total number of *unique* entries (unique "Protocol-Person-Cases"), that at the same are not duplicated on names and DoBs, can be seen as the total number of missing individuals for whom DNA reports have been issued so far.

### **The ICMP Srebrenica Update**

The main source used for this report is the ICMP Srebrenica update of 24 November 2008,<sup>36</sup> which contains 10,066 records of matched bone-sample profiles, including both main cases

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<sup>36</sup> In November 2008 the OTP received an update from the ICMP concerning DNA identifications of victims related to the fall of Srebrenica. The update is called "LIST OF DNA MATCHING REPORTS - (from November 2001 to November 2008) - Srebrenica Related Only" and is dated 24 November 2008. The original material has been registered under ERN D000-2588-D000-2588 and R065-5266-R065-5519. This data is referred to as the ICMP Srebrenica November 2008 update, or, simply the November 2008 ICMP update. For all other ICMP updates, see the list of sources at the end of this report.

and re-associations; 1,107 records are marked as new records since the previous (July 2008) update. 5,525 records are marked as "Main Case" in the original data (354 marked as new).

A number of minor issues, regarding reported details, were addressed by the Demographic Unit OTP to the ICMP and clarifications were received from ICMP. This included one duplicated main case, which resulted in one main case record being excluded. The corrected number of main cases is thus 5,524, and the corrected number of cases in total (main cases plus re-associations) is 10,065. An overview of all addressed issues and the clarification provided to the DU-OTP is attached in Annex 6.5.

The organization of the data file included in the November 2008 Srebrenica update and the information items included are largely the same as in the "ICMP Notice of DNA Reports ...." summarized above. Three items are additional in the Srebrenica file, namely date of birth (DoB), date of disappearance (DoDis), and place of disappearance (PoDis). The presence of DoB is fundamentally important for being able to matching this list with the 2005 OTP list of missing and dead persons from Srebrenica. According to ICMP, the DoB is not fully reliable, since the source for DoB are relatives who do not always remember all details correctly. DoDis is more a label than an actual data item. It is reported as 11 July 1995 for all Srebrenica identified and as such it flags the Srebrenica records but provides no added value to the actual date of disappearance. Finally, PoDis indicates whether a given person disappeared in the "Forest" or from Potočari.

The records in the ICMP Srebrenica File are a mixture of positive DNA reports and DNA-based re-associations. Negative reports (marked as "EXCLUSION" in some previous Srebrenica updates) are not any longer part of the November 2008 update. Next to the use of the two suffixes P and R with the Protocol IDs, there is an additional item "Type of Report" in the file which explicitly indicates whether a given report is a "main case" or "re-association". In addition to the records marked as main cases, a further 67 records were marked as re-associations and "main case in process" (in the "Comment" field). Exactly 31 out of the 67 cases represent different and unique DNA profiles and thus can be added to the already marked main cases of 5,524, as they concern DNA profiles that are additional compared to all other main cases. The number of identifications to be considered, is therefore 5,555 (5524+31).

The completeness of information in the November 2008 Srebrenica update is very good, only 432 of the sibling identifications (multiple name records) do not have DoB, DoDis and PoDs, see the discussion in Annex 6.5.

### **Number of Records in the ICMP Srebrenica File versus Publicly Announced Statistics of ICMP**

The number of main cases in the Srebrenica updates received by the OTP from ICMP is usually higher than the number of identified persons related to Srebrenica officially reported by the ICMP in the media. In July 2005, for example, the difference was 512 entries between our September 2005 Srebrenica update and the July 2005 figure of ICMP (ICMP News Archive of 10 July 2005), and we were wondering what this difference represented.

Having consulted the issue with ICMP,<sup>37</sup> it became clear that in official ICMP statements only the *actual closed cases* are included. Positive DNA reports *under review* and positive DNA reports *kept open* due to incompleteness of the bones of identified individuals or any other reasons are not included in the publicly announced figures. These types of reports have been included, however, in the ICMP Srebrenica files sent to the ICTY. Note that the ICMP number of closed cases is not necessarily the same as the number of closed cases declared (i.e. dead) by local courts.

The number of positive matches (and respectively closed cases) is changing constantly according to the progress in matching made daily by ICMP. Thus, the second source for the inconsistency is the time lag between subsequent Srebrenica updates and official ICMP statistics.

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<sup>37</sup> The inconsistency between official ICMP figures on Srebrenica victims and the number of unique main cases in the Srebrenica updates received at the OTP was explored in detail at the time of writing of our 2005 report on the identification of Srebrenica victims (dated 21 November 2005). Telephone meetings were carried out between Ewa Tabeau of the OTP and Andreas Kleiser and Tom Parsons of ICMP for discussing this and other related issues.

### ANNEX 3.3 THE 1991 POPULATION CENSUS FOR BOSNIA AND HERZEGOVINA<sup>38</sup>

In statistical practice, a Population Census is usually the largest and most complete source of information about the population in a country. The 1991 Population Census for Bosnia and Herzegovina covered the entire population of as of 31 March 1991. During the Census, information was collected about 4,4 million individuals. The information about individuals was obtained in face-to-face interviews, usually with a head of household, based on a census questionnaire designed in a uniform way for the whole country, i.e. the former Yugoslavia.

The 1991 Census file contains one record for each enumerated person. These records include information on a large number of variables, such as the municipality and settlement of residence, name and surname, father's name, household sequential number, personal ID number, date and place of birth, sex, occupation, ethnicity, mother tongue, religion, educational attainment, the number of children born (for women only), and many more.

The overall data quality is good, except for frequent errors in the persons' names. These errors are mostly consequences of poor optical scanning of the original forms (for example misreading V for U, as in MVSICĆ) and no subsequent checking and editing. To correct the scanning errors we employed several strategies.

#### Surname Corrections

- First, computer software was developed and applied to detect combinations of letters that are impossible in the B/C/S<sup>39</sup> language. The software used the B/C/S syntax in order to access the viability of combinations. The impossible combinations were corrected by eliminating miss-shaped (illogical) characters and inserting their most likely equivalents.
- Secondly, we developed correction tables to eliminate scanning mistakes from the names. The tables contained the actual names and their correct versions, which were used by a computer programme to produce suggestions regarding the corrections needed. These suggestions were controlled manually to discard any wrong corrections produced by the software. The accepted corrections were then applied to the data. Native speakers of the B/C/S language, who in addition were familiar with naming traditions in Bosnia and Herzegovina, undertook all these tasks.
- Furthermore, we also developed and applied computer software that utilised household information to correct surnames within households. The software checked the correctness and consistency of family names within the same household. Household members, whose family name was different from the (correct) name of others in this particular

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<sup>38</sup> The Demographic Unit acquired two versions of the 1991 Population Census. They are referred to as the "Old" and the "New" version. In 1997, Helge Brunborg (HBr), then the OTP demographer, approached the Federal Institute of Statistics in Sarajevo to obtain a copy of the individual-level census data for use in the ICTY cases. He was given what we call the "Old" version of the Census. As it turned out, these files did not include any information on ethnicity, and other socio-economic variables, which greatly reduced the usefulness of the files for investigative purposes. Then, HBr approached the Federal Institute of Statistics again and obtained new files that included information on socio-economic data items, including ethnicity. Both versions have been registered with the Evidence Unit under the following ERNs: D000-0070-D000-0070: The 1991 Population Census for BH - all "OLD" Census files (ca. 4,333M records), and D000-0079-D000-0079: The 1991 population census for BH - all "NEW" census files (ca. 4,377M records).

<sup>39</sup> Bosnian, Croatian, Serbian

household, received the correct name. For example, if MUSIC<sup>Ć</sup> was the correct surname in a household, the person enumerated as part of this household under the name MVSIC<sup>Ć</sup> would become MUSIC<sup>Ć</sup>.

Surnames correction resulted in improving at least 500,000 names in the Census, which related to several times more persons. This contributed greatly to increasing the probability of a positive match between a list of, say, missing persons, and the 1991 Census.

### **First Name Corrections**

The first names in the Census were corrected manually by native BCS speakers. They suggested corrections to all first names that appeared in the Census more than once with wrong spelling. These suggestions were also based on information on the sex distribution of the name, i.e. the sex distribution of the persons who bear that name in the Census files.

This helped us to distinguish between correct female names and wrong male names and vice versa. For instance, a name can be correct when a female is bearing it, but incorrect when a male bearing it.

The table produced by the native speaker, was then split into two correction tables: one for men and one for women. For a suggestion to be included in the correction tables, at least 95% of the persons with this name had to be of the corresponding sex. For example, to create the correction table for men, the records in the frequency table for first names were taken that had a suggestion field not equal to null and where men comprised at least 95% of the bearers of the name.

These correction tables were then applied to the Census data, again correcting several hundred thousands of names.

### **Father's Name Corrections**

The results already suggested for first names were also applied to fathers' names. The correction table for males was applied to the Census data and corrected more than 300,000 names. The reason for this excellent result is that many father's names are in the genitive case and end in A. This is also one type of error that frequently occurs in first names.

A second data quality problem is that for a number of records the unique 13-digit personal ID number (*jedinstveni matični broj*, JMB, or called as well *jedinstveni matični broj građana* JMBG), introduced in the former Yugoslavia in 1981, is only partly available. The JMBG consists of date of birth (DOB, 7 digits), region of birth or region of registration for those born before 1981 when the JMBG was introduced (2 digits), a sex-specific sequential number (3 digits), and a check digit (1 digit). For our needs the date of birth is essential, other components of the JMBG being of less value. The date of birth is missing only for a few percent of the 1991 Census population records.

Another deficiency of the Census data relates to completeness of data items; as a matter of fact several data items have missing values such as e.g. DoB or MB (MB includes all remaining digits in JMBG other than DoB). Especially important is the high number of missing values in the MB field. This, however, can be improved by integrating two fields in which the MB is reported in the original Census data; one field contains MB only and the second field

the entire JMBG. Many records miss MB in either field but not in both. By merging the two fields, one reduces the number of records with missing MB.

As DoB is also available from two separate fields in the Census files (the proper DoB field and the JMBG field) the above-mentioned procedure could be also applied to improve the availability of DoB.

Several other procedures were applied to improve the quality of the Census data, including checks of the reported place of residence (PoR) as compared with the enumeration area, and checks of the municipality of residence.

In our opinion, the limited data-related problems do not discredit the 1991 Census as a powerful source of information about the pre-conflict population in Bosnia and Herzegovina.

The Census includes a variable on the ethnicity of the enumerated individuals. This allows us to study the population in the context of the 1991 ethnicity for all those individuals whose records have been linked between the two data sources (in the 1991 Census and ICRC list). The question on ethnicity in the census questionnaire was open-ended, meaning that individuals could declare themselves as belonging to any ethnicity as defined by themselves. The majority of the 1991 census population declared themselves as belonging to one of the three major ethnic groups in Bosnia and Herzegovina: Serbs, Muslims, or Croats. Other ethnic declarations in the 1991 Census included Yugoslavs (relatively frequently), combinations of ethnicities, such as "Serb-Croat" or "Muslim-Serb" (infrequently), and other national (e.g. Vlach or Gypsies) or foreign (e.g. Hungarians) ethnicities (less frequently). Those who called themselves Yugoslavs, or by names combining two ethnicities, were often children from mixed marriages. Many Yugoslavs felt that they did not belong to any particular ethnic group and disliked ethnic categorisation.

For this report, four ethnic groups were distinguished on the basis of ethnicity declarations in the 1991 Census: Serbs, Muslims, Croats, and Others. The last group, Others, is a residual category and covers persons who declared themselves as Yugoslavs, combinations of ethnic groups, and other national or foreign ethnic groups.

### ANNEX 3.4 THE 1997-98 AND 2000 VOTERS REGISTERS FOR BOSNIA AND HERZEGOVINA<sup>40</sup>

The Voters Registers discussed in this section were established under the auspices of the OSCE, i.e. the Organization for Security and Co-operation in Europe, thus are referred to here as the OSCE Voters Registers. The basis for establishing these registers was the 1991 Population Census that after the conflict was the latest available complete source of information about the population of Bosnia and Herzegovina, in particular about the eligible voters. Note, however, that Voters Registers cannot be used as a source on the overall population size in 1997, 1998, or 2000. In these years the population of Bosnia was certainly larger than the approximately 2.7 million voters included in the Registers, probably around 3.5 or more million. The reasons for this are that many people did not register to vote and that persons below 18 years of age are not eligible to vote. Nevertheless, these registers can be seen as large samples of the population that survived the 1992-95 conflict in Bosnia and Herzegovina.

We merged the two Voters Registers of 1997 and 1998 into one (1997-98). The overlap of these two lists is large. Only about 150,000 records are new in 1998, all other records reported also covered in the 1997 register. In most cases the 1998 with records appeared to cover municipalities where the registration was limited in 1997. The total size of the merged 1997-98 Voters Register is 2,674,506 records, mainly covering the year 1997. The size of the 2000 Voters Register is 2,296,308 records.

The Voters Registers contain information about surname, first name, JMBG, DoB, municipality of residence in 1991 and/or 1996, municipality of registering to vote (as part of the code of the registration centre), and the municipality they wanted to vote for. Note that the two location items express two different aspects of voters registration. The first one, i.e. the municipality of registration to vote, indicated where they actually lived at the time of elections. The second one, i.e. the municipality they wanted to vote for, expressed the voters' intentions as to where they wanted to settle in the future.

The procedures for voters registration are based on the Dayton Peace Accords (Annex III, Article IV):

*"1. Voters. Any citizen of Bosnia and Herzegovina aged 18 or older whose name appears on the 1991 Census for Bosnia and Herzegovina shall be eligible, in accordance with electoral rules and regulations, to vote. A citizen who no longer lives in the municipality in which he or she resided in 1991, shall, as a general rule, be expected to vote, in person or by absentee ballot, in that municipality, provided that the person is determined to have been registered in*

<sup>40</sup> Michael Yard of the Organization for Security and Co-operation in Europe (OSCE) submitted the 1997 Voters Register on a CD to the OTP on 12<sup>th</sup> November 1997. The CD has the ERN-range D000-0072-D000-0072. The CD ROM includes information on approximately 2.6 millions persons who registered for the local elections in Bosnia and Herzegovina in 1997.

The 1998 version of the Voters Register is available under ERN D000-0103-D000-0103. The CD ROM comprises 2,680,648 individual records of information on the persons who registered to vote in the elections in BiH in 1998. This data set was also provided to the OTP by OSCE in Sarajevo at request of the OTP demographer Helge Brunborg. The two databases were named Voters97 and Voters98.

Finally, the 2000 OSCE Voters Register for the general elections in BH was collected by Ewa Tabeau. It was provided on a CD-ROM containing the Municipal Lists of Voters (Final Voters Register) from the November 2000 General Elections in BH. The disk contains files with alphabetical lists of voters by municipality. Each mu-

*that municipality as confirmed by the local election commission and the Provisional Election Commission. Such a citizen may, however, apply to the Commission to cast his or her ballot elsewhere. The exercise of a refugee's right to vote shall be interpreted as his/her confirmation of his or her intention to return to Bosnia and Herzegovina. By Election Day, the return of refugees should already be underway, thus allowing many to participate in person in elections in Bosnia and Herzegovina. The Commission may provide in the electoral rules and regulations for citizens not listed in the 1991 Census to vote."*

A second observation from Article IV, Annex III of the Dayton Accords relates to the use of the 1991 Census records in the post-war elections in Bosnia and Herzegovina. In accordance with the above-mentioned guidelines, it was of crucial importance for every voter to have been enumerated in the 1991 Population Census. Therefore, the 1991 Census records were referred to at each voter registration. In order to simplify the checks, the OSCE had two different versions of the 1991 Census at every registration office throughout the entire country of Bosnia and Herzegovina.<sup>41</sup>

- 1) An OSCE computer database and program. This version allowed the user to look up a person by name, national identification number (JMBG), 1991 street address, birth date, or a combination of these variables. The Census also had the father's name listed. Both international and local registration staff could easily use this program as it had both an English and a Serbo-Croatian (in Cyrillic) version of the Bosnian language.
- 2) Hard copies. Each voter registration center also had a set of approximately twenty printed volumes of the 1991 Census for the entire country. This hard copy was arranged by city and year of birth. It largely duplicated the information contained in the electronic version, although we are not sure whether it included street address.

As a matter of fact, the 1991 Census records were used by the OSCE during the 1997 elections in order to declare whether or not a given person is eligible to vote and register. In this way, the first matching of the 1991 Census and 1997 voter records was completed by the staff of the OSCE registration offices. This fact has a fundamental importance for every next matching of the Census records with other sources, including the Voters Registers of 1997, 1998 and 2000 and the 2000 records of internally displaced and refugees from Bosnia and Herzegovina (discussed in Annex 3.5 of this report under the "DDPR-2000" database).

Being part of the 1991 Census records, the Voters Registers have some of the same deficiencies as those discussed for the Census (e.g. spelling mistakes, incomplete or missing JMBG, etc.). These deficiencies were corrected in the same way as for the Census.

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municipal list is saved in a separate \*.pdf file. Additionally, an index of municipalities and settlements as well as an index of polling stations were provided.

<sup>41</sup> The information about how the 1991 Census was used by the OSCE in the 1997 elections was provided to the OTP during meetings held between the staff of OTP and OSCE in Sarajevo in August 1997, and was recently confirmed in a letter from the OSCE Mission in Sarajevo to the ICTY Prosecutor in November 2008. (ERN of the OSCE letter of 19 November 2008: 0424-9267-0424-9267. The OTP letter of 13 November 2008 asking for checking out this issue has the ERN: 0644-6964-0644-6964).

### **ANNEX 3.5 OFFICIAL BH REGISTRATION OF INTERNALLY DISPLACED PERSONS AND REFUGEES, DDPR-2000<sup>42</sup>**

The register (or database) of Displaced Persons and Refugees (DDPR) is an official source of information of the government of Bosnia and Herzegovina and UNHCR. It originated from records of population displacement that were taken by local (municipal) authorities already during the 1992-95 war. The authorities were registering displaced persons already in the early stages of the war, as their numbers were very high and had reached several millions at the end of 1995. With respect to population displacement, the situation in Bosnia and Herzegovina could be clearly seen as a serious human emergency situation.

In the early stages of collecting this information the data were not computerized and entered into a central database. After the war ended the necessity for a centralized registration system was recognized by the BH government and the international community, in particular UNHCR, largely because of the Dayton Peace Accords in which the importance of the returning and re-settlement of displaced persons was given a prominent place. The development of the central database was co-ordinated by UNHCR, while municipal authorities provided the input data for the database. The first sets of data that populated the DDPR needed to be validated, mainly because displacement is a dynamic process and the status of those registered in the system systematically changes. Secondly, some war-time records might have been invalid as the applicants sometimes registered entire families, including persons that later were reported missing or dead.

In 2000 UNHCR and the BH government conducted a country-wide re-registration of all internally displaced persons and refugees residing on the territory of Bosnia and Herzegovina. The database that then was established covers the entire country. The 2000 version, made available to the Demographic Unit, reports persons who in the year 2000 were still registered as displaced from their pre-war homes and in need of a durable solution. A copy of the DDPR was acquired from the State Ministry of Human Rights and Refugees (MHRR) in Sarajevo in mid August, 2002.

The database contains information for 583,816 persons. Among them it also includes about 60,000 persons born after 1 April 1991, who can not be matched with the 1991 Census. For about 1/3 of the persons reported in DDPR the available information is very complete (this is the third that actually made the application, 191,954 persons). Items such as names, date and place of birth, place of residence before the conflict, marital status and ethnicity are all available. For the remaining 2/3 (i.e. families of the applicants, 391,862 persons), the information is more limited and includes only names, date of birth, sex, kinship with applicant, and JMB. There is no information about place of birth or ethnicity of the family members. The only additional information is the work status and occupation of the spouse of the applicant, and the

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<sup>42</sup> ERN D000-2286-D000-2286: The Database for Displaced Persons and Refugees (hereafter DDPR) was acquired by the DU-OTP in August 2002 from the Ministry of Human Rights and Refugees (hereafter MHRR) in Sarajevo, with approval from UNHCR. It contains registration of persons that applied for the status of internally displaced persons or refugees, information about their current whereabouts, socio-economic status, and the status of their application. Main tables: tblAP (data on Applicants) and tblFM (data on family members of the Applicant's families). The two combined give a total of 583,816 cases.

implied information about current residence. In this situation, assumptions or linked information are needed to process the data (e.g. by assuming the same ethnicity as the applicant for all the other family members).

The overall quality of the data seems quite good, although there are some problems, such as with the personal identification numbers (JMBGs), which are incomplete or invalid in about 1/4 of all cases.

### ANNEX 3.6 ABiH MILITARY RECORDS OF DEAD AND MISSING SOLDIERS AND OTHER MILITARY PERSONNEL<sup>43</sup>

The 1992-95 military records of fallen soldiers and other personnel associated with the BH Government Army (ABiH) were actually not used in the compilation of any OTP list of Srebrenica victims, including this report. The main reason for not using them was that the circumstances and place of death are unavailable from this source; the missing persons, who have been central in all OTP reports on Srebrenica victims, are reported in the ABiH records as "missing" without giving the place of disappearance. Secondly, we also think that the reliability of the military records is generally not very high, as discussed in more detail in Annex 6 on Matching Results. Despite these reservations we studied the ABiH records in order to identify the overlap between the OTP list of Srebrenica missing persons, especially the 2005 list, to monitor the *possible* ABiH army members in the OTP list. The monitoring of ABiH records in the OTP Srebrenica missing list cannot be seen as an attempt to distinguish between combatant and non-combatant victims of the fall of Srebrenica.

The Demographic Unit of OTP (DU-OTP) acquired this data source in 2001 from the Ministry of Defence of the Federation of Bosnia and Herzegovina. The ABiH list was compiled for the purpose of post-mortem pensions for the families of the deceased. Categories of individuals reported include army members, non-army personnel of the FBH Ministry of Defence, police members, and the staff of production units associated with the army. The coverage of the ABiH list was initially believed to be complete, i.e. that the 28,027 records were exhaustive and covered the entire country. However, the records from the Tuzla district did not add up to the overall total reported in the original source.<sup>44</sup> As a matter of fact, whereas the overall Tuzla total was given as 7,856 records, a second total obtained for Tuzla from adding up sub-totals for a number of municipalities falling within the Tuzla district became 13,558 records. The difference was about 5,700 records. We used all 13,558 Tuzla district records in cross-referencing these records with the 2005 OTP list.

All records were initially believed to be war-related deaths but later we realized that a few natural deaths and many missing persons were included as well.

The original ABiH files contain information on a person's name, date and municipality of birth, full *matični broj*, municipality of residence, military evidence, district and type of a unit, as well as date and general cause of death, with e.g. "missing" or "killed" or "dead".. No place of death/missing is available and no circumstances of death are reported.<sup>45</sup> The Demographic

<sup>43</sup> Seven diskettes with original MS Excel spreadsheets containing lists of the (government-controlled, i.e. mainly Bosniak) Army of Bosnia and Herzegovina (*Armija Bosne i Hercegovine*, hereafter: ABiH) soldiers and other military personnel killed during the 1992-1995 conflict were obtained by Ewa Tabeau from the Federal Ministry of Defence during a mission to Sarajevo on 10 May 2001. The floppies were registered under ERN D000-0613-D000-0619. They contained data for the following sector of the BH military evidence: Tuzla, Mostar, Bihac, Travnik, Sarajevo, Gorazde, and Zenica.

<sup>44</sup> The Tuzla district comprised the following municipalities: Banovici, Celic, Dobojski, Gracanica, Gradacac, Kalesja, Kladanj, Lukavac, Sapna, Srebrenik, Teocak, Tuzla, and Zivnice. For the Tuzla district, (and exclusively for this district), data was reported twice in the original file: one time as a list and an overall total for the entire district, and secondly, each municipality had its own datasheet with a list and an associated total. The discrepancy between the records given for the entire district and the result of merging all lists for the component municipalities was not discovered immediately.

<sup>45</sup> Among the 28,027 initial records, some 3,049 had an unknown cause of death, 110 were accidents, 372 were natural deaths, 60 suicide cases, and the rest 21,909 included missing, dead, killed, or injured persons.

Unit merged the original data from an Excel spreadsheet and converted it into MS Access format. During the initial process of data preparation, 258 duplicates were deleted, leaving 28,027 unique records of the original data set. Additional 106 duplicates were excluded from the 13,558 Tuzla district records.

The major problem with this data source is related to the inconsistencies with other related sources, discovered through cross-referencing. This observation was made when ABiH records were compared with e.g. the FIS or RS Mortality Databases discussed in the next section of this report, or with the ICRC lists of missing persons. Details of these inconsistencies and the way we dealt with them are discussed in Annex 6.4.

### ANNEX 3.7 AUXILIARY SOURCES ON SURVIVORS: THE 1997 LISTS OF “SREBRENICA REFUGEES”<sup>46</sup>

Records of “Srebrenica refugees” were collected at the early stages of the Srebrenica investigation by a former OTP staff member. At that stage, it was still unclear what would be the scale of victimization of the fall of Srebrenica. Also, one of the initial plans at that time was to cross-reference the sources on survivors with the 1991 Population Census records and in this way to learn about the casualties, i.e. a backwards reconstruction of the fall of Srebrenica. This approach was never applied due to the lack of reliable and complete data on survivors related to Srebrenica (mainly internally displaced persons and refugees).

In February 1997 the OTP obtained four disks with data on “Srebrenica refugees” from the authorities in Bosnia and Herzegovina.<sup>47</sup> The data were assessed, briefly analyzed and never used again (until the present) due to their questionable quality and unclear coverage. The decision of not using the data was related to their deficiencies in the first place, and to the fact that it was impossible to reliably link these records to the 1991 Census. The data were found to be useless for the cross-referencing exercise meant as the reconstruction of the 1995 Srebrenica events.

Nevertheless, the records of “Srebrenica refugees” could have been used in the search for survivors among those reported as missing to the ICRC. However, in the course of time, better sources became available to the Demographic Unit, including three large Voters Registers (1997, 1998 and 2000) and the DDPR-2000, i.e. official records of IDPs and refugees in Bosnia and Herzegovina, which were collected in the well-known re-registration survey of UNHCR. The survey was meant to review the status of all applicants (and their families) who had already submitted (or planned to submit) requests for being recognised as an IDP or a refugee by the authorities dealing with these issues. Persons that at the time of the re-registration were known to be dead or missing, who left Bosnia and Herzegovina to other countries, or who returned to their pre-war places of residence, were removed from the central database. The valid 1997 data in “Srebrenica refugees” were most likely absorbed into the DDPR, thus we attempted to link these data with the DDPR (about 584,000 records).

Nevertheless, for the 2009 Srebrenica report we decided to separately cross-reference the data on “Srebrenica refugees” with the OTP list of Srebrenica missing in order to double check that

<sup>46</sup> The term “refugee” refers to a person who has left his/her original place of residence and moved abroad, or in the case of an internally displaced person (IDP), moved to a different place of residence within the same country. Moreover, according to the UNHCR definition of a refugee/IDP, the person did so because of fear of being persecuted due to racial, religious, political or other reasons. The 1997 records of “Srebrenica refugees” do in fact represent internally displaced persons as all individuals reportedly stayed in Bosnia and Herzegovina. With regard to their legal status, it is highly uncertain whether or not they were granted status of an IDP/refugee as this information is unavailable in the disks.

Throughout this report we use the term “Srebrenica refugee” to describe the IDP records from the 4 disks and not to accentuate their legal status.

<sup>47</sup> Data on “Srebrenica Refugees” are available on four disks:

Disk A: D000-2101 and 0618-4132-0618-4282

Disk B: D000-2102 and 0618-4283-0618-4374

Disk C: D000-2103 and 0618-4375-0618-4488

Disk D: D000-2104; contains a database; could not be stamped

The disks were provided as an attachment to a letter (ERN 0638-0417-0638-0423) from the BH Federal Ministry of Social Affairs, Displaced Persons and Refugees to the Office of the Prime Minister of the Federation of Bosnia and Herzegovina; dated 2 February 1997. The letter provides a description of the 1997 data on displaced persons from Srebrenica; the data and the letter were submitted to the OTP by the same Ministry.

our earlier approaches were all correct and that we did not miss any significant number of "Srebrenica refugees".

The four disks contain lists of displaced persons, mostly from Srebrenica:

- CD 1 (D000-2101-D000-2101), containing 4,816 names;
- CD 2 (D000-2102-D000-2102), containing 9,259 names;
- CD 3 (D000-2103-D000-2103), containing 6,116 names; and
- CD 4 (D000-2104-D000-2104), containing 28,342 names.

CDs 1 through 3 (in total 20,191 records) were compiled by the BH Ministry of Social Affairs, Displaced Persons and Refugees in Sarajevo. The data were extracted from the central database on IDPs and refugees in Bosnia and Herzegovina, i.e. the predecessor of the DDPR, by including all cases of displacement/refuge at any given moment of time during the 1992-95 armed conflicts. Consequently, cases of displacement before 1995 were also included (about 5,153 out of 20,191; 25.5 percent). The 1995 displacement amounted to 15,038 records, including the 251 cases of refugees from Žepa. For all records, the data comprise names (first, father's and family), date of birth or at least year of birth, the year the person fled, and the municipality the person resided in at the time registration. There is some degree of duplication within this data set (about 2 to 5 percent).

First name and surname are all available, with father's name missing for 21 cases. DoB is reported for 19,946 cases but day and month are missing for 2,770 cases ("0101" or "101" code). Year of birth is available for almost all (20,172, with 21 missing). All in all, the data quality does not look bad, but only a few data items are included, which makes it difficult to match this dataset with the 1991 Population Census (about 60% can be matched but without a high degree of confidence), as is the case with matching of these data with data from other sources on survivors.

CD4 contains data on IDPs and refugees registered by local authorities in Tuzla-Podrinje Canton. This data set is considerably different from the first in that it does not include the *year of displacement*. It is very likely that all IDPs and refugees who ever reported to the authorities are included (i.e. the entire 1992-95 period is covered); possibly with approximately 25.5% of the cases (as in CDs 1-3) from before 1995. Data items included are the following: names (first, father's and family), year of birth, municipality of temporary residence, and the current address and municipality of residence. The term "temporary" might denote the "last before displacement". "Current" refers to the moment of registration. Records are duplicated at a lower degree as within the first data set (2 percent).

The records are relatively complete in terms of missing values but the coverage is not entirely clear. A quick check tells us that about 11,680 cases were of persons with "temporary residence" in Srebrenica; the remaining largest groups were from Bratunac (2,833), Vlasenica (2,187), Zvornik (488) and Han Pijesak (30). How many of these persons lived in these areas before the war (i.e. at the 1991 Census) is unclear. This again creates difficulties for matching the records at a reasonable level of confidence with the 1991 Population Census (about 32% matched), or with any source on survivors that we have at our disposal at the Demographic Unit.

The two data sets show a considerable overlap, of about 10,000 records. Together, the two combined data sets comprise about 38,000 *different* records (i.e. non-overlapping but with

some degree of “within-each-set” duplication). Of those, about 75% might be the 1995 “Srebrenica refugees”, assuming that the pre- and post July 1995 “refugees” are equally represented in the overlap.

Despite the above-mentioned deficiencies we matched the records of “Srebrenica Refugees” with the 2005 OTP list of Srebrenica missing persons and with the ICMP July 2008 up-date on the DNA identifications, as discussed in Annex 6.3.

### ANNEX 3.8 SOURCES NOT USED: RS AND FBIH DEM2 DATABASES AND THE BOSNIAN BOOK OF DEAD

The Demographic Unit of OTP has frequently been criticised for not using three major sources on victims of the 1992-95 war in Bosnia and Herzegovina. The three sources are summarized below. The major reason for not using them on Srebrenica is that they do not cover new and additional information on missing persons related to the fall of Srebrenica. RS and FIS DEM2 databases cover known deaths for which death certificates or other forms of death declaration are available. The BBD uses ICRC records as the first and most essential source on Srebrenica victims. Noteworthy, even though the issue is not discussed in our Srebrenica reports, we systematically cross-reference the OTP records of Srebrenica missing or survivors with sources on known deaths as this improves our knowledge and understanding of each single case.

In relation to the sources listed below, and especially with regard to the RS DEM2 database and BBD, we have occasionally noticed during our searches that a small number of Srebrenica missing are inconsistently reported across the sources. These are cases registered soon after the end of war. Their registration is often based on court declarations (thus witness statements) and not on death certification. Such cases are occasionally inconsistent with information in the ICRC lists and this has led to criticism of ICRC that their data is unreliable and inferior to the RS data.

We believe that all such claims of inconsistencies can be resolved by cross-referencing the OTP lists of missing with the ICMP records of DNA identifications. Searches in the 1991 Census are the best way to increase the reliability of the matching between the ICRC and the ICMP data.

**FIS (DEM2) Mortality Database, 1992-1995**,<sup>48</sup> was established by the Federal Institute for Statistics (FIS) in Sarajevo through the centralisation and computerisation of individual death records available from the vital events registration system in the part of the territory of Bosnia and Herzegovina controlled by the Bosnian government during the war. The collected forms were stored in local offices until the Federal Statistical Office decided in late 2001 to engage in the processing of this information. This decision was made in response to a request made by the OTP, and approved by the Bosnian government. In the first half of 2002 all available forms were computerised. The OTP acquired the FIS database in mid 2002 from the Federal Institute for Statistics in Sarajevo. Its coverage is believed to be large, encompassing mainly FBH territory, containing 74,539 death records, of which about 25,000 are marked as war-related.

**RS Mortality Database, 1992-95**,<sup>49</sup> was finalized in June 2005. It contains approximately 66,000 individual records of deaths that occurred on the territory of Republika Srpska from January 1992 to December 1995. The records include personal information items (JMBG, names, DoB, PoB etc.) and information about the death (DoD, PoD, CoD etc.)<sup>50</sup>. For about 43,000 records death certificates are available. Causes of death are coded according to the In-

<sup>48</sup> FIS (DEM2) Mortality Database, 1992-1995 has the ERN D000-2018-D000-2018.

<sup>49</sup> RS (DEM2) Mortality Database has the ERN D000-1704-D000-1704

<sup>50</sup> DoD stands for date of death, PoD place of death, and CoD cause of death.

ternational Classification of Diseases and External Conditions Leading to Death (10<sup>th</sup> revision). War-related deaths (at least 11,000) and natural and accidental deaths (maximum 55,000) are included. Both civilians and military victims are covered.

The database was developed on OTP request by the Statistical Office of Republika Srpska (RS SO). The director of RS SO, Slavko Sobot, was project leader in Banja Luka. The database is the largest and most professional source on war-time deaths of Bosnian Serbs.

**The Bosnian Book of Dead, 1992-95**,<sup>51</sup> is the outcome of the project “Population Losses, 1992-95”, conducted by the Research and Documentation Centre (RDC) in Sarajevo. Mirsad Tokača is the president of RDC and BBD project leader. The objective of this project was to establish a country-wide database covering the victims of the Bosnian war. Sources used for the BBD include witness statements<sup>52</sup>, existing electronic lists, lists from books, reports, and press articles, names from grave tombs, newspaper memorials, other newspapers records (single or lists), government sources and microfilms. About 8,000 witnesses have testified so far and more than 400 different sources have been used.

According to Tokača, the BBD project started in October 2003 taking the MAG (Muslims Against Genocide) mortality database and other computerized lists of victims as a starting point. In April 2004 the BBD contained 39,527 active (valid) records, and in August 2004 86,369 such records, i.e. checked unique records. The overall number of entries in the database was much higher and equalled 223,162 as of August 2004. In the latest 2008 version, the overall total of cases is 250,098 and active cases 97,207.<sup>53</sup> A part of these records was not marked as active due to various shortcomings (e.g. duplicates), while another part consisted of records not yet checked. Thus, the overall total might still increase but not significantly. The project has six regional components distinguished according to the main conflicts during the Bosnian war: Eastern Bosnia, Bosanska Krajina, North Eastern Bosnia, Sarajevo - Central Bosnia, Herzegovina, and the remainder of Bosnia. The RDC produces statistics according the above-mentioned regions. However, victim statistics can be obtained for any municipality and time period between 1992 and 1995. For the fall of Srebrenica, the BBD records are based mainly but not exclusively on ICRC data. The BBD number of Srebrenica victims is higher than that of OTP as known deaths *and* missing persons were included.<sup>54</sup>

In 2007, Ewa Tabeau together with two external experts, Patrick Ball and Philip Verwimp, prepared an assessment report of the 2006 version of BBD. The evaluation was made at the invitation of BBD donors, primarily the embassies of Norway and Switzerland. The report was

<sup>51</sup> Bosnian Book of Dead, 1992-95 has the ERN D000-2322-D000-2322

<sup>52</sup> Eye witness statements were collected not necessarily according to investigative procedures. The Commission does not pretend to use the same methods as legal institutions. Records were accepted only from eye witnesses, relatives, neighbours, and close friends.

<sup>53</sup> Active cases, as opposed to all cases, are not duplicated and selected as valid.

<sup>54</sup> The following table was produced by an OTP intern, Nadira Herenda, a trained mathematician and a RDC researcher, who in early 2008 compared the 2005 OTP list of Srebrenica missing with the BBD records on Srebrenica. A large part of the difference was related to soldiers and civilians whose deaths were *known* and reported by families to BBD interviewers.

Database	OTP number	Bosnian Book of Dead records	ICRC number
Srebrenica	7661	7447	9376
Sarajevo	11707	7687	16878

publicly presented in Sarajevo in June 2007 and is available at several Internet sites.<sup>55</sup> The overall conclusion was that even though several deficiencies were identified, generally the BBD is a useful and meaningful database, especially for historical purposes. It should be used with caution, however, for single events, short time periods and small areas.

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<sup>55</sup> See for example: [http://www.hicn.org/research\\_design/rdn5.pdf](http://www.hicn.org/research_design/rdn5.pdf)

## ANNEX 4. METHODOLOGY

In this report we present *counts* of missing and identified dead persons related to the fall of Srebrenica in July 1995. We also document these counts by attaching separately lists of missing and identified persons. The lists contain a lot of detailed information about individuals including their names, date of birth, date and place of disappearance and several items describing the DNA identification of the victims, with, among other items, the names of exhumation sites where the remains were found. We further use these lists to produce basic demographic statistics on the victims (e.g. their sex and age structure), timing and location of their disappearance. We can also show their distribution by exhumation site, and present measures on the process of disappearance, such as probabilities of disappearing for Muslim men from Srebrenica. The methodology is very simple but extremely powerful. Its significance is the consequence of using reliable sources in obtaining the counts and of benefiting from matching and merging of various data sources. When we do the matching and merging of different data sources we always pay particular attention to the identification and elimination of duplicates.<sup>56</sup>

The matching methodology used for this report was the same as for the 2000 and all following OTP lists, especially the 2005 report on Srebrenica missing and the 2008 report on Srebrenica identified. The matching principles are discussed in Annex 5 and the detailed results of matching in Annex 6. Generally, we have matched records on individuals reported missing during or around the fall of Srebrenica in July 1995 with data on post-war survivors, and on DNA identifications of Srebrenica victims. In addition to this, for validation purposes, we have also matched the OTP list of missing with the 1991 Population Census and with the ABiH military records for monitoring purposes.

The general matching steps completed for this report included:

- Compilation of the 2005 OTP list of Srebrenica missing (already done for the 2005 OTP report on the Srebrenica missing, see report of 16 November 2005).
- Integration of the 2005 OTP list of Srebrenica missing with the latest October 2008 ICRC list of Srebrenica missing.
- Cross-referencing the resulting OTP list of Srebrenica missing with sources on post-war survivors and elimination of survivors from the OTP list.
- Cross-referencing the resulting OTP list of Srebrenica missing with the latest November 2008 ICMP list of identified persons from Srebrenica.
- Cross-referencing the resulting OTP list of Srebrenica missing with ABiH military records for monitoring purposes.

Note that in every step mentioned above we compared our OTP list of Srebrenica missing with other independent sources and incorporated the results of this “exposure” into this report and the accompanying list of missing and dead. Most importantly, by cross-referencing the OTP list of missing with the ICMP list of identified persons we presented counts of the missing persons who have been identified as dead, and thus introducing additional evidence on the victimization of the fall of Srebrenica.

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<sup>56</sup> The terms “matching”, “merging” and “duplicate search” have much in common. As a matter of fact, all three activities involve the same methodology for comparison of records that possibly represent the same persons. We explain these issues in more detail in Annex 5.

The 2005 OTP list of Srebrenica missing is an important building-stone for this report. As a matter of fact, the 2005 list has been shown to overlap well with the ICMP records of Srebrenica identified, and to be of good quality. Therefore, also in this report we decided to proceed with this list as the major data set on the missing individuals related to the fall of Srebrenica. In order to make sure that all relevant and most up-to-date records are included in this list, we cross-referenced the 2005 list with the latest October 2008 ICRC list of Srebrenica missing. As the reader will see from one of the next annexes (6.1), the overlap between these two lists is large: only 30 ICRC records do not overlap with the OTP list of 2005, of which were added to the OTP list, thus confirming that the 2005 OTP list of Srebrenica missing is very close to being complete and does not really require any major revision.

Regarding the compilation of the 2005 OTP list of Srebrenica missing, the following steps were completed:<sup>57</sup>

- A searchable database was established from the 2005 ICRC list of missing persons for Bosnia and Herzegovina.
- The 2005 ICRC list was matched with the 1991 Population Census. This was done through the linking with the 2004 ICRC & PHR lists, which resulted from merging all ICRC lists up to and including version 6 from 2004 and also the PHR records. Information about the ethnicity and the place of residence according to the 1991 Census was incorporated into the 2005 ICRC list.
- The 2005 ICRC list was checked for duplicates and duplicates were marked and excluded from further analysis.
- The 2005 ICRC list was searched for Srebrenica-related missing persons, using the criteria of relevance to the fall of Srebrenica in 1995 (see Annex 2) in order to select records for the 2005 OTP list.
- Srebrenica-relevant PHR records that were not reported in the 2005 ICRC list were added, resulting in the first version of the 2005 OTP list.
- An additional check for survivors was conducted, using the first version of the 2005 OTP list on one hand and all three Voters Registers and DDPR-2000 on the other hand.
- All matches of potential survivors reported in the 1997, 1998, 2000 Voters Registers and/or DDPR-2000 were checked manually in the 1991 Population Census.
- A number of potential survivors were excluded from the 2005 OTP list.
- The 2005 OTP list of Srebrenica missing was cross-referenced with the ABiH military records for monitoring purposes.

Similar steps were repeated for the small number of new records (29) that were added to the 2005 OTP list based on the comparison with the October 2008 ICRC list of Srebrenica missing. All in all, however, the 2005 OTP list remains the main source for the 2009 Srebrenica missing and dead persons list, and thus needs to be discussed in more detail also in this report.

The major rounds of matching for the 2005 OTP list were with the 1991 Population Census, Voters Registers of 1997-98 and 2000, DDPR of 2000, and with early (1997) records of "Srebrenica refugees", as well as with ABiH military records. Of course, the 2005 OTP list, and the additional 29 ICRC records of 2008 were matched with the November 2008 Srebrenica

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<sup>57</sup> Most steps were completed in 2005 before the 2005 reports became available. Matching with ABiH military records was done in several rounds, the last round being finished in July 2008.

update of ICMP on the DNA identifications of victims. All these major matching activities are discussed one by one in the sub-annexes in Annex 6.

## ANNEX 5. DATA MATCHING: GENERAL INTRODUCTION

In this annex, first of all, we review the main principles of matching as discussed in the literature of the subject. Secondly, we describe the data processing and matching procedures that we applied to our data sources. Finally, in Annex 6 we discuss the results of data processing and matching for all major sources one by one.

### Summary of the Literature on Matching

#### Introduction

Combining information from heterogeneous information sources implies that researchers must identify data records that refer to equivalent entities. However, records that describe the same object often *differ syntactically*—for example; the same person can be referred to as “William Jefferson Clinton” and “bill clinton.” No computer program is able to declare these two records as describing the same person, unless the two records will be standardized according to some pre-defined rules.

Variations in representation across sources can arise from differences in reporting across sources and in formats that store data, typographical and optical character recognition (OCR) errors, and abbreviations. Variations are particularly pronounced in data that is historically and/or by design different and does not contain individual record IDs, or is automatically extracted from Web pages and unstructured or semi-structured documents, making the matching task essential for information integration in statistical (or other) databases or on the Web. Researchers have investigated the problem of identifying duplicate objects under several terms, including *record linkage, merge-purge, duplicate detection, database hardening, database cleaning, identity uncertainty, entity resolution, co-reference resolution, approximate joins, fuzzy matching, and (approximate) name matching*. Such diversity reflects research in several areas: information technology, statistics, databases, digital libraries, natural language processing, and data mining.

#### Summary of the Name-Matching Approaches<sup>58</sup>

“Record linkage—the task of matching equivalent records that differ syntactically—was first explored in the late 1950s and 1960s (1).<sup>59</sup> Ivan Fellegi and Alan Sunter’s seminal paper—

<sup>58</sup> The source for this section is: Mikhail Bilenko, Raymond Mooney, William Cohen, Pradeep Ravikumar, and Stephen Fienberg, 2003: Adaptive Name Matching in Information Integration. IEEE Intelligent Systems Vol. 18, No. 5. Published by the IEEE Computer Society. <http://www.cs.cmu.edu/~pradeep/papers/ieee03.pdf>. The text is the exact quotation from the above-mentioned article (Text Bar 1).

<sup>59</sup> References referred to in the text are included below:

1. H.B. Newcombe et al., “Automatic Linkage of Vital Records,” *Science*, vol. 130, no. 3381, Oct. 1959, pp. 954–959.
2. I.P. Fellegi and A.B. Sunter, “A Theory for Record Linkage,” *J. American Statistical Assoc.*, vol. 64, no. 328, Dec. 1969, pp. 1183–1210.
3. M.A. Hernández and S.J. Stolfo, “The Merge/Purge Problem for Large Databases,” Proc. 1995 ACM SIGMOD Int’l Conf. Management of Data (SIGMOD 95), ACM Press, 1995, pp. 127–138.
4. A.K. McCallum, K. Nigam, and L. Ungar, “Efficient Clustering of High-Dimensional Data Sets with Application to Reference Matching,” Proc. 6th ACM SIGKDD Int’l Conf. Knowledge Discovery and Data Mining (KDD 2000), ACM Press, 2000, pp. 169–178.
5. H. Galhardas et al., “AJAX: An Extensible Data-Cleaning Tool,” Proc. 2000 ACM SIGMOD Int’l Conf. Management of Data (SIGMOD 00), ACM Press, 2000, p. 590.
6. H. Galhardas et al., “Declarative Data Cleaning: Language, Model, and Algorithms,” Proc. 27th Int’l Conf. Very Large Databases (VLDB 2001), Morgan Kaufmann, 2001, pp. 371–380.

where they studied record linkage in the context of matching population records—provides a theoretical foundation for subsequent work on the problem (2). They described several key insights that still lie at the base of many modern name-matching systems:

- You can represent every pair of records using a vector of features that describe similarity between individual record fields. Features can be Boolean (for example, last-name-matches), discrete (for example, first-n-characters-of-name-agree), or continuous (for example, string-edit-distance-between-first-names).
- The problem of identifying matching records can be viewed as the task of placing feature vectors for record pairs into three classes: links, non-links, and possible links. These correspond to equivalent, non-equivalent, and possibly equivalent (for example, requiring human review) record pairs, respectively.
- A system can perform record-pair classification by calculating the ratio  $(P(\gamma \text{ dM}))/P(\gamma \text{ dU})$  for each candidate record pair, where  $\gamma$  is a feature vector for the pair and  $P(\gamma \text{ dM})$  and  $P(\gamma \text{ dU})$  are the probabilities of observing that feature vector for a matched and non-matched pair, respectively. Two thresholds based on desired error levels— $T_\mu$  and  $T_\lambda$ —optimally separate the ratio values for equivalent, possibly equivalent, and nonequivalent record pairs.
- When no training data in the form of duplicate and non-duplicate record pairs is available, name-matching can be unsupervised, where conditional probabilities for feature values are estimated using field value frequencies.
- Because most record pairs are clearly non-duplicates, you needn't consider them for matching; blocking databases so that only records in blocks are compared significantly improves efficiency.

The first four insights lay the groundwork for accurate record pair matching, while the fifth provides for efficiently processing large databases. We can describe subsequent name-matching research in terms of improvements in those two directions.

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7. M.-L. Lee, T.W. Ling, and W.L. Low, "Intelliclean: A Knowledge-Based Intelligent Data Cleaner," Proc. 6th Int'l Conf. Knowledge Discovery and Data Mining (KDD 2000), ACM Press, 2000, pp. 290–294.
  8. W.E. Winkler, "Using the EM Algorithm for Weight Computation in the Fellegi-Sunter Model of Record Linkage," Proc. Section on Survey Research Methods, American Statistical Assoc., 1988, pp. 667–671.
  9. W.E. Winkler, Advanced Methods for Record Linkage, tech. report, Statistical Research Division, US Census Bureau, 1994.
  10. W.W. Cohen, "Integration of Heterogeneous Databases without Common Domains Using Queries Based on Textual Similarity," Proc. ACM SIGMOD Int'l Conf. Management of Data (SIGMOD 98), ACM Press, 1998, pp. 201–212.
  11. K. Seymore, A.K. McCallum, and R. Rosenfeld, "Learning Hidden Markov Model Structure for Information Extraction," Papers from the 16th Nat'l Conf. Artificial Intelligence (AAAI 99) Workshop Machine Learning for Information Extraction, AAAI Press, 1999, pp. 37–42.
  12. T. Churches et al., "Preparation of Name and Address Data for Record Linkage Using Hidden Markov Models," Medical Informatics and Decision Making, vol. 2, no. 9, 13 Dec. 2002; [www.biomedcentral.com/1472-6947/2/9/abstract](http://www.biomedcentral.com/1472-6947/2/9/abstract).
  13. H. Pasula et al., "Identity Uncertainty and Citation Matching," Advances in Neural Information Processing Systems 15, MIT Press, 2003.
  14. W.W. Cohen, H. Kautz, and D. McAllester, "Hardening Soft Information Sources," Proc. 6th ACM SIGKDD Int'l Conf. Knowledge Discovery and Data Mining (KDD 2000), ACM Press, 2000, pp. 255–259.
  15. S. Tejada, C.A. Knoblock, and S. Minton, "Learning Domain-Independent String Transformation Weights for High Accuracy Object Identification," Proc. 8th ACM SIGKDD Int'l Conf. Knowledge Discovery and Data Mining (KDD 2002), ACM Press, 2002, pp. 350–359.

Several methods address the computational cost of name matching and follow the spirit of the blocking mechanism the Fellegi-Sunter theory suggests. The sorted neighborhood method sorts the database using multiple keys to obtain record blocks (“windows”) in which candidates for matching lie (3). Alternatively, the canopies method uses a computationally cheap and general string similarity metric such as term frequency-inverse data frequency (TF-IDF) cosine similarity to create overlapping record clusters that contain possible matching pairs (4).

We can roughly categorize methods for improving matching accuracy by how much human expertise they require and the extent to which they use machine learning and probabilistic methods. On one end of this spectrum are rule-based methods based on equational theory that require a human expert to specify the conditions for records to be equivalent in a declarative rule language (3, 5–7). Such conditions might involve multiple string similarity metrics (for example, the string edit distance being less than a threshold value), domain-specific comparisons (equality of nicknames and full first names), and inferred knowledge (geographic proximity based on zip codes). Although the rule-based approach can lead to high accuracy after meticulous, domain-specific tuning, its human cost tends to be high and therefore impractical for large databases.

Unlike the rule-based approach, probabilistic methods developed following the Fellegi-Sunter framework obviate the need to involve human domain expertise by using unsupervised machine learning methods. We can employ the powerful expectation maximization algorithm to classify record pairs into the three classes we specified without any training data on the basis of the database’s statistical properties (8). In an iterative procedure, EM estimates the probability that the records match for each pair of records. We can add additional constraints to the standard EM algorithm to enforce one-to-one matching when records are being matched across two databases, thereby avoiding spurious multiple matches (9).

An alternative unsupervised approach to domain-independent matching assumes that data is stored in databases as natural language text and treats the matching task as an information retrieval problem (10). This approach achieves domain independence through normalization, which uses pre-processing such as case conversion and stemming, then employs cosine similarity in the vector space created using the TF-IDF weighting scheme (see the main text). This approach often works well for databases where records can be meaningfully represented as natural text strings. An alternative approach to dealing with such databases is to separate string records into individual fields that represent atomic information units—for example, to parse a citation record into separate fields such as author, title, venue, and so on. Hidden Markov models are particularly successful for this task if they receive sufficient training data in the form of segmented strings (11, 12).

Another avenue for using supervised learning to improve name matching relies on creating a relational probabilistic model for the domain. This involves constructing a generative model for individual fields and using a Markov chain Monte Carlo procedure to obtain the matching decisions (13). This approach allows for capturing the different matching decisions’ interdependence. This is useful for databases that contain several matching records, such as bibliographies of citations to scientific papers. Accounting for the distributed nature of matching decision making in databases with many equivalent records is also central to the database hardening approach, which formalizes name matching as a mathematical optimization problem

and suggests a greedy algorithm for obtaining the best global record matching using a graph of similarity values between records (14).

Recently, researchers have proposed machine-learning methods that use supervision in the form of matched and unmatched record pairs to train classifiers to distinguish between them. This includes those methods that try to select the most informative record pairs for human labelling to produce maximum accuracy improvements (15). The main text describes our recent work using training data in the form of matched and unmatched record pairs to train an algorithm for classifying record pairs as duplicate and non-duplicate.”

### **Standardization and Blocking**

An excellent extensive overview of the latest developments in record linkage/matching is available from Winkler (2006),<sup>60</sup> who is a senior researcher in the Statistical Research Division of the US Census Bureau. Several sections in his report discuss the importance and practicalities of standardization of records as a prerequisite of a successful matching. Among other things, issues such as name and address standardization, re-formatting dates and string comparators are studied.

Basically, standardization, which is a prerequisite and first step in any matching procedure, consists of replacing various spellings of words with a single spelling. All alternative spellings, misspellings and abbreviations are, thus, eliminated and one consistent spelling is used. Also dates and other numeric characteristics are checked and reformatted such that one format is consistently used throughout all data sets. In addition to this, any special characters such as commas, spaces, dots, question marks, quotation marks, brackets and stars need to be removed from the strings to be compared.

As part of standardization, parsing of multiple name strings is done into single components that can be compared. Parsing is meant to increase the frequency of successful string comparisons during the matching.

Standardization efficiently minimizes typographic errors but is unable to eliminate them altogether as such errors are partly due to differences in reporting by the informants. This is why dealing with typographical error has been a major research project in matching-related computer science. As Winkler (2006) puts it:

- “In record linkage one needs to have a function that represents approximate agreement, with agreement being represented by 1 and degrees of partial agreement being represented by numbers between 0 and 1.”

Several concepts have been proposed to date to define this type of functions, which are generally called “string comparators”. Jaro (1989; in Winkler, 2006) introduced a string comparator that accounts for insertions, deletions, and transpositions. Bigrams and Edit Distance functions are the next examples of string comparators. The Bigram metric counts the number of consecutive pairs of characters that agree between two strings. The Edit Distance uses dynamic programming to determine the minimum number of insertions, deletions, and substitu-

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<sup>60</sup> William E. Winkler, 2006: Overview of Record Linkage and Current Research Directions. RESEARCH REPORT SERIES, Statistics #2006-2. Statistical Research Division, U.S. Census Bureau, Washington, DC 20233.

tions to get from one string to another. More recent examples include TFIDF metrics from Information Retrieval literature.

In order to improve the efficiency of matching, the number of pairs considered must be reduced. Notably, this is the case when files are too large to consider every pair in the cross-product space of all possible pairs from two files. The technique used for this is called *blocking* and relates to considering only those pairs that agree on a few basic characteristics such as surname or date of birth (Winkler, 2006; see as well Newcombe 1962, 1988;<sup>61</sup> in Winkler, 2006). The remaining data items in the related records are considered at the reviewing stage when the researcher (or computer program) decides whether or not a given pair is a true match.

### Current Practice in Matching by Official Statistical Authorities

In this section we refer to a direct quotation from another research report by Winkler (2001).<sup>62</sup>

“For a large matching situation such as matching the main Social Security Administration file of 600 million records against the 2000 Decennial Census file of 300 million records, this may entail the detailed comparison of 600 trillion pairs of records. Matching must be done using name, address, and date-of-birth information because the Census file does not contain the Social Security Number. Matching is done on secure administrative-record machines having two additional sets of firewalls inside the main firewalls protecting Census Bureau computers. To match efficiently, the files are matched in a series of blocking passes. During a blocking pass, only those pairs agreeing on certain characteristics are considered. For instance, on one blocking pass, only those pairs agreeing on first and last name may be considered. Other characteristics such as dob and address are used to determine whether a pair is a match. On another pass, only those pairs agreeing on date-of-birth may be considered. Prior to each matching pass according to a given blocking criteria, the files must be sorted according to the blocking criteria. Whereas the string comparators are useful once a pair of records has been brought together, they cannot be used for bringing pairs together. Twelve blocking passes have been used in some applications. A sort of a file requires three times the storage of the file being sorted. To sort a 600 million record file of 0.7 terabytes necessitates 2.1 terabytes of storage. The sort can require 3 days on a fast machine. Ten pairs of sorts and associated matching passes can take more than 40 days CPU time and substantial disk storage for intermediate files. The slowest part of the process can sometimes be the amount of skilled programmer intervention that is

<sup>61</sup> Newcombe, H.B. and Kennedy, J. M. (1962) "Record Linkage: Making Maximum Use of the Discriminating Power of Identifying Information" *Communications of the Association for Computing Machinery*, 5, 563-567.

Newcombe, H. B. (1988), *Handbook of Record Linkage: Methods for Health and Statistical Studies, Administration, and Business*, Oxford: Oxford University Press.

See as well other related papers by Newcombe:

Newcombe, H. B., Kennedy, J. M. Axford, S. J., and James, A. P. (1959), "Automatic Linkage of Vital Records," *Science*, 130, 954-959.

Newcombe, H. B. and Smith, M. E. (1975), "Methods for Computer Linkage of Hospital Admission-Separation Records into Cumulative Health Histories," *Methods of Information in Medicine*, 14 (3), 118-125.

<sup>62</sup> William E. Winkler, 2001: *Quality of Very Large Databases*. Statistical Research Report Series No. RR2001/04. Statistical Research Division. Methodology and Standards Directorate. U.S. Bureau of the Census. Washington D.C. 20233.

needed for tracking steps of the processing, backing off intermediate files, and writing auxiliary programs needed for analysis and evaluation.

BigMatch software (Yancey and Winkler 2001) allows the matching of a relatively small file having between 1 million and 100 million records against a large file of 4 billion records. The software allows up to ten simultaneous blocking criteria. For the above situation, the Census file could be divided in three subsets of 100 million records and matched against the Social Security Administration File. For ten blocking criteria, the match would take less than three days (one day for each subset of the Census file). The overall disk space requirement might be as little as 3 terabytes. Very little special programmer intervention would be needed.”

The magnitude of matching in the US Census Bureau represents a really extra large-size class.

### **Data Processing of Demographic Sources at the Demographic Unit**

With regard to data processing and matching, the work of the Demographic Unit has always been in line with the principles discussed above. Any source received at DU has always gone through a thorough assessment and standardization procedure. Matching has always been done after the standardization was completed. Notably, in our work we always kept the original data items unchanged and created copies that were standardized, re-formatted and improved. In this way, we have always been able to track the data improvements and link any record back to the original record.

### **Matching Procedure of the Demographic Unit**

As mentioned above, the most recent matching uses *machine-learning* methods (i.e. artificial intelligence) that are based on supervision in the form of examples of matched and unmatched record pairs provided to them by humans, so as to train classifiers to distinguish between them. On the other end of the matching approaches are *rule-based* methods that require a human expert to specify the conditions for records to be equivalent. The rule-based approach usually leads to high accuracy but its human cost is high and therefore impractical for large databases.

The Demographic Unit has been using the rule-based approach in its record linkage. The human costs are high but the databases we have worked with are not extremely large and thus the job has been feasible. Below are the details of how we have done it.

When matching various lists with data on individuals our approach has been to use the MS Access database program to search for records on one list that represent the same individuals on another list. If key variables are identical in two given lists the matched records are assumed to correspond to the same person, otherwise not. This would have been a fast and easy procedure if all individuals on each list were uniquely determined by one or more variables, such as an ID number, but this is not the case with all lists available to us. Although a unique ID number (JMBG) was introduced in Yugoslavia in 1981, it is not used by, for example, ICRC and PHR in their databases. Moreover, when it is used, such as in the 1991 Census and the OSCE Voters Register, it is sometimes missing or wrong.

The matching of two lists was always begun by searching for records with identical names and date of birth. It is very unusual that two different persons have identical names *and* are born on exactly the same date, especially if we are only considering the population of a small

area, such as a municipality or Eastern Bosnia. Quite often, however, names are spelled differently or the date of birth is recorded slightly differently – or missing altogether in one or both lists. Consequently, for persons not matched in the first round we made the search criteria gradually broader for one or more variables, for example by including only the *year* (and not the full date) of birth, or only the *initial* of the first name, in addition to the surname. The results of such matches have to be inspected visually, however, to decide if the matches are likely to be of the same person or not, by looking at the other available information, such as municipality and place of birth or residence. For example, the place of birth may be given as a municipality on one list and a small hamlet, located in the same municipality, on the other list. It would be very complicated, if possible at all, to automate such checks.

For difficult cases we checked the 1991 Census for more information about the persons in question, for example when one of the lists has information on an item which is also included in the Census but not on the other list, such as ID number or place of birth. The spelling of names was also checked in this way, often by looking at the names of other family members contained in the Census files.

Matching records from the ICRC and PHR lists of missing persons with the Voters Registers presents a special problem, since only a limited number of variables are included in *all* of these lists. The father's name, for example, which is important for identifying people in BiH, is recorded in the lists of missing persons but not in the Voter lists, whereas the opposite is the case with the national ID number (JMB). Thus, when we attempted to match records from these sources a large number of potential matches were often found since there were not always enough variables common to the two data sources to distinguish between real and false matches, for example when the full date of birth was lacking. To allow for errors in the date of birth we also searched for matches of records with a difference of up to several years in the year of birth. Such matches were not accepted, of course, before the likelihood of a match was confirmed after comparing information on other items, for example on various locations such as place of birth, residence or disappearance on the missing persons lists, *and* current municipality or municipality of voting in the Voter list. A match of missing people and registered voters was not accepted if the locations were clearly inconsistent, for example if a person was born, lived and went missing in Eastern Bosnia according to the missing lists, but registered to vote in and for a municipality in a completely different part of the country, according to the Voter list.

The use of data from the 1991 Census was crucial in concluding whether a pair of potential matches of records from two different lists represented the same person. When, for example, a set of matched records from the ICRC/PHR lists and the Voter list were also identified in the Census file, both the ID number and the father's name were checked in order to ascertain whether the matched records represented the same person. In some cases only one of a pair of matched persons was identified in the Census and not the other. In such cases the match was rejected if the father's name recorded in the Census differed significantly from the father's name recorded by ICRC/PHR. If only the person from the ICRC/PHR list was found in the Census file the match was rejected if the Census ID number differed significantly from the Voter's list ID number. There were no examples of matches where neither of the persons was found in the Census. This is both an indication of the completeness of the 1991 Census and the quality of the registers of missing persons, showing that false persons were not registered as missing to inflate the numbers or for other reasons.

The existence of twins, who have the same parents and family names, are born on the same date, and often have similar first names, present a special challenge.

To record the quality and basis for a match, a parameter was assigned to each matched person depending on the criteria used for the match. This parameter was used to study the number of accepted matches according to the type and quality of the match.

### **Matching Approach of the Demographic Unit**

In the case of Bosnia and Herzegovina, in principle all lists of victims, thus also the Srebrenica missing persons' lists, should be examined in an assessment procedure in which questionable entries are highlighted for the Prosecution, Chambers and Defence. The existing approach at the Demographic Unit, OTP, includes such an assessment procedure.<sup>63</sup> In this approach, victims' records are cross-referenced with records available in corresponding demographic sources on deaths, missing, exhumed and identified persons. Further, these records are also compared with those from the 1991 Population Census, post-war lists of voters and of internally displaced persons and refugees. The latter lists are well-suited to identify possible survivors from victims' lists.

Before the summary of the DU matching approach can begin, a few terms need to be introduced for ease of discussion.

- Records are composed of information items describing individual cases, e.g. names, DoB, PoB, PoR etc. of persons listed; one case being one victim reported. Two examples of records are given in Text Box 1 attached below.
- Links between records in two sources are record IDs from one source copied into the second source. Examples of links are available from Text Box 2 (links are highlighted).
- Establishing links between records in a given list and a given demographic source (e.g. the 1991 Census) is done by comparing how names and other personal details are reported in the two sources. Cases with a high consistency of reporting, i.e. the same or similar information in respective data fields, can be declared as "linked" in the related sources.
- Overview of Links: Over the years, major demographic sources have been linked on several occasions by the DU staff with records from the 1991 Population Census. An overview of links refers to Census records associated with a given original list and their links with the major sources. The lists of Srebrenica missing integrated with the DNA identifications of ICMP are an example of such links.

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<sup>63</sup> This approach is described in detail in Tabeau and Bijak (2005): War-related Deaths in the 1992-1995 Armed Conflicts in Bosnia and Herzegovina: A Critique of Previous Estimates and Recent Results. *European Journal of Population* Vol. 21(2005), No. 2/3.

**Text Box 1. Examples of Records**

Example 1: Census Record of ADIS (OMER) DELIJA)								
Census: JMBG	Census: First Name	Census: Father's Name	Census: Last Name	Census: Sex	Census: DoB	Census: YoB	Census: Place of Residence (1991)	
2711990133659	ADIS	OMER	DELIJA	male	27.11.1990	1990	VISEGRAD	
Example 2: ICRC Record of ADIS (OMER) DELIJA)								
ICRC: CaseID (BAZ)	ICRC: First Name	ICRC: Father's Name	ICRC: Last Name	ICRC: Sex	ICRC: DoB	ICRC: YoB	ICRC: PoDis	ICRC: DoDis
BAZ-109377-03	ADIS	OMER	DELIJA	man	27.10.1990	1990	VISEGRAD	14.06.1992

**Text Box 2. Examples of links**

Example 1: Census Record of ADIS (OMER) DELIJA)								Link with ICRC Record	
Census: JMBG	Census: First Name	Census: Father's Name	Census: Last Name	Census: Sex	Census: DoB	Census: YoB	Census: Place of Residence (1991)	Link with ICRC Record	
2711990133659	ADIS	OMER	DELIJA	male	27.11.1990	1990	VISEGRAD	BAZ-109377-03	
Example 2: ICRC Record of ADIS (OMER) DELIJA)								Link with Census Record	
ICRC: CaseID (BAZ)	ICRC: First Name	ICRC: Father's Name	ICRC: Last Name	ICRC: Sex	ICRC: DoB	ICRC: YoB	ICRC: PoDis	ICRC: DoDis	Link with Census Record
BAZ-109377-03	ADIS	OMER	DELIJA	man	27.10.1990	1990	VISEGRAD	14.06.1992	2711990133659

Having defined the terms, a summary follows:

**A.** A given list of persons, such as the OTP list of Srebrenica missing, is an input for our review (hereafter: "Original"). Links are established between the "Original" and several other data sources available at DU. The demographic sources used in this process fall into three broad categories: data on the population at the outbreak of the conflict, data on persons who survived the war, and data regarding individuals who died in the conflict or are still missing.

**B.** DU takes the original list and cross-references it with the three major kinds of data sources:<sup>64</sup>

Sources on the pre-conflict population:

- 1991 Population Census (hereafter: Census);

Sources on the surviving population:

- Voters registers 1997-98 and 2000 (V97-98 and V2000);
- BH register of internally displaced persons and refugees 2000 (DDPR).

Sources on deaths/missing persons:<sup>65</sup>

<sup>64</sup>The sources listed here are related to Bosnia and Herzegovina, not Croatia or Kosovo. Bosnian sources are described in the mentioned article by Tabeau and Bijak (2005).

- ICRC Missing Persons List 2005 (ICRC Missing);
- ICRC-PHR Missing Persons list 2000 (PHR Missing);
- FBH War-Time Mortality Database (FBH DEM2);
- RS War-Time Mortality Database (RS DEM2);
- Exhumations FBH 2007 (FBH-Ex);
- Exhumations RS 2005 (RS-Ex);
- ICMP List of the DNA Identified Persons 2008 (ICMP);
- Lists of deaths of military personnel (ABiH, HVO and VRS)
- Bosnian Book of Dead, 2008 (BBD);
- Household Survey, Sarajevo 1994;

Sources on the living population (1991, 1997-98 and 2000) are used to confirm personal details about the victims (1991 Population Census) and to check whether post-conflict survivors are possibly reported among victims (Voters and DDPR).

Data sources on deaths and missing persons are used for collecting details on date, place and causes of death, and, of course, to estimate their numbers.

C. Having completed the matching of the original input data with the 1991 Population Census (see par. A), the next step in the analysis is to enter information from the Census into the "Original" list. A number of Census items may then be incorporated. The "Original" may thus be enlarged in this and the next steps by transferring new data items from the Census and other DU sources. Eventually this table evolves into the final output list or data base (hereafter called: "Final"). The Census items that may be transferred are the following:

- a. Census ID of a given person (JMBG)
- b. Surname, first name, father's name, DoB, PoB, etc.
- c. Links to data sources on post-war survivors: Voters 1997-98 and DDPR
- d. Links to data sources on dead and missing

Also from Voters lists and DDPR data items may be moved into the final output table. Because these sources include post-conflict data, i.e. voting in 1997-98 or 2000 and the post-war registration as an IDP or a refugee (DDPR-2000), they provide an indication of a *possible* survivor that needs closer inspection.

Finally, from each source on deaths/missing persons, for every "Original" record matched with a given source, some information items may be incorporated as well, e.g. date of death/ disappearance (DoD), place of death/ disappearance (PoD), and cause of death/ disappearance (CoD).

D. By transferring data items from DU sources a database is created, which becomes an overview of how the original records of victims from a given list are reported in the 1991 Census and in the sources on deaths/missing persons or survivors. The presentation of the results can take the form of a list such as the lists of Srebrenica missing and identified dead persons attached to this report. Other forms of presentation are also possible. With the described procedure a given list of victims is validated, corrected and expanded.

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<sup>65</sup> Not all sources listed here are used in every case of running the assessment procedure; the sources actually used need to be adapted to the concrete victims list analysed.

## **ANNEX 6. DATA MATCHING BY SOURCE**

### **ANNEX 6.1 MATCHING OF THE 2005 OTP LIST OF SREBRENICA MISSING WITH THE OCTOBER 2008 ICRC LIST OF SREBRENICA MISSING**

#### **Summary**

In October 2008 the OTP received a copy of the most recent update of the ICRC list of Srebrenica missing. The list was received in the same format as previous updates of the full list of missing from Bosnia and Herzegovina, that is, a CD with several Excel spreadsheets. For ease of reference, the information in this update will be referred to as the ICRC Srebrenica 2008 update, or, where the context permits, just the 2008 update.

The CD contains five Excel files with a total of 7,640 records:

1. srebrenica pending reports on death\_september2008.xls (246 cases)
2. srebrenica pending tracing requests\_september2008.xls (3,908)
3. srebrenica solved alive\_september2008.xls (26)
4. srebrenica solved cancelled\_september2008.xls (1)
5. srebrenica solved dead\_september2008.xls (3,459)

Although the exact criteria that the ICRC used to select records for this list are not known to us, it is likely that they used the information concerning the circumstances of disappearance reported by the relatives of the missing and being part of the ICRC tracing requests.

Of the 7,640 records in the ICRC Srebrenica 2008 update, 7,634 are overlapping with the ICRC 2005 update. Thus, this update contains 6 new records. Furthermore, of the 7,613 victims (i.e. those not reported alive or cancelled reports), 7,563 overlap with the 2005 OTP list of missing and dead from Srebrenica (the 2005 OTP list). In addition to the 6 new records, a further 24 existing records can be added to the 2005 OTP list as Srebrenica related, though they were previously not selected as relevant. In total, 30 names can be seen as new and additional to the 2005 OTP list. One of the 30 records is inconsistent with the time frame of Srebrenica missing (disappeared in 1992) and is excluded from the 2009 OTP list.

Also, 98 records were included on the 2005 OTP list but were not listed on the ICRC Srebrenica 2008 update. However, on basis of DNA identifications by ICMP and a surmised difference in the understanding of "Srebrenica related", we see no reason to exclude these records.

Finally, one record on the 2005 OTP list is now listed by the ICRC as cancelled. As we have no information that the individual concerned has been identified, we must assume that this person is either alive or possibly dead from non-conflict related causes. Either way, this record has been removed from the 2005 OTP list.

#### **Import and Duplicate checks**

Each of the five Excel spreadsheets was separately imported into an MS Access database and combined into one table, containing all 7,640 records.

After importing and combining the information in one file, the next step was to compare the ICRC Srebrenica 2008 update with the full ICRC update (i.e. covering all of Bosnia and Herzegovina) from 2005.

Doing record linkage via the ICRC BAZ number, 7,633 of the 7,640 records were found to correspond to the ICRC 2005 update. A double check on the names for the linked records showed that for all but 11 records, the field "NAME OF THE SOUGHT PERSON" (containing first name and last name) were exactly the same. For the 11 records that were not exactly the same, there were only minor spelling corrections from the 2005 to the 2008 update, while all other information, including father's name, date of birth and information about disappearance remained the same. As an example, "TALOVIC EJUB" had been changed to "TALOVIC ELJUB").

In addition, it later became apparent that one more record actually overlaps between ICRC Srebrenica 2008 and ICRC 2005. One record with BAZ number BAZ-903762-02 in the ICRC 2005 update appears to be the same record, but is now listed with BAZ-903762-01 in the ICRC Srebrenica 2008 update. In both case, the name is MUJIC ZURJET, father's name is RAHMAN, date of birth is reported as --. --.1962, place of birth MOCEVICI, and date and place of disappearance is 11.07.1995, POBUDE, BRATUNAC. Also, note that the main part of the BAZ number remains the same, i.e. 903762, only the second part has changed, from 02 to 01.

Including the record described above, the overlap between the ICRC Srebrenica 2008 update and the ICRC 2005 update is fully 7,634 of 7,640 records, or 99.9%. There are then only 6 records in the 2008 update that are completely new, in the sense that these are tracing request previously unknown to us and not used in our previous work.

**Table (6.1)1 Possible duplicate matches**

ICRC NO	Name of the sought person	Sex	Date of Birth	Place of Birth	Father's Name	Reported Date of Death/ Disappearance	Place of Death/ Disappearance	Municipality of Death/ Disappearance
BAZ-902924-01	ALIC SUKRIJA		27.0 9.19 40		ALIJA	12.07.1995	POTOCARI	SREBRENICA
BAZ-915213-03	ALIC SUKRIJA	M	12.0 6.19 38	JAGOD NJA	ALIJA	13.07.1995	POTOCARI	SREBRENICA

As the overlap is almost complete, the searching for duplicates was essentially already done in 2005, since any duplicates would be the same for the 2005 update as for the 2008 update. By using the link provided by the BAZ numbers, information about duplicates was copied from the 2005 update to the 2008 update. This provided duplicate information about 7,633 records with identical BAZ number. 18 records were marked as potential duplicates, of which 9 were marked to be excluded (seven pairs of records, one triplet of records, and one record for which the corresponding duplicate is not on the ICRC Srebrenica 2008).

In addition, the remaining 7 records were checked, in that duplicates were searched for in the ICRC 2005 update. One record identified as a duplicate was due to the BAZ number change described above. Of the 6 remaining records, only one record was found to be a potential duplicate, shown in Table (6.1)1.

As can be seen in Table (6.1)1, the date of birth is complete and different for the two cases, as reported. Further more, in the Census, there are two different registrations for Sukrija (Alija) ALIC, one born 12.06.1938 in Radovcici, Srebrenica, and one born in 1940 (no exact date reported) in Jagodnja, Bratunac. Based on this, it is unlikely that this is a duplicate, and both records are kept as relevant

### Further analysis and comparisons

As established above, 7,634 of the 7,640 records from the ICRC Srebrenica 2008 update overlap with the ICRC 2005 update. From this overlap, we can check any changes in status reported by ICRC, i.e. whether a person is still missing or have now been found alive or dead. Table (6.1)2 below summarizes the status and changes between 2005 and 2008.

**Table (6.1)2 Status comparison and change, 2005 and 2008**

Status of Records	Categories of Records	Status in 2008					Total 2005
		Still missing	Info death	Solved alive	Solved dead	Cancelled	
	<i>New records</i>	5			1		6
Status in 2005	Still missing	3,903			1,352	1	5,256
	Info death		246		67		313
	Solved alive			25			25
	Solved dead				2,039		2,039
	Cancelled			1			1
<b>Total 2008</b>		<b>3,908</b>	<b>246</b>	<b>26</b>	<b>3,459</b>	<b>1</b>	<b>7,640</b>

As can be seen, the largest change relates to cases reported as “still missing” in 2005 that are reported as “solved dead” in 2008 (1,352 cases). In addition, some cases have changed status from “information about death” to “solved dead” (i.e. confirmation of previously unconfirmed reports, 67 cases). One case has apparently changed from “solved alive” to “cancelled”, which does not affect our results, as both groups are excluded from our analysis. Finally, one record has changed status from “still missing” to “solved alive”. This record needs to be checked against the 2005 OTP list, and if present there, should be removed from that?? list.

The next question is how large the overlap is with the 2005 OTP list. The ICRC Srebrenica 2008 list contains 7,640 records while the 2005 OTP list contains 7,661. In theory, all records from ICRC Srebrenica 2008 update should be contained in the 2005 OTP list. This is, however, not the case. Of the 7,640 records in the ICRC Srebrenica 2008 update, 7,562 are overlapping, based on linkage by BAZ numbers. That leaves 77 records from the 2008 update that were not included in the 2005 OTP list. The reasons are:

1. 6 records are new, and could therefore not be in the 2005 OTP list.
2. 12 records match the 12 in the list of excluded records from the 2005 report (for the 2005 Srebrenica report, 12 records were marked as possible survivors, and listed in a separate table as excluded)
3. 26 records are non-victims, that is cases “solved alive” or “cancelled”, both in the 2008 update and the 2005 update. These records were obviously not included in the 2005 OTP list.
4. 9 records were excluded because they were duplicates
5. 24 records had not previously been selected for the 2005 OTP list as they fell outside the criteria used for selecting Srebrenica-related records in the 2005 Srebrenica report. Of these:
  - 2 records have new information in the 2008 update that placed them within the criteria required for Srebrenica missing (reported date and place of disappearance changed from 07.08.1992 (for one record) and 17.04.1992 (for the other

record) in Karakaj, Zvornik (both records) to 11.07.1995 Forest (Suma), Srebrenica (both records).

- 4 records list Drina River as place of disappearance, at various times between July and September 1995. For the 2005 Srebrenica report, Drina River was not considered sufficient for inclusion.
- 1 record lists Tara Mountain as the place of disappearance in July 1995, but is now included for the same reasons as given above.
- 17 records have either date or place of disappearance outside the scope for the 2005 OTP list. Some have date of disappearance as early as May/June 1995 or as late as January 1996. One record has date of disappearance reported as April 1992.

The 6 new records all fall well within the criteria for the 2005 OTP list (dates of disappearance 11-13 July 1995, places of disappearance Potocari (4 records), Srebrenica (1 record), and Buljim, Bratunac (1 record)). As these are new records (new tracing requests) we can easily argue that these should be seen as additional names to those already in the 2005 OTP list.

In addition, it can be argued, on the assumption that ICRC has access to additional information regarding the circumstances of disappearance, that the 24 records that we have previously not included based on date and place of disappearance, should be seen as additional names to those in the 2005 OTP list.

This means that in addition to updating the status for 7,563 records in the 2005 OTP list, the ICRC Srebrenica 2008 update also provides information on 29 new names that should be added to the list.

With 7,563 records overlapping between the ICRC Srebrenica 2008 update and the 2005 OTP list, it becomes necessary to review the remaining 98 records, to see whether we can still justify their inclusion in the list, given that we now know that ICRC has not included them.

Of these 98 records, 23 are from the PHR (Physicians for Human Rights) ante mortem database. These have, for various unknown reasons, never been registered by ICRC. However, they were registered by PHR, and 7 have already been identified by ICMP (and reported as Srebrenica related), so there is no reason to remove them from the list as a result of the ICRC Srebrenica 2008 update.

Of the remaining 75 records, that is the records from ICRC the 2005 update that are not listed as Srebrenica related in the ICRC Srebrenica 2008 update, 21 have already been identified as dead by ICMP (as Srebrenica related). These should clearly, be considered relevant for the 2005 OTP list. Of the 53 missing persons not yet identified as dead, a substantial number seems to be related to the incidents in Žepa later in July 1995. It is possible (but unknown to us at this point) that the ICRC has a more restricted view of what is Srebrenica related than what we have for the 2005 OTP list. For our purposes we would consider events in Žepa as “Srebrenica related”, although these might also be seen as separate events. Given a substantial number of Srebrenica-related identifications and given that there may well be differences in what constitutes “Srebrenica related”, as we see it and as ICRC sees it, we see no reason not to continue to include these records in the 2005 OTP list.

## ANNEX 6.2 MATCHING THE 2005 OTP LIST WITH THE 1991 POPULATION CENSUS

The matching process of the ICRC-PHR list of missing persons that was used for the initial 2000 Srebrenica report is described in Table (6.2)1.<sup>66</sup> The aim was to apply the most systematic exploiting set of linkage that was possible.

**Table (6.2)1 Description of the Matching of the Consolidated ICRC-PHR List of Missing Persons with the 1991 Population Census**

Match No.	Records	Criteria and Comments
1	3325	First name, Fathers name, Last name, m:DoB, m:OoD
2	257	Initial(First name), Fathers name, Last name, m:DoB, m:OoD
3	688	First name, Initial(Fathers name), Last name, m:DoB, m:OoD
4	128	First name, Fathers name, Initial(Last name), m:DoB, m:OoD
5	30	First name, Initial(Fathers name), Initial(Last name), m:DoB, m:OoD
6	66	Initial of First name, Initial(Fathers name), Last name, m:DoB, m:OoD
7	0	Initial of First name, Fathers name, Initial of Last name, m:DoB, m:OoD
8	2232	First name, Fathers name, Last name, m:DoB, m:OoB
9	192	Initial(First name), Fathers name, Last name, m:DoB, m:OoB
10	508	First name, Initial(Fathers name), Last name, m:DoB, m:OoB
11	76	First name, Fathers name, Initial(Last name), m:DoB, m:OoB
12	47	Initial(First name), Initial(Fathers name), Last name, m:DoB, m:OoB
13	22	First name, Initial(Fathers name), Initial(Last name), m:DoB, m:OoB
14	21	Initial(First name), Fathers name, Initial(Last name), m:DoB, m:OoB
15	680	First name, Fathers name, Last name, m:DoB
16	46	Initial(First name), Fathers name, Last name, m:DoB
17	165	First name, Initial(Fathers name), Last name, m:DoB
18	23	First name, Fathers name, Initial(Last name), m:DoB
19	64	Initial(First name), Initial(Fathers name), Last name, m:DoB
20	0	First name, Initial(Fathers name), Initial(Last name), m:DoB
21	0	Initial(First name), Fathers name, Initial(Last name), m:DoB
22	2078	First name, Fathers name, Last name, m:YoB, m:OoD, DOB-comparison algorithm run.
23	194	Initial(First name), Fathers name, Last name, m:YoB, m:OoD, DOB-comparison algorithm run.
24	432	First name, Initial(Fathers name), Last name, m:YoB, m:OoD, DOB-comparison algorithm run.
25	80	First name, Fathers name, Initial(Last name), m:YoB, m:OoD, DOB-comparison algorithm run.
26	29	First name, Initial(Fathers name), Initial(Last name), m:YoB, m:OoD, DOB-comparison algo-
27	51	Initial(First name), Initial(Fathers name), Last name, m:YoB, m:OoD, DOB-comparison algo-
28	9	Initial(First name), Fathers name, Initial(Last name), m:YoB, m:OoD, DOB-comparison algo-
29	979	First name, Fathers name, Last name, m:YoB, m:OoB, DOB-comparison algorithm run.
30	79	Initial(First name), Fathers name, Last name, m:YoB, m:OoB, DOB-comparison algorithm run.
31	183	First name, Initial(Fathers name), Last name, m:YoB, m:OoB, DOB-comparison algorithm run.
32	42	First name, Fathers name, Initial(Last name), m:YoB, m:OoB, DOB-comparison algorithm run.
33	10	First name, Initial(Fathers name), Initial(Last name), m:YoB, m:OoB, DOB-comparison algo-
34	17	Initial(First name), Initial(Fathers name), Last name, m:YoB, m:OoB, DOB-comparison algo-
35	14	Initial(First name), Fathers name, Initial(Last name), m:YoB, m:OoB, DOB-comparison algo-
36	291	First name, Fathers name, Last name, m:YoB, DOB-comparison algorithm run.
37	30	Initial(First name), Fathers name, Last name, m:YoB, DOB-comparison algorithm run.
38	58	First name, Initial(Fathers name), Last name, m:YoB, DOB-comparison algorithm run.
39	14	First name, Fathers name, Initial(Last name), m:YoB, DOB-comparison algorithm run.
40	7	First name, Initial(Fathers name), Initial(Last name), m:YoB, DOB-comparison algorithm run.
41	13	Initial(First name), Initial(Fathers name), Last name, m:YoB, DOB-comparison algorithm run.
42	1	Initial(First name), Fathers name, Initial(Last name), m:YoB, DOB-comparison algorithm run.
43	12	First name, Fathers name, Last name, m:YoB, i:ExclDuploRecord=NULL, DOB-comparison algo-
44	2	Initial(First name), Fathers name, Last name, m:YoB, i:ExclDuploRecord=NULL, DOB-
45	0	First name, Initial(Fathers name), Last name, m:YoB, i:ExclDuploRecord=NULL, DOB-
46	0	First name, Fathers name, Initial(Last name), m:YoB, i:ExclDuploRecord=NULL, DOB-
47	13	Duplicate matches from previous queries resolved manually (matched on FN, Initial(FaN), LN,
48	492	First name, Fathers name, Last name, m:OoB, m:OoD, m:YoB
49	93	First name, Initial(Fathers Name), Last Name, m:OoB, m:OoD, m:YoB

<sup>66</sup> The ICRC list used for the 2000 OTP report was from 1998 (4<sup>th</sup> edition), which was integrated with the 1997 3<sup>rd</sup> edition and the 1999 PHR data. In Table (6.2)1 "Records" refer to accepted matches.

Match No.	Records	Criteria and Comments
50	50	Initial(First name), Fathers name, Last name, m:OoB, m:OoD, m:YoB
51	24	First name, Fathers name, Initial(Last name), m:OoB, m:OoD, m:YoB
52	71	First name, Fathers, Last name, m:YoB, m:OoD, Sex
53	351	First name, Fathers, Last name, m:YoB, m:OoB, Sex
54	11	First name, Initial(Fathers Name), Last Name, m:OoD, m:YoB, Sex
55	60	First name, Initial(Fathers Name), Last Name, m:OoB, m:YoB, Sex
56	5	Duplicate matches from previous queries resolved manually (matched on FN, FaN, LN, and
57	833	First name, Fathers name, Last name, m:OoB, m:OoD, Sex, Fuzzy DOB-comparison run.
58	153	First name, Initial(Fathers name), Last name, m:OoB, m:OoD, Sex, Fuzzy DOB-comparison run.
59	74	Initial(First name), Fathers name, Last name, m:OoB, m:OoD, Sex, Fuzzy DOB-comparison
60	36	First name, Fathers name, Initial(Last name), m:OoB, m:OoD, Sex, Fuzzy DOB-comparison
61	135	First name, Fathers name, Last name, m:OoD, Sex, Fuzzy DOB-comparison run.
62	38	First name, Initial(Fathers name), Last name, m:OoD, Sex, Fuzzy DOB-comparison run.
63	5	Duplicate matches from previous queries resolved. (FN, FaN, LN, m:OoD, Fuzzy DOB compari-
64	24	Initial(First name), Fathers name, Last name, m:OoD, Sex, Fuzzy DOB-comparison run.
65	9	First name, Fathers name, Initial(Last name), m:OoD, Sex, Fuzzy DOB-comparison run.
66	357	First name, Fathers name, Last name, m:OoD, Sex, Fuzzy DOB-comparison run.
67	74	First name, Initial(Fathers name), Last name, m:OoB, Sex, Fuzzy DOB-comparison run.
68	52	Initial(First name), Fathers name, Last name, m:OoB, Sex, Fuzzy DOB-comparison run.
69	16	First name, Fathers name, Initial(Last name), m:OoB, Sex, Fuzzy DOB-comparison run.
70	1	Initial(First name), Initial(Fathers name), Initial(Last name), m:DOB, m:OoD
71	1	Initial(First name), Initial(Fathers name), Initial(Last name), m:DOB

Until 2000 fully four versions of the ICRC list of missing persons for Bosnia and Herzegovina were published, versions 3 and 4 in January 1997 and July 1998, respectively. We merged these two,<sup>67</sup> together with a list of dead persons published together with version 4 of the ICRC list in July 1998<sup>68</sup> and the 1999 PHR database, arriving at 19,692 persons for all BH,<sup>69</sup> after correcting for a few obvious inconsistencies. Of these records, according to Table (6.2)1, 16,173 records were matched with the 1991 Population Census. This gives a 82.1 % matching rate which is very high. The matching rate for the Srebrenica related records that were extracted from the merge of the 1997-98 ICRC and 1999 PHR lists was slightly different, as the Srebrenica records were a sample of the records for Bosnia and Herzegovina.

Table (6.2)1 contains an overview of the 71 criteria and the accepted matches (“Records”) at each additional step. It does not, however, show all potential matches at each step, which was far higher than the number of accepted matches. Decisions about whether or not a potential candidate match should be accepted as a true match were made after a visual review of *all data items* in both related records.

The initial matching of the consolidated ICRC-PHR list with the 1991 Census established the principles for the following matching exercises between the Census and subsequent updates of the ICRC lists processed at the Demographic Unit, including the 2005 version of the ICRC list and the 2008 ICRC of Srebrenica missing. Whenever a new ICRC update was received at the DU, we matched this update with the previous ICRC list using the ICRC BAZ numbers. Only

<sup>67</sup> Merging of the two ICRC lists was done using the ICRC record ID, the BAZ number, and comparing visually the remaining items in related records. The PHR also used the BAZ numbers in addition to their own ID record number. Merging of the ICRC lists with the PHR records involved both BAZ-based merging, and merging based on criteria similar to those in Table (6.2)1, such as all three names (or parts of them), DoB, sex, date and place of disappearance.

<sup>68</sup> Prior to the publication of version 4 of the ICRC list families had the opportunity to register missing relatives that were assumed not to have survived, as dead.

<sup>69</sup> The consolidated list includes 19,692 persons missing from all of BH, where 6,980 records are found on both lists (ICRC and PHR), with 12,423 on the ICRC list only, and 289 found on the PHR list only.

new records from subsequent ICRC updates were matched with the 1991 Census by re-using several criteria in Table (6.2)1. The already existing matches were moved from update "A" to "B" through links created with the BAZ numbers. Note as well that we did not necessarily re-use all the 71 criteria in order to obtain a satisfactory matching rate for the new records. Usually, fewer criteria were enough to achieve a matching level of approximately 80% for new records. We concentrated on using the most efficient criteria, as seen in Table (6.2)1.

By applying this procedure we were able to match fully 87% of the 2005 OTP list of the Srebrenica missing with the 1991 Population Census in Bosnia and Herzegovina.

### **ANNEX 6.3 MATCHING OF THE 2005 OTP LIST OF SREBRENICA MISSING WITH THE VOTERS REGISTERS AND OTHER SOURCES ON SURVIVORS**

In our search for Srebrenica survivors we systematically applied several approaches:

- ICRC cases of missing persons confirmed alive were excluded from the OTP lists of Srebrenica missing.
- Cases of missing persons from the OTP list of Srebrenica missing that were found in OTP sources on survivors, such as the Voters Registers of 1997-98 and 2000, internally displaced persons and refugees registered in Bosnia and Herzegovina (DDPR), and any other list of "Srebrenica refugees", were also excluded.
- Additionally, any indication of Srebrenica survivors that came to our attention from any document, data source, press report, book, report and witness recollection (be it a statement or testimony of the person) brought to our attention by others (including both the Prosecution and the Defence) were always checked one by one and excluded if survival was confirmed.

The work was done by matching, or searching, in the data sources on survivors. Three matching/searching methods were used:

- Direct searching: searching for potential survivors one by one in OTP sources on survivors (Voters Registers and DDPR)
- Direct matching: matching the entire list of Srebrenica missing with the entire source on survivors (Voters Registers and DDPR)
- Indirect matching: Firstly, matching the entire 1991 Population Census with each of the entire Voters Registers of 1997-98 and 2000, and with DDPR. Secondly, matching the OTP list of Srebrenica missing with the 1991 Census. For the records of the missing that have been successfully matched with the 1991 Census, we reviewed whether or not any surviving voters were reported in the Voters Registers and DDPR. Voter records matched in this way (i.e. indirectly) were considered to be potential survivors.

Whereas searching for records one by one and direct matching are straightforward as they have to be based on descriptive criteria as those in Table (6.2)<sup>1</sup>, indirect matching is different and needs some additional explanation.

In order to understand indirect matching, the importance of the 1991 Census in our information system on victims of the war of Bosnia and Herzegovina needs to be explained. The Census is a central reference point for all other sources, Voters Registers, DDPR, ICRC lists of missing, ICMP identification records, RS and FBH DEM-2 databases on known deaths, military records (ABiH, VRS and HVO), etc. The Census has been linked with all these sources and any record matched with the Census is marked as such. In this way, an overview of links is available between the Census and all other sources. Through the overview, any piece of information from the Census can be associated and integrated with a corresponding record from a given source. For instance, father's name reported in the Census but not in the Voters Registers can be transferred into the voters records that have been matched with the Census. Or the 1991 place of residence reported in the Census can be integrated with the matched voter records and compared with their post-war place of residence.

The central place of the Census has a fundamental importance for matching Srebrenica missing persons' records with records of survivors. Indirect matching plays a crucial role in this regard. This is because the matching of the 1991 Census with the Voters Registers have been done mainly through the personal identification number JMBG available from both sources. As the Voters Registers include a selection of data items from the 1991 Census, such as JMBG, first and family name, sex and date of birth, it is fairly easy to link these two data sets with each other. As a matter of fact, although the JMBG was incorrect and/or incomplete for some individuals, if it was identical in the 1991 Census and Voters Registers, a link could nevertheless be created. We have been careful, however, not to use the JMBG only as some JMBGs may have been misused by the voters.

In the matching process we used additional data items together with the JMBG (or parts of it) to link the 1991 Census with the Voters Registers. For example, the two first matches of the Census with the consolidated Voters Register 1997-98 were based on:

- Identity of first name, last name, DOB, MB, and IDQ=5<sup>70</sup> (1,151,559 matches)
- Identity of (first name OR last name), DOB, MB, Sex, IDQ=5 (404,662 matches)

Thus, in a very short time, the two criteria brought us about 1.5 million good matches out of the total 2.7 million of consolidated Voters Register 1997-98. A number of other matching criteria were used as well, as for example:

- First name, Last name, DOB, IDQ>2 (409,137 matches)

We have continued to match the 1991 Population Census with the Voters Registers until mid 2003, trying to match as many records as possible and using both the JMBG-based and descriptive criteria. Modifications of the criteria in Table (6.2)1 were used. Visual checks were always done whenever the criteria were broad.

All in all, approximately 80% of records from the Voters Registers were matched with the 1991 Census. These are highly reliable matches of survivors, and all of them can be compared with the records of Srebrenica missing persons, i.e. the 87 percent of the Srebrenica records that were linked with Census. In the 2005 OTP of list of missing persons 87% of cases were matched with the Census. The overlap of the 87% of matched Srebrenica records with the Voters Registers (any of them) and with DDRP is in total 27 cases (2005 report, Table 2, p. 17).

<sup>70</sup> The IDQ parameter is a measure of the quality and completeness of JMBGs reported in the 1991 Census, in particular the correctness of a person's date of birth and sex. The IDQ ranges from 1 to 5:

IDQ value	Criteria
1	DOB only contains a valid date, but not year.
2	DOB contains a valid year, but no date.
3	DOB is complete and valid, MB is not present or invalid.
4	DOB is complete, and MB is present, but MB is not consistent with the sex of the person.
5	DOB and MB is valid, and consistent with sex.

Values of "3" and "5" are very common as most persons in the Census and in the Voters Registers have dates of birth but often lack MB. In the ICRC list of missing persons, many records lack date of birth, but include year of birth. A few records in the Census have an IDQ score of 4, meaning that their JMBG (DOB and MB concatenated in that order) is correct according to the check digit, but that the JMB is inconsistent with the sex.

For the 2009 OTP Srebrenica report, matching of the OTP list of missing with data on survivors was done in several ways:

- (a) matches obtained for the 2000 OTP list were accepted and moved to the 2009 list
- (b) matches obtained for the 2005 OTP list were accepted and moved to the 2009 report
- (c) an additional search for survivors was completed for the new 29 records from the ICRC List of Srebrenica missing of October 2008, using the same criteria and sources as in 2005
- (d) an additional search for survivors was made among the 1997 records of “Srebrenica refugees”
- (e) any new survivors communicated to us through witness testimonies, press reports or any other related evidence were checked in the DU sources on survivors.

We summarize these steps below.

Re (a):

In the 2000 OTP report, the ICRC and PHR lists of missing persons were compared with the 1997 and 1998 Voters lists, finding a total of *nine* Srebrenica-related matches.<sup>71</sup> The identities of these nine persons have been checked with the 1991 Census for Eastern Bosnia.<sup>72</sup> We are convinced that the matches are matches of the same people and not a mix-up of persons with the same name and identical or similar date of birth.<sup>73</sup>

Since dead people cannot register to vote, these matches imply that the nine persons are either wrongly registered as missing, or that their identities have been misused when registering to vote. Another possibility is that their names should have been taken off the list but have not been so, for miscellaneous reasons. The survival of some people may not have been reported to ICRC, for example, because they do not want their survivorship to be disclosed. Six of the nine persons were reported independently *both* to ICRC and PHR, decreasing the likelihood that the inconsistencies are due to fraudulent registration of missing persons.<sup>74</sup>

In any case, the number of such inconsistencies is very small, only 0.1 percent of the approximately 7,500 missing persons. This indicates that there cannot have been any large-scale campaign of registering living persons as missing.

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<sup>71</sup> The comparison was done separately with three different combinations of data sets, including data for all of Bosnia and Herzegovina (BH): ICRC 3 and Voters Register 1997; ICRC 4 and Voters Register 1998 (done by OSCE Sarajevo); and PHR AMDB and Voters Register 1998.

<sup>72</sup> A special census file for Eastern Bosnia was compiled for this purpose, including the municipalities of Bratunac, Han Pijesak, Rogatica, Šekovići, Srebrenica, Vlasenica and Zvornik.

<sup>73</sup> We found four additional genuine matches of persons disappearing in 1992 (2 from Bratunac, 1 from Srebrenica, and 1 from Zvornik). We also investigated thoroughly the identities of three additional matches, which revealed that each pair of matched records represented *two different* persons. We found, for example, that there were two persons with identical first names, last names and dates of birth, but different father's names, and another example of two persons having the same first names, surnames and father's names, but with different dates of birth and ID numbers.

<sup>74</sup> Four of the nine have the same family name, Gabeljić, and registered to vote, surprisingly, in Serbia (Šabac). Of the other five, two lived in Tuzla, one in Srebrenik, one in Germany and one in Austria when they registered to vote.

Re (b)

In order to make sure that no survivors were included in the 2005 OTP list, a search for possible survivors was conducted. This was achieved by two approaches:

1. Records marked as possible survivors by OTP in 2000 and consequently excluded from the 2000 OTP list, were checked to find out if they were still registered in the 2005 OTP list.
2. The 2005 OTP records were checked against the Voters Registers (1997, 1998 and 2000) and against the BH Database of Displaced Persons and Refugees (2000).

The results of this exercise are reported in Table (6.3)1 below.

**Table (6.3)1. Matches between the 2005 OTP List of Missing Persons Related to the Fall of Srebrenica and Post-War Sources on the Surviving Population**

Source on the Post-War Surviving Population	Included in the 2005 OTP list				Excluded Still missing	Total
	Still ing	miss-	Confirmed dead	Info about death		
Voters 1997-98 (only)	7		2			9
Voters 1997-98 & Voters 2000 & DDPR 2000			1		5	6
Voters 1997-98 & Voters 2000			1		5	6
Voters 2000 (only)			1			1
DDPR (only)			2	1	2	5
Total	7		7	1	12	27

Abbreviations: DDPR: Database of Displaced Persons and Refugees, Voters: Voters Register

When compiling the 2000 OTP list, the ICRC and PHR lists of missing persons were compared with the 1997 and 1998 Voters lists, finding a total of 9 Srebrenica-related matches.<sup>75</sup> The identities of these 9 persons have been checked with the 1991 Census for Eastern Bosnia.<sup>76</sup> We are convinced that the matches are matches of the same people and not a mix-up of persons with the same name and identical or similar date of birth.<sup>77</sup> Eight out of those 9 records can still be found in the 2005 OTP list of missing and dead from Srebrenica, i.e. in the first selection of Srebrenica-relevant records from the 2005 ICRC list, with the same BAZ

<sup>75</sup> The comparison was done separately with three different combinations of data sets, including data for all of Bosnia and Herzegovina (BH): ICRC 3 and Voters Register 1997; ICRC 4 and Voters Register 1998 (done by OSCE Sarajevo); and PHR AMDB and Voters Register 1998.

<sup>76</sup> A special census file for Eastern Bosnia was compiled for this purpose, including the municipalities of Bratunac, Han Pijesak, Rogatica, Šekovići, Srebrenica, Vlasenica and Zvornik.

<sup>77</sup> We found four additional genuine matches of persons disappearing in 1992 (2 from Bratunac, 1 from Srebrenica, and 1 from Zvornik). We also investigated thoroughly the identities of three additional matches, which revealed that each pair of matched records represented two *different* persons. We found, for example, that there were two persons with identical first names, last names and dates of birth, but different father's names, and another example of two persons having the same first names, surnames and father's names, but with different dates of birth and ID numbers.

numbers. However, only 3 of the 9 possible survivors could be found on the 2000 Voters Register, possibly indicating that the remaining 6 were not survivors after all, but misuse of missing persons' identities to register to vote or being an IDP, deliberate or not.

The increase in the number of possible survivors from 9 in 2000 to 27 in 2005 is due to improved matching methodology, improved data quality, and an increase in the matching rate of the Voters Registers with the 1991 Census achieved in the years after 2000. We have, e.g., corrected the misspelling of a large number of names in the 1991 Census, and the ICRC has improved the quality of its missing list considerably. For example, the proportion of records with full date of birth has increased from 65.8% in the ICRC 1997-98 list to 71.2% in the 2005 list.

Of the 27 matches on the 2005 OTP list of missing and dead persons related to Srebrenica with the post-war lists of survivors (Table (6.3)1), 8 matches represent persons that are recorded by the ICRC as confirmed deaths, i.e. the body has been identified (7 cases), or is believed to be dead based on information about the body from family members (1 case). The very same 8 matches are also seen among voters or displaced persons. This shows that the reliability of the post-war lists is not perfect. In particular, it strengthens our suspicion that some or all of the matches of the missing list with lists of survivors may be due to errors, intentional or not, in the post-war lists - rather than errors in the missing lists.<sup>78</sup>

However, to be on the safe side, we decided to exclude some of these 27 potential survivors from the 2005 OTP list of missing and dead persons, while others will remain. We keep the 7 missing persons who only appeared in the 1997-98 Voters Register but not in the more recent Voters list or in the database of displaced persons and refugees (DDPR-2000). These matches are most likely the result of errors or fraud in the registration to vote. We also, quite obviously, include the 8 persons recorded by the ICRC as being dead. We exclude, however, the 12 persons who have been matched with the 2000 Voters list and/or the DDPR-2000 list. We think, though, that the missing persons found in the DDPR are highly questionable since 3 of these 5 persons are dead, according to ICRC.

Thus, we conclude that of the 27 matches of the ICRC 2005 missing list with the three post-war lists of survivors, 15 can be quite safely regarded as missing while 12 should be excluded from our list of dead and missing. This does not mean that we are convinced that these persons are survivors. On the contrary, we think that it is more likely that all or most of them are wrongly registered as voters or displaced persons, rather than being wrongly registered as missing. Only further investigation may clarify this. The 12 (excluded) names are listed in an addendum to the 2005 OTP list of missing that is available with this report.

In any case, the number of such inconsistencies is very small compared to the total number of the 7,661 missing persons. This indicates that there cannot have been any large-scale campaign of registering living persons as missing.

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<sup>78</sup> Table (6.3)1 also includes the 9 matches of missing persons with the Voters list that we found previously and excluded from the OTP 2000 list of missing and dead persons. Analysis of more recent data sources revealed that of these 9 matches, one is dead according to ICRC, 3 are still on the Voters list (2000 version), whereas 5 cannot be found in any other post-war list available to us. The appearance of the dead person on the Voters lists 1997-1998 is most probably a case of error or fraud in the registration to vote.

Re (c)

The additional 29 records were searched one by one, firstly in the 1991 Census (all but one confirmed), and secondly (indirectly and directly) in the Voters Registers 1997-98 and 2000, DDPR, and the 1997 “Srebrenica refugees” records. No survivors were found in any of these data sources (Table (6.3)2).

**Table (6.3)2 Overview of 30 ICRC Records Non-Overlapping with the 2005 OTP List of Missing**

ICRC NO	First Name	FATHER'S NAME	Last Name	SEX	DoB	PoB	DoDis	PoDis	MoDis	ICRC STATUS	ICRC Table	ICMP Site Name (Nov2008)	ICMP Protocol (Nov 2008)	Census Match
BAS-001140-04	SEFIK	MUJO	GUTIC		--.05.1967		11.07.1995	FOREST (SUMA)	SREBRENICA	Conf. dead	5			yes
BAS-002860-01	MEHMED	MEHO	BABAJIC	M	---.1936	GLOGOVA	11.05.1995	POTOCARI	SREBRENICA	Identified	2	Kamenica	908707	yes
BAS-003451-01	NESIB	MEHMED	LOSIC	M	---.1932	RUTENOVICI	--.06.1995	SREBRENICA	SREBRENICA	Info death	1			yes
BAS-004696-01	MUJO	SALIH	SEHOMEROVIC	M	13.10.1917	SREBRENICA	11.07.1995	POTOCARI	SREBRENICA	Still miss.	2			yes
BAS-004714-01	HASIB	HASO	KARIC	M	---.1927	SASE	12.07.1995	POTOCARI	SREBRENICA	Still miss.	2			yes
BAZ-102224-01	OMER	HALIL	HABIBOVIC		---.1965		11.07.1995	FOREST (SUMA)	SREBRENICA	Conf. dead	5			No info
<b>BAZ-103043-02</b>	<b>AJNA</b>	<b>HASAN SUBASIC</b>	<b>SULJIC</b>	<b>F</b>	<b>---.1931</b>	<b>ZVORNIK</b>	<b>--.04.1992</b>	<b>POTOCANI</b>	<b>ZVORNIK</b>	<b>Still miss.</b>	<b>2</b>			<b>yes</b>
BAZ-105097-01	DAHMO	DULAN	ALIC	M	---.1958	GRUJICICI	04.08.1995	VISEGRAD	VISEGRAD	Info death	1			yes
BAZ-107020-01	FADIL	MUJO	ALIC	M	18.10.1965	JAGODNJA	--.08.1995	DRINA RIVER	UNKNOWN	Still miss.	2			yes
BAZ-901140-01	AVDO	MASO	AVDIC		---.1943		12.07.1995	SREBRENICA	SREBRENICA	Identified	5	Kamenica	945807	yes
BAZ-901941-02	VAHDET	SABAN	HODZIC	M	25.01.1968	PROHICI	--.04.1996	OLOVO	OLOVO	Still miss.	2			yes
BAZ-903806-02	ISMET	BEGO	DURAKOVIC	M	17.11.1944	LUKA	--.04.1996	BATKOVIC	BATKOVIC	Identified	2	Kamenica	1111008	yes
BAZ-905054-02	NEDZAD	ABDULAH	SULJIC	M	--.06.1967	PUSMULICI	05.12.1995	PADINSKA SKELA	KRNJACA	Still miss.	2			yes
BAZ-905258-04	HAZIM	NURKO	SULEJMANOVIC	M	---.1953	LUKE	05.08.1995	PRELOVO	VISEGRAD	Identified	2	Blace-Visegrad	11029/08	yes
BAZ-910088-01	IBRAHIM	MUSTAFA	SMAILJAGIC	M	10.06.1966	OSMACE	05.01.1996	SUSICA	VLAZENICA	Still miss.	2			yes
BAZ-910653-01	ZEKERIJAH	RAGIB	SALIHOVIC	M	31.08.1978	OSAMSKO	27.01.1996	SUSICA	VLAZENICA	Still miss.	2			yes
BAZ-910653-02	REDZO	MEHO	OMEROVIC	M	---.1957	POBUDE	27.01.1996	SUSICA	VLAZENICA	Identified	2	Liplje	688205	yes
BAZ-910673-01	MUMIN	SALKO	MURATOVIC	M	12.12.1965	POBUDE	11.07.1995	BULJIM	BRATUNAC	Identified	2	Kamenica	11614/08	yes
BAZ-912120-01	IBRAHIM	AHMO	ALIC	M	15.08.1957	POLJAK	--.07.1995	TARA	TARA MT.	Identified	2	Cancari	4908/04	yes
BAZ-912689-02	BAJRO	ISMET	RAHMIC	M	10.07.1975	SIKIRIC	28.03.1996	KAMENICA	ZVORNIK	Info death	1			yes
BAZ-912949-01	SAHID	TAIB	BRDAREVIC	M	16.01.1969	MILACEVICI	--.08.1995	LOZNICA	LOZNICA	Still miss.	2			yes
BAZ-914440-05	SEMIR	KADRJA	HASANOVIC	M	21.08.1975	PROHICI	12.07.1995	POTOCARI	SREBRENICA	Still miss.	2			yes
BAZ-914516-02	EDIN	TAHMAZ	PEJMANOVIC	M	---.1975	POLJAK	--.09.1995	DRINA RIVER	UNKNOWN	Still miss.	2			yes
BAZ-914936-01	MEVLID	MEHO	SALIHOVIC	M	03.01.1968	SKELANI	--.08.1995	DRINA RIVER	UNKNOWN	Still miss.	2			yes
BAZ-915213-03	SUKRIJA	ALJA	ALIC	M	12.06.1938	JAGODNJA	13.07.1995	POTOCARI	SREBRENICA	Still miss.	2			yes
BAZ-916826-01	SEJFUDIN	RIFET	SMAILJOVIC		06.11.1958		--.01.1996	VLAZENICA	VLAZENICA	Conf. dead	5			yes
BAZ-946861-01	HILMO	ISMET	MANDZIC	M	08.03.1972	KRUSEV DO	13.08.1995	OLOVSKE LUKE	OLOVO	Info death	1			yes
BAZ-946862-01	LATIF	ARIF	MANDZIC	M	05.09.1964	KRUSEV DO	13.07.1995	OLOVO	OLOVO	Still miss.	2			yes
BAZ-965200-01	FAHRUDIN	SAFET	PARIC	M	23.04.1960	SREBRENICA	11.07.1995	DRINA RIVER	UNKNOWN	Identified	2	Jasikovaca	5265/05	yes
BAZ-965605-01	SAKIB	BE CIR	GLADOVIC	M	13.07.1968	KRUSEV DO	30.07.1995	OLOVO	OLOVO	Still miss.	2			yes

Note that we checked all new ICRC records, including one record that is not going to be part of the OTP list if missing; this record is bolded in Table (6.3)2 (BAZ-103043-02). The reason for exclusion of this person is the date of disappearance reported by ICRC, April 1992. It is possible that the person was reported missing more than one time, e.g. the first time in 1992 and later in 1995 but that only the first disappearance was reported. It is also possible that the

DoDis is a typo. At this stage, we are unable to check this information and, thus, have to exclude this case from the OTP list of missing.

Re (d)

A new search was completed of the 2005 OTP list and 30 new ICRC records in the “Srebrenica refugees” records. As a result of this search 102 potential survivors were identified; their names and other details are listed in Table (6.3)3. All these names come from the 2005 OTP list of Srebrenica missing and not from the list of 29 new ICRC records.

**Table (6.3)3 The List of 102 Potential Srebrenica Survivors Reported in “Srebrenica Refugees” Records<sup>79</sup>**

DU ID	Last Name	First Name	Father's	DoB	YoB	MoB	Year of Displacement	Old MoR	New MoR	BH: Cnt	BH: status	BH: exh site	BH: DoB	BH: BAZ	OTP Missing: BAZ	ICMP Identified
1	ADEMOVIC	HASAN	ATIF		1945		SREBRENICA		LUKAVAC	1	exhumed and identified	Lipje, Zvornik	1202943	BAZ-910329-02	BAZ-910329-02	
2	ADEMOVIC	MESUD	SULJO		1964		SREBRENICA		ZIVINICE	2	exhumed and identified	Ravnica, Bratunac	1506965	BAZ-906757-02	BAZ-906757-02	
3	ALIC	MUJO	HASIB	2906969	1969			95	VISEGRAD	3	exhumed and identified	Krajinovci, Bratunac	0605966	BAZ-900841-02	BAZ-900841-02	yes
4	ALIC	SEJDIN	SEJDALIJA		1972		BRATUNAC		ZIVINICE	4	exhumed and identified	Krajinovci, Bratunac	2803972	BAZ-912045-01	BAZ-912045-01	yes
5	ALIC	RAMIZ	SULJO		1942		BRATUNAC		ZIVINICE	5	exhumed and identified	Cancani, Zvornik	1405942	BAZ-900594-01	BAZ-900594-01	yes
6	Alihodzic	Amir	Saban		1979			Srebrenica	Tuzla	6	exhumed and identified	Kozluk	1801979	BAZ-106995-03	BAZ-106995-03	
7	AVDIC	RAMO	HASAN		1950		SREBRENICA		ZIVINICE	7	exhumed and identified	Cancani, Zvornik	0306950	BAZ-903573-01	BAZ-903573-01	yes
8	BEGOVIC	AVDIJA	HABIBA	101970	1970			95	BRATUNAC	8	exhumed and identified	Glogova 1, Bratunac	1304970	BAZ-902127-02	BAZ-902127-02	
9	BEGANOVIC	MERSEDA	MEHO		1976		SREBRENICA		LUKAVAC	9	exhumed and identified	Ravnica, Bratunac	2307976	BAZ-901215-01	BAZ-901215-01	yes
10	Dzanic	Latif	Atif		1960		Srebrenica		Srebrenik	10	exhumed and identified	Budak, Srebrenica	1209960	BAZ-104972-01	BAZ-104972-01	yes
11	EFENDIC	MEVLUDIN	HUSEIN		1969		SREBRENICA		ZIVINICE	11	exhumed and identified	Biljeva, Bratunac	1806969	BAZ-904746-02	BAZ-904746-02	yes
12	HAJDAREVIC	AZMIR	ZEJNIL	1009977	1977			95	BRATUNAC	12	exhumed and identified	Zeleni Jadar	2609977	BAZ-903832-01	BAZ-903832-01	yes
13	Halilovic	Edhem	Asim		1953			Srebrenica	Tuzla	13	exhumed and identified	Zeleni Jadar	1610952	BAZ-906875-02	BAZ-906875-02	
14	Halilovic	Mesud	Asim		1960			Srebrenica	Tuzla	14	exhumed and identified	Palez, Srebrenica	1506960	BAZ-911869-01	BAZ-911869-01	yes
15	Halilovic	Asim	Juso		1927			Srebrenica	Tuzla	15	exhumed and identified	Lazete, Zvornik	0312928	BAZ-906857-01	BAZ-906857-01	yes
16	Halilovic	Saban	Mujo		1947		Vlasenica		Vlasenica	16	exhumed and identified	Banovci	1012947	BAZ-914922-01	BAZ-914922-01	yes
17	HANDZIC	KAHUA	AVDO		1940		SREBRENICA		ZIVINICE	17	exhumed and identified	Cancani, Zvornik	1710640	BAZ-910019-01	BAZ-910019-01	
18	Jusupovic	Muharem	Mustafa		1933		Bratunac		Bratunac	18	exhumed and identified	Cancani, Zvornik	2104933	BAZ-903314-01	BAZ-903314-01	
19	Kardasevic	Munib	Ramo		1971		Srebrenica		Srebrenica	19	exhumed and identified	Glogova, Bratunac	1003971	BAZ-905724-01	BAZ-905724-01	yes
20	Mujanovic	Amir	Mustafa		1946		Bratunac		Bratunac	20	exhumed and identified	Cancani, Zvornik	2007946	BAS-001474-01	BAS-001474-01	yes
21	MUJGINOVIC	ADEM	MUHAREM		1962		BRATUNAC		ZIVINICE	21	exhumed and identified	Lazete, Zvornik	0709962	BAZ-104942-01	BAZ-104942-01	
22	Music	Mustafa	Musa		1940		Vlasenica		Vlasenica	22	exhumed and identified	Lazete, Zvornik	1202943	BAZ-109869-01	BAZ-109869-01	
23	Music	Muhidin	Mustafa		1973		Vlasenica		Vlasenica	23	exhumed and identified	Skugrići	2210972	PHR-000029-00	PHR-000029-00	
24	MUSTAFIC	SAMIR	SALKO		1978		VLASENICA		ZIVINICE	24	exhumed and identified	Pobude, Bratunac	0908978	BAZ-105350-01	BAZ-105350-01	yes
25	OMEROVIC	AMIR	OMER	1303974	1974			95	BRATUNAC	25	exhumed and identified	Hodzici, Zvornik	2803974	BAZ-900781-01	BAZ-900781-01	yes
26	OMEROVIC	ALMIR	SALIH		1972		VLASENICA		ZIVINICE	26	exhumed and identified	Cancani, Zvornik	1501972	BAZ-946925-01	BAZ-946925-01	
27	Osmanovic	Muaz	Mustafa		1966			Srebrenica	Tuzla	27	exhumed and identified	Cancani, Zvornik	1306966	BAZ-901113-01	BAZ-901113-01	yes
28	RAMIC	FAHRUDIN	HIMZO		1975		SREBRENICA		ZIVINICE	28	exhumed and identified	Kamenicka Brdo - Pobude, Bratunac	1904975	BAZ-105275-02	BAZ-105275-02	
29	SALHOVIC	ALIJA	NEZIR		1977		SREBRENICA		ZIVINICE	29	exhumed and identified	Nova Kasaba	1006975	BAZ-912111-01	BAZ-912111-01	
30	SALHOVIC	SULJO	MUJO		1935		SREBRENICA		ZIVINICE	30	exhumed and identified	Lazete, Zvornik	3001935	BAZ-912387-01	BAZ-912387-01	
31	Sejmenovic	Hasan	Alija		1929		Vlasenica		Vlasenica	31	exhumed and identified	Kozluk, Zvornik	2103930	BAZ-900583-01	BAZ-900583-01	
32	Smailjovic	Jusuf	Osman		1955			Srebrenica	Tuzla	32	exhumed and identified	Hemljasi, Kalesija	0108954	BAZ-904295-04	BAZ-904295-04	
33	SULEJMANOVIC	HASIB	SABAN	1107920	1920			95	ZVORNIK	33	exhumed and identified	Kozluk	0204920	BAZ-901175-01	BAZ-901175-01	yes
34	Suljic	Saliko	Ramo		1945		Srebrenica		Srebrenica	34	exhumed and identified	Lazete, Zvornik	0101945	BAZ-903321-01	BAZ-903321-01	yes
35	Sahmanovic	Izeta	Nezir		1975		Srebrenica		Zvinice	35	exhumed and identified	Kozluk	0401975	BAZ-904176-01	BAZ-904176-01	yes
36	Sehic	Salim	Salih		1976		Srebrenica		Srebrenica	36	exhumed and identified	Cancani, Zvornik	2310976	BAZ-901272-01	BAZ-901272-01	yes
37	TURGUNOVIC	MUJO	JUSO		1968		SREBRENICA		ZIVINICE	37	exhumed and identified	Hodzici, Zvornik	0906968	BAZ-904132-01	BAZ-904132-01	yes

<sup>79</sup> Indications provided by the BH authorities are labelled with “BH” in Table (6.3)3. For example, “BH:cnt” is the record (or in other words, case) number from the BH original response. The “BH:status” relates to the category of victim. Three categories were distinguished by the BH authorities: “exhumed and identified”, “still missing” and “went to the free territory”.

The numbering of cases by the BH authorities (“BH:cnt”) was consecutive (1, 2, 3, ...) but independent in each list. Thus, in Table (6.3)3 there will be triplicates of values from “1” through “9” as each of the three lists has these values, further duplicated values of “10” through “37”, and single values of “38” through “56”.

**Table (6.3)3 The List of 102 Potential Srebrenica Survivors Reported in “Srebrenica refugees” Records - Continued**

DU ID	Last Name	First Name	Father's	DoB	YoB	MoB	Year of Displacement	Old MoR	New MoR	BH: Cnt	BH: status	BH: exh site	BH: DoB	BH: BAZ	OTP Missing: BAZ	ICMP Identifier
38	AJSIC	IZETA	ISMET		1971	SREBRENICA			LUKAVAC	1	still missing		0303971	BAZ-905490-02	BAZ-905490-02	yes
39	Ademovic	Abid	Ramo		1938	Zvornik		Zvornik	Zvinice	2	still missing		0308938	BAZ-911973-01	BAZ-911973-01	
40	Alic	Senahid	Jusuf		1977	Srebrenica		Srebrenica	Kladanj	3	still missing		1306977	BAZ-105262-01	BAZ-105262-01	yes
41	ALIC	HASAN	ALLJA		1936	SREBRENICA			LUKAVAC	4	still missing		0109936	BAZ-110650-01	BAZ-110650-01	
42	ALIC	SEJDALJA	ALLJA		1948	BRATUNAC			ZIVINICE	5	still missing		2303948	BAZ-916793-01	BAZ-916793-01	
43	ALIC	NEZIR	IBRAHIM		1941	SREBRENICA			ZIVINICE	6	still missing		2011941	BAZ-901331-01	BAZ-901331-01	
44	AVDIC	KEMAL	ISMET		1970	BRATUNAC			ZIVINICE	7	still missing		0405971	BAZ-900507-01	BAZ-900507-01	
45	BEGOVIC	NEDZIB	HABIBA	101967	1967		95	ERATUNAC	GRADACAC	8	still missing		0609967	BAZ-902127-01	BAZ-902127-01	
46	Boric	Jasmina	Saban		1979	Vlasenica		Vlasenica	Banovici	9	still missing		1903979	BAZ-240108-02	BAZ-240108-02	
47	Delic	Elvira	Hasib		1979			Srebrenica	Tuzla	10	still missing		1905979	BAZ-903270-01	BAZ-903270-01	yes
48	Dudic	Mehmedalija	Mujo		1963			Srebrenica	Tuzla	11	still missing		0402963	BAZ-904244-01	BAZ-904244-01	
49	Hallovic	Azmir	Asim		1973			Srebrenica	Tuzla	12	still missing		0711972	BAZ-906857-03	BAZ-906857-03	
50	Hallovic	Hanumka	Nazif		1917			Srebrenica	Tuzla	13	still missing		2603918	BAZ-910966-01	BAZ-910966-01	
51	HALILOVIC	RAMIZ	SALIH		1962	SREBRENICA			LUKAVAC	14	still missing		0103962	BAZ-905182-01	BAZ-905182-01	
52	HANDZIC	AZEM	HAKIJA		1968	SREBRENICA			ZIVINICE	15	still missing		0901968	BAZ-910019-02	BAZ-910019-02	yes
53	Hasanovic	Nezir	Saban		1949			Srebrenica	Tuzla	16	still missing		0409949	BAZ-904242-01	BAZ-904242-01	
54	HASANOVIC	ARIFA	HUSEJIN		1944	SREBRENICA			LUKAVAC	17	still missing		0101944	BAZ-916754-01	BAZ-916754-01	yes
55	HASANOVIC	NIHAD	ADIL		1971	ZVORNIK			ZIVINICE	18	still missing		1908971	BAZ-902835-01	BAZ-902835-01	yes
56	HASANOVIC	SALCIN	HUSEJIN		1978	SREBRENICA			ZIVINICE	19	still missing		2006978	BAZ-903903-01	BAZ-903903-01	yes
57	HIRKIC	HUSEJIN	MAHMUT		1949	SREBRENICA			ZIVINICE	20	still missing		0603949	BAZ-902483-02	BAZ-902483-02	
58	HIRKIC	ISMAIL	HUSEJIN		1971	SREBRENICA			ZIVINICE	21	still missing		0203971	BAZ-902483-01	BAZ-902483-01	yes
59	Hodzic	Muris	Mujo		1979			Srebrenica	Tuzla	22	still missing		2007979	BAZ-901142-01	BAZ-901142-01	
60	HUREMOVIC	SAMIR	MESAN		1977	SREBRENICA			ZIVINICE	23	still missing		1908977	BAZ-902923-02	BAZ-902923-02	yes
61	Husejnagic	Redzep	Fehim		1949			Srebrenica	Tuzla	24	still missing		2505949	BAZ-901127-01	BAZ-901127-01	
62	HUSIC	TAHIRA	TAHIR	1005936	1936		92	SREBRENICA	TUZLA	25	still missing		0000936	BAS-002787-01	BAS-002787-01	
63	IBISEVIC	ESMIR	MEHMED		1978	BRATUNAC			ZIVINICE	26	still missing		2101978	BAZ-105842-02	BAZ-105842-02	yes
64	IBRAHIMOVIC	NESIBA	HAKIJA		1970	SREBRENICA			LUKAVAC	27	still missing		0101970	YUB-384727-01	YUB-384727-01	
65	IBRAHIMOVIC	IDRIZ	NURIF		1945	BRATUNAC			ZIVINICE	28	still missing		1508945	BAZ-902289-01	BAZ-902289-01	
66	JUSIC	HAMDJA	JUSO		1975	BRATUNAC			ZIVINICE	29	still missing		1902975	BAZ-904971-01	BAZ-904971-01	
67	KALIC	HASIB	SALKO		1976	SREBRENICA			LUKAVAC	30	still missing		1802976	BAZ-905132-01	BAZ-905132-01	yes
68	Mehmedovic	Hazim	Hasan		1973	Vlasenica		Vlasenica	Srebrenik	31	still missing		0501973	BAZ-907073-02	BAZ-907073-02	yes
69	Mehmedovic	Selim	Hasan		1955	Srebrenica		Srebrenica	Banovici	32	still missing		0303953	BAZ-910492-02	BAZ-910492-02	
70	MEHMEDOVIC	MEHMED	SEMO		1952	SREBRENICA			ZIVINICE	33	still missing		0808952	BAZ-105217-01	BAZ-105217-01	
71	MEHMEDOVIC	IBRO	SULEJMAN		1970	BRATUNAC			ZIVINICE	34	still missing		0308970	BAZ-905674-01	BAZ-905674-01	yes
72	MESANOVIC	ADEM	AVDO		1961	BRATUNAC			ZIVINICE	35	still missing		1210961	BAZ-903457-01	BAZ-903457-01	yes
73	Muharemovic	Sahin	Mujo		1938	Bratunac		Bratunac	Srebrenik	36	still missing		2407948	BAZ-905679-01	BAZ-905679-01	
74	Mujic	Zenudin	Hajrudin		1977			Srebrenica	Tuzla	37	still missing		0608977	BAZ-904827-02	BAZ-904827-02	
75	Mujic	Hajrudin	Mustafa		1948			Srebrenica	Tuzla	38	still missing		2507948	BAZ-904827-01	BAZ-904827-01	
76	Mujic	Elvir	Hajrudin		1972			Srebrenica	Tuzla	39	still missing		2205972	BAZ-904828-01	BAZ-904828-01	
77	Mujic	Sead	Alija		1965	Zvornik		Zvornik	Srebrenik	40	still missing		0507965	BAZ-105422-01	BAZ-105422-01	
78	MUJIC	SUAD	BEKTO		1968	SREBRENICA			ZIVINICE	41	still missing		0601968	BAZ-910018-01	BAZ-910018-01	
79	Mujkic	Almira	Fehim		1974			Srebrenica	Tuzla	42	still missing		1808974	BAZ-914912-01	BAZ-914912-01	yes
80	Mustafic	Fakir	Sejdalka		1978			Srebrenica	Tuzla	43	still missing		1201978	BAZ-905801-01	BAZ-905801-01	
81	Mustafic	Alija	Bekto		1930			Srebrenica	Tuzla	44	still missing		1608930	BAZ-102517-02	BAZ-102517-02	yes
82	MUSTAFIC	RAGIB	RAMO		1929	SREBRENICA			ZIVINICE	45	still missing		1905929	BAZ-911194-02	BAZ-911194-02	
83	Omerovic	Sabit	Suljo		1968	Srebrenica		Srebrenica	Srebrenik	46	still missing		0501970	BAZ-910537-01	BAZ-910537-01	
84	OMEROVIC	MEHMED	HAMED		1971	BRATUNAC			ZIVINICE	47	still missing		0308972	BAZ-910736-01	BAZ-910736-01	
85	OMEROVIC	RAMO	HAMED		1969	BRATUNAC			ZIVINICE	48	still missing		1901968	BAZ-910736-02	BAZ-910736-02	
86	ORLOVIC	MUSTAFA	MUHAREM		1972	BRATUNAC			ZIVINICE	49	still missing		1405972	BAZ-904488-02	BAZ-904488-02	yes
87	RAMIC	HAZIM	HIMZO		1969	SREBRENICA			ZIVINICE	50	still missing		2010969	BAZ-105279-01	BAZ-105279-01	
88	Salihovic	Salko	Bekir		1972	Srebrenica		Srebrenica	Srebrenik	51	still missing		1011971	BAZ-105113-02	BAZ-105113-02	
89	Selimovic	Azmir	Mujo		1976	Srebrenica		Srebrenica	Kladanj	52	still missing		1112976	BAZ-901162-01	BAZ-901162-01	
90	SELIMOVIC	SEID	SELIM		1974	VLASENICA			ZIVINICE	53	still missing		2204972	BAZ-903397-01	BAZ-903397-01	
91	SIRUCIC	ABDULAH	MEHO		1937	SREBRENICA			ZIVINICE	54	still missing		1305937	BAZ-906757-01	BAZ-906757-01	yes
92	SULEJMANOVIC	ASIM	ARIF	605967	1967		95	SREBRENICA	ZENICA	55	still missing		0605967	BAS-001554-01	BAS-001554-01	
93	Zukic	Mustafa	Muharem		1937	Srebrenica		Srebrenica	Zavidovici	56	still missing		0101937	BAS-002583-01	BAS-002583-01	

DU ID	Last Name	First Name	Father's	DoB	YoB	MoB	Year of Displacement	Old MoR	New MoR	BH: Cnt	BH: status	BH: exh site	BH: DoB	BH: BAZ	OTP Missing: BAZ	ICMP Identifier
94	Alic	Osman	Meho		1930	Bratunac		Bratunac	Srebrenik	1	went to the free territory		1709930	BAZ-903787-01	BAZ-903787-01	
95	FERHATOVIC	SEVLUDIN	RAHMAN		1974	VLASENICA			LUKAVAC	2	went to the free territory		1305974	BAZ-905579-03	BAZ-905579-03	
96	HUKIC	MUSKA	SEMSO		1950	SREBRENICA			ZIVINICE	3	went to the free territory		1803950	BAZ-905677-02	BAZ-905677-02	
97	JUSIC	NIHAD	MUJO		1979	SREBRENICA			LUKAVAC	4	went to the free territory		1412978	BAZ-900504-01	BAZ-900504-01	yes
98	KRDZIC	SABIRA	OMER	810975	1975		95	SREBRENICA	TUZLA	5	went to the free territory		0000975	BAZ-912211-02	BAZ-912211-02	yes
99	KRDZIC	IBRAHIM	HASAN		1962	SREBRENICA			ZIVINICE	6	went to the free territory		0901962	BAZ-900807-01	BAZ-900807-01	
100	MEHIC	MEHO	OMER	1001954	1954		92	SREBRENICA	VOGOSCA	7	went to the free territory		1001954	BAZ-906797-01	BAZ-906797-01	yes
101	MUSIC	KIRAM	NEZIR	1808974	1974		95	BRATUNAC	TUZLA	8	went to the free territory		1808974	BAZ-967250-02	BAZ-967250-02	
102	Omerovic	Hasa	Mehmed		1965			Srebrenica	Tuzla	9	went to the free territory		2010965	BAZ-904741-01	BAZ-904741-01	

The list of 102 names was sent to the Ministry of Interior of the Government of Bosnia and Herzegovina with a request to check whether or not there exists evidence regarding their survival or death (RFA 2679).<sup>80</sup> In response to this request we received three lists:<sup>81</sup>

- list of exhumed and identified bodies (37 names)
- list of missing persons (56 persons)
- list of persons of whom it is known they reached the so-called "free territory" (9 persons)

We analyzed these lists and concluded that all but 9 persons out of 102 potential survivors were confirmed dead or missing. In total, eight persons were also confirmed as identified by the ICMP (based on the November 2008 up-date). With regard to the 9 individuals seen in the free territory, three of them are reported as identified by ICMP. Regarding the remaining six, we are unable to further confirm their survival in other sources on survivors (Voters Registers and DDPR). Thus, these six cases must be seen as inconclusive at the present time. In the future we will try to sort them out in subsequent rounds of matching with ICMP records of identified persons.

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<sup>80</sup> The RFA 2679 is registered under ERN 0645-8815-0645-8817 (dated 23 December 2008).

<sup>81</sup> The response of the BH Government to the OTP RFA 2679 is registered under ERN 0645-8818-0645-8829 and is dated 22 January 2009.

## ANNEX 6.4 MATCHING OF THE 2005 OTP LIST OF SREBRENICA MISSING WITH THE MILITARY RECORDS OF ABiH AND OTHER SOURCES ON DEATHS<sup>82</sup>

In this annex we discuss results of the matching of ABiH military records with the 2005 OTP list of Srebrenica missing and with the ICMP records of identified persons as reported in the July 2008 ICMP up-date on Srebrenica victims. In the meantime, a new ICMP up-date on Srebrenica identified became available, i.e. the November 2008 update. We have not re-done the analysis of records on the ABiH soldiers as the numbers obtained from the July 2008 ICMP update are still valid and can be seen as “at least” (or minimum) numbers.

In July 2008, at the request of the POPOVIĆ et al. trial team, the Demographic Unit-OTP analyzed the military records pertaining to the Tuzla region, provided to the OTP by the Ministry of Defence of the Federation of Bosnia and Herzegovina (hereafter called “ABiH records”). The goal of our analysis was to establish whether any military records are reported on the 2005 OTP list of Srebrenica missing (“OTP list”). Secondly, we wanted to measure the overlap between the ABiH military records from Tuzla and all other regions with cases of identified persons from the July 2008 ICMP update (“ICMP identified” or “July 2008 update”).

In our analysis, we concentrated on data from the Tuzla region. We started by establishing a database on ABiH records and cleaning this data from duplicates (13,558 cases; 106 duplicates excluded). We matched this data with the 2005 OTP list (7,661) using independently two approaches.<sup>83</sup>

- **Indirect approach:** We matched ABiH records with the 1991 Census using the JMBG available from both these sources. And further, we transferred these matches from the Census into the 2005 OTP missing persons list by the names & DoBs-based matches that were established earlier by the Demographic Unit (DU) for the 2005 OTP demographic expert report on the Srebrenica missing by Brunborg et al. 3,406 ABiH records were matched.
- **Direct approach:** We matched ABiH records with the OTP list directly using the names- & DoBs-based matching. 4,964 ABiH were matched.

A large number of matches (with the OTP list) obtained independently in each of the two approaches were identical; 3,081. The 3,081 identical overlapping matches came out from the total of 3,086 of all overlapping obtained, thus the consistent overlapping matches comprised 99.8% of all overlapping. **This finding proves a very high consistency of the direct and in-**

<sup>82</sup> References for this annex include:

D000-0613-D000-0619: ABiH records (Lists of Killed ABiH Soldiers and Other Military Personnel)  
 D000-2372-D000-2372: ICMP identified, July 2008 update  
 0501-6180-0501-6209, Exhibit No. P02413: Expert report by Brunborg et al., 16 Nov. 2005  
 0501-5985-0501-6177, Exhibit P02414: Srebrenica Missing – the 2005 OTP list  
 R089-6474-R089-6490, Exhibit No. P02416: Expert report by Brunborg et al., 21 Nov. 2005  
 0626-5765-0626-5781: Expert report by Tabeau and Hetland, 11 Jan. 2008  
 0634-6600-0634-6607: Request for Assistance, from the Office of the Prosecutor, ICTY, to the Ministry of Defence of the Federation of Bosnia and Herzegovina  
 0360-4878-0360-5022: Response to 0634-6600-0634-6607 received from the Federal Ministry of Defence of the Federation of Bosnia and Herzegovina

<sup>83</sup> In each approach, duplicated records and duplicated links were systematically identified and removed. Statistics given here do not include duplicated records or links.

**direct approaches.** We included all consistent (3,081) as final matches. In addition to this, we also accepted two groups of non-overlapping matches: the first obtained only from the JMBG-based and the second only from the names & DoBs-based approaches (320 and 1,878, respectively). This concluded my matching of the ABiH records from the Tuzla region with the OTP list of missing. In total, (after deleting 6 duplicated links related to the integration of direct and indirect matches), 5,273 matches were obtained.

An additional group of matches was obtained for the ABiH records from all regions other than Tuzla. Here, only 313 matches were produced. Many of them were the same as those included in 5,273, but 98 matches were new. **So, the overall total of matches of ABiH records with the OTP list became 5,371.** This comprises about 70% of the OTP list.

Matches of the ICMP list of Srebrenica identified with the 2005 OTP list of Srebrenica missing were produced by the Demographic Unit (DU) just after the July 2008 update arrived at the OTP, using the usual names & DoBs matching approach as described in the demographic expert reports dated 21 November 2005 and 11 January 2008. Overall total of the ABiH records reported by ICMP in their **July 2008 update on the DNA-based identification of Srebrenica victims is 3,437**, which is about 64 % of the military records.<sup>84</sup> An overview of the exhumation sites reported by ICMP for the identified ABiH cases on the 2005 OTP list is attached in Table (6.4)1 at the end of this annex.<sup>85</sup> Table (6.4)1 contains as well the July 2008 – based statistics by site and site type for all identified on the ICMP list, and for the identified missing from the 2005 OTP list.

Table (6.4)1<sup>86</sup> confirms that the percent of the identified ABiH cases in relation to the identified OTP missing is about 70% (exactly: 71% for ICTY sites and 73% for all sites). Secondly, it points out that the number of identified ABiH cases exhumed from the ICTY grave sites (2,686) is much larger than the number of identified ABiH cases from the non-ICTY grave sites (751; the sum of the two gives the overall total of 3,437 identified ABiH cases). Basically, about 78% of all identified ABiH cases were exhumed from the ICTY sites as opposed to 22% from non-ICTY sites.

The next issue we discuss here is the reliability of reporting in the ABiH lists (Tuzla region and all other regions). In the assessment of the Demographic Unit, reporting of cases in ABiH lists is not highly reliable. The lists were made for the post-mortem pension purposes, so attention was predominantly paid to the fact whether or not a given person died. Including cases in these lists was motivated financially and in some cases had nothing to do with the actual being of an army member.<sup>87</sup> Death details were of less importance, e.g. cause of death is poorly reported, for missing persons it is just “missing”, place of death is not reported at all, inconsistencies are seen in the reported date of death when cross-referenced with other sources etc. Moreover, next to the army members, also non-army personnel of the FBH Min-

<sup>84</sup> In the October 2007 update of the ICMP, there were 2,798 cases of military records matched with the identified missing persons. Some 640 ABiH cases have been identified between October 2007 and July 2008.

<sup>85</sup> Category “Other sites” comprises cases that are not yet assigned as ICTY or non-ICTY sites, the latter being “surface” or “related” as classified in the Dean Manning exhumation report of December 2007, and sites other than those on the Manning’s list.

<sup>86</sup> The results in Table (6.3)1 are based on the July 2008 up-date of ICMP on DNA identifications of Srebrenica victims.

<sup>87</sup> This statement is based on my personal communication with several persons in Bosnia and Herzegovina, including prof. Samil Cekic, Mirsad Tokaca, persons from NGOs, and local staff-interpreters with whom I worked in Bosnia.

istry of Defence, police members, and the staff of the production sector associated with the army were occasionally included in these lists as well.<sup>88</sup> The Demographic Unit never used these lists as a source for compiling a list of victims. In few cases, these lists were used by the Demographic Unit for monitoring possible army and police members on victim lists based on other sources.

Having said this, we checked inconsistencies in reporting of date of death/missing (DoD) for the ABiH records matched with the 2005 OTP list of missing persons. We were unable to compare place of death (PoD) for these victims as PoD is unavailable in the ABiH lists.

A total of 220 ABiH records for those matched (5,371) with the OTP list have inconsistent DoD.<sup>89</sup> A complete overview of the 220 inconsistent cases is attached in Table (6.4)2. Of the 220 inconsistent cases:

- 140 have been confirmed as identified and related to Srebrenica grave sites by the ICMP (according to the July 2008 update);
- 127 have been corrected by the FBH Ministry of Defence in 2003 in response to the OTP request for clarification of a number of inconsistent ABiH records identified by DU prior to and in the course of 2003; the corrected DoDs and additionally provided PoDs clearly point to the fact that these were all Srebrenica victims;
- 38 cases out of 220 remain yet undecided as at the present time they are not covered by the DNA identification (ICMP) or clarifications from the Bosnia and Herzegovina Ministry of Defence (BH MD). For 31 cases out of 38, the OTP already requested such a clarification from the BH MD earlier this year and results are expected very soon.

Exhumation grave sites for the 140 identified persons among the 220 inconsistent cases are reviewed in (Table (6.4)3). Yet again, a majority of the identified ABiH inconsistent cases were exhumed from the ICTY sites (118 out of 140 cases; 84 percent). The remaining identified were exhumed from non-ICTY and other sites (22 cases; 16 percent).

In conclusion, the DoD inconsistencies have been examined, explained and corrected for all but 38 out of 220 cases. 31 cases out of 38 already are in the process of clarification. Additional clarification will be requested for the remaining 7 cases. The scale of inconsistent reporting of DoDs is small and Srebrenica missing remain practically unaffected by this problem.

<sup>88</sup> I included all non-army individuals in my analysis presented here. The impact of this is likely small but needs a further investigation.

<sup>89</sup> Inconsistent were all records with DoD prior to July 1995. Cases reported as death/missing from 1 July 1995 to December 1995 are consistent with our criteria for Srebrenica missing persons (comp. the OTP expert report on Srebrenica missing of 16 Nov 2005).

**Table (6.4)1. Overview of DNA Identification Cases by Type and Name of Exhumation Grave Site: All Identified, Identified among the 2005 OTP Missing and among the ABiH Records Matched with the 2005 OTP Missing**

Type of Site	Site Name	All Identified	OTP Missing	ABiH Records	Percent ABiH in OTP Miss
Mass Grave	Branjevo Military Farm	109	98	65	66.3
Mass Grave	Cerska	132	117	88	75.2
Mass Grave	Petkovci Dam	16	14	10	71.4
Mass Grave	Glogova 1	214	195	152	77.9
Mass Grave	Glogova 2	157	142	116	81.7
Mass Grave	Godinjske bare	5	5	2	40.0
Mass Grave	Konjević Polje 1	8	8	7	87.5
Mass Grave	Konjević Polje 2	2	2	2	100.0
Mass Grave	Kozluk	303	273	145	53.1
Mass Grave	Kozluk (surface)	14	14	8	57.1
Mass Grave	Nova Kasaba 1996	31	30	26	86.7
Mass Grave	Nova Kasaba 1999	49	45	37	82.2
Mass Grave	Orahovac 1 (Lazete 1)	107	101	60	59.4
Mass Grave	Orahovac 2 (Lazete 2)	149	141	94	66.7
Mass Grave	Ravnice 1 and Ravnice 2	185	170	129	75.9
Mass Grave	Čančari Road 2	105	90	60	66.7
Mass Grave	Čančari Road 3	114	110	65	59.1
Mass Grave	Čančari Road 5	264	244	174	71.3
Mass Grave	Čančari Road 7	96	89	58	65.2
Mass Grave	Čančari Road 10 (Kamenica 10)	349	309	210	68.0
Mass Grave	Čančari Road 11	131	120	87	72.5
Mass Grave	Čančari Road 12	101	98	66	67.3
Mass Grave	Čančari Road 13	59	55	30	54.5
Mass Grave	Hodžići Road 2 (Snagovo 3)	58	45	31	68.9
Mass Grave	Hodžići Road 3	36	32	28	87.5
Mass Grave	Hodžići Road 4	65	60	43	71.7
Mass Grave	Hodžići Road 5	53	52	28	53.8
Mass Grave	Hodžići Road 6 (Snagovo 1)	59	54	37	68.5
Mass Grave	Hodžići Road 7 (Snagovo 2)	91	78	65	83.3
Mass Grave	Liplje 1	147	138	104	75.4
Mass Grave	Liplje 2	165	143	106	74.1
Mass Grave	Liplje 3	54	47	36	76.6
Mass Grave	Liplje 4	265	225	183	81.3
Mass Grave	Liplje 7	108	92	75	81.5
Mass Grave	Zeleni Jadar 2 (Zeleni Jadar 4)	15	14	11	78.6
Mass Grave	Zeleni Jadar 3 (Zeleni Jadar 1)	27	26	21	80.8
Mass Grave	Zeleni Jadar 4 (Zeleni Jadar 8)	54	50	38	76.0
Mass Grave	Zeleni Jadar 5	156	135	109	80.7
Mass Grave	Zeleni Jadar 6	112	99	80	80.8
Mass Grave	Blječeva 2	72	66	52	78.8
Mass Grave	Blječeva 3	60	53	41	77.4
Mass Grave	Budak 1	54	51	39	76.5
Mass Grave	Budak 2	42	37	26	70.3
Mass Grave	Sandići	18	18	12	66.7
Mass Grave	Bišina	33	32	27	84.4
Mass Grave	Potočari	7	6	4	66.7
Mass Grave	Brezjak	5	5	4	80.0
Mass Grave (mixed remains)	Blječeva 1	43	37	30	81.1
Surface Remains	Baljkovica	10	9	6	66.7
Surface Remains	Corvići	1	1	1	100.0
Surface Remains	Jasikovaca	23	22	19	86.4
Surface Remains	Križevačke Njive	5	3	1	33.3
Surface Remains	Motovo	2	2	1	50.0
Surface Remains	Pobudje	4	4	4	100.0
Surface Remains	Rahunici	27	25	24	96.0
Surface Remains	Svilile	10	9	8	88.9
Surface Remains	Voljeva Glava	8	8	7	87.5
Surface Remains	Vlasenica (Vlasenicka Jelovacka Cesma)	9	9	8	88.9
Surface Remains	Kruševo Dol	1	1	0	0.0
Surface Remains	Prohići	1	1	1	100.0
Surface Remains	Kamenica	2	2	2	100.0
Surface Remains	Križevići	8	8	6	75.0
NA	Surface remains and other Sites	588	536	428	79.9
<b>Total</b>	<b>Total</b>	<b>5198</b>	<b>4705</b>	<b>3437</b>	<b>73.0</b>

Table (6.4)2 The 220 Cases with Inconsistent Date of Death/Disappearance between the 2005 OTP List of Srebrenica Missing and ABiH Records

Last Name (OTP)	First Name (OTP)	FATHER'S NAME (OTP)	DoB (OTP)	DoD Military	DoD Corrected	PoD Corrected	Clarification Requested	ICMP Protocol	ICMP Grave Site (July 2008)
GUTIC	MUJO	ALJO	2906919	2604992			yes		
GUTIC	BERIZ	MUJO	2910951	2604992			yes		
SINANOVIC	ALJO	MUJO	3101935	1001994				3763/04	Kozluk
JAHIC	RAMO	HAKIJA	101946	1001994			yes	1602/03	Other Sites (Kravica)
HASANOVIC	HAKIJA	NEZIR	2103948	1805992				1152/02	Orahovac 2 (Lazete 2)
MALAGIC	MUHAMED	RAMIZ	409972	1001994	12.07.95	Buljim		1935/03	Glogova 2
AVDIC	HAMDIIJA	HAMED	960	2009994			yes		
AVDIC	AVDULAH	SABAN	1306927	1001994			yes		
HASANKOVIC	NIJAZ	ZAIM	2008957	1902993			yes		
MUJIC	IDRIZ	IBRAHIM	1102940	1001994			yes	230/02	Kozluk
AHMETOVIC	MEHMEDALIJA	MUSTAFA	1203956	1808994	12.07.95	put Srebrenica - Tuzla		5080/04	Other Sites (Zvornik)
SALIHVIC	HUSEIN	HUSO	943	1001994			yes		
ALIC	REFIK	SEFIK	905977	1001994	12.07.95	put Srebrenica - Tuzla		1654/03	Glogova 2
HODZIC	MUJO	MUSTAFA	1201971	612993				9721/07	Other Sites (Jagostica-B.Basta)
SELIMOVIC	AHMO	HASIB	948	309992				4813/04	Čančari Road 2
SALCINOVIC	SALIH	CAMIL	1510939	101994			yes	2454/03	Hodžići Road 5
OMEROVIC	SAKIB	SULJO	966	2107993				10651/07	Liplje 4
KANDZETOVIC	OMER	AHMET	968	101994			yes	687/02	Other Sites (Kravica)
JUSIC	HAKIJA	ALAGA	703935	2004993	11.07.95	put Srebrenica - Tuzla		7684/06	Hodžići Road 5
MUSTAFIC	ENEZ	IBRO	1007947	1704995				1940/03	Liplje 2
SELIMOVIC	JUSO	HASO	2007950	1003995			yes		
MUMINOVIC	SABAN	SALKO	963	1001994			yes		
AHMETOVIC	MAHMUT	KARO	402927	101994	12.07.95	Potočari			
ARNAUT	HILMO	RAMO	930	107992			yes	2435/03	Čančari Road 12
DZANIC	RAMIZ	DZANO	946	1001994			yes	8005/06	Hodžići Road 6 (Snagovo 1)
AHMETOVIC	DZEMAIL	DERVIS	801977	1001994	12.07.95	put Srebrenica - Tuzla			
IBRAHIMOVIC	SMAJO	IBRAHIM	102938	1001994	12.07.95	put Srebrenica - Tuzla			
MEHMEDOVIC	SEID	HUSEIN	1611965	106995			yes		
HAJRIC	MEHMED	IDRIZ	1908968	105995			yes	4946/04	Other Sites (Vragolovi)
ISAKOVIC	DZEMO	HAKIJA	1502961	1001994			yes	3238/03	Cerska
HUKIC	SABIT	MUJO	401972	1809993	12.07.95	Konjevic Polje		2279/03	Čančari Road 3
MEMIC	NEDZIB	HUSO	955	1001994	12.07.95	put Srebrenica - Tuzla		6335/05	Liplje 2
HUSIC	IDRIZ	AVDO	906935	1001994			yes	9946/07	Čančari Road 5
OMEROVIC	AMIR	OMER	2803974	1001994	12.07.95	put Srebrenica - Tuzla		4793/04	Hodžići Road 4
ZUHRIC	ESAD	MEHMED	1605973	909994	12.07.95	put Srebrenica - Tuzla			
MASIC	SADIJA	MUSTAFA	1208950	1001994	12.07.95	put Srebrenica - Tuzla			
HASANOVIC	JUSO	DURMO	8976	1505992					
HARBAS	BEGO	JUNUZ	936	1107992			yes	2092/03	Čančari Road 7
OMEROVIC	MUSA	NURKO	106962	1001994			yes	9821/07	Glogova 1
KADRIC	MUJO	ALIJA	945	101994			yes		
SALIHVIC	RAMO	HUSO	510943	1001994			yes	7448/06	Hodžići Road 6 (Snagovo 1)
HASANOVIC	KASIM	RESO	1111944	1001994	12.07.95	put Srebrenica - Tuzla			
CEHIC	NURIJA	ISMET	954	1001994			yes	2330/03	Ravnice 1 and Ravnice 2
MALAGIC	NURIF	RAMO	604943	1001994			yes	202/02	Zeleni Jadar 5
SULEJMANOVIC	KEMAL	ADIL	3974	1001994	12.07.95	Buljim			
OMEROVIC	AMIR	FEHIM	1707969	1001994			yes		
MUJIC	MEHO	RASIM	1007958	2204994	12.07.95	put Srebrenica - Tuzla		9295/07	Branjevo Military Farm
MUMINOVIC	SALKO	SECO	933	1001994	12.07.95	mjesto Buljim		1366/03	Čančari Road 3
DEDIC	SACIR	IBRO	1403940	1001994	12.07.95	put Srebrenica - Tuzla			
RIZVANOVIC	RAMO	ALIJA	1903954	1001994	12.07.95	put Srebrenica - Tuzla		776/02	Rahunici

**Table (6.4)3. Overview of DNA Identification Cases<sup>90</sup> by Type and Name of Exhumation Grave Site: The ABiH Records with Inconsistent Date of Death/Disappearance Matched with the 2005 OTP Missing**

Type of Site	Site Name	ABiH Records
Mass Grave	Branjevo Military Farm	1
Mass Grave	Cerska	2
Mass Grave	Glogova 1	5
Mass Grave	Glogova 2	7
Mass Grave	Kozluk	6
Mass Grave	Orahovac 2 (Lazete 2)	3
Mass Grave	Ravnice 1 and Ravnice 2	4
Mass Grave	Čančari Road 2	5
Mass Grave	Čančari Road 3	5
Mass Grave	Čančari Road 5	11
Mass Grave	Čančari Road 7	7
Mass Grave	Čančari Road 10 (Kamenica 10)	7
Mass Grave	Čančari Road 11	8
Mass Grave	Čančari Road 12	3
Mass Grave	Čančari Road 13	1
Mass Grave	Hodžići Road 2 (Snagovo 3)	2
Mass Grave	Hodžići Road 4	3
Mass Grave	Hodžići Road 5	4
Mass Grave	Hodžići Road 6 (Snagovo 1)	5
Mass Grave	Hodžići Road 7 (Snagovo 2)	4
Mass Grave	Liplje 1	2
Mass Grave	Liplje 2	7
Mass Grave	Liplje 4	4
Mass Grave	Liplje 7	4
Mass Grave	Zeleni Jadar 4 (Zeleni Jadar 8)	1
Mass Grave	Zeleni Jadar 5	6
Mass Grave	Zeleni Jadar 6	1
Mass Grave	Blječeva 2	2
Mass Grave	Blječeva 3	3
Surface Remains	Rahunici	1
Surface Remains	Vlasenica (Vlasenicka Jelovacka Cesma)	1
NA	Other Sites	15
<b>Total</b>	<b>Total</b>	<b>140</b>

<sup>90</sup> Based on the July 2008 up-date of ICMP on DNA identifications of Srebrenica victims.

## ANNEX 6.5 MATCHING OF THE NOVEMBER 2008 SREBRENICA UPDATE OF ICMP WITH THE PREVIOUS ONES

### Summary

In November 2008 the OTP received an update from the ICMP concerning DNA identifications of victims related to the fall of Srebrenica. The update is called "LIST OF DNA MATCHING REPORTS - (from November 2001 to November 2008) - Srebrenica Related Only" and is dated 24 November 2008. This is referred to in the following as the ICMP Srebrenica November 2008 update, or, simply the November 2008 update.

The November 2008 update contains 10,066 records of matched bone-sample profiles, including both main cases and re-associations; 1,107 records were marked as new records since the previous update. 5,525 records are marked as "Main Case" in the original data (354 marked as new).

A number of minor issues, regarding reported details, were addressed to ICMP and clarifications were received from ICMP. This included one duplicated main case, which resulted in one main case record being excluded. The corrected number of main cases is thus 5,524, and the corrected number of cases in total (main cases plus re-associations) is 10,065.

In addition to the records marked as main cases, a further 31 records were marked as re-associations and "main case in process". These 31 cases can be added to the already marked main cases 5,524, as they concern DNA profiles that are unique compared to all other main cases. The number of identifications to be considered, is therefore 5,555 (5524+31).

All records in the July 2008 update were matched with the corresponding record in the November 2008 update.

Of the 5,555 cases considered main cases for our purposes, 5,053 have been conclusively matched with the 2005 OTP list of missing and dead from Srebrenica (the 2005 OTP list), and 8 cases have been matched with the records added from the Srebrenica-related update received from ICRC in October 2008. A further 281 main cases have been marked as possible matches, that is while we can not say conclusively that these have been matched with the 2005 OTP list, there is also insufficient grounds to conclude that they have not been matched with the 2005 OTP list. The remaining 213 records can reasonably be considered new and additional names to the 2005 OTP list, as they have conclusively not been matched with the 2005 OTP list.

### Importing and processing

The data from ICMP was, as previous updates, received in the form of an Excel spreadsheet. The formatting was the same as previous updates. The spreadsheet was imported into an Access database.

After importing and establishing an Access database, the new update was linked to the previous update. In theory, all records should be uniquely linkable between updates on protocol number and case id; this holds for the majority of cases. For a few cases, however, this may not be enough, as there may have been corrections in the protocol number (sometimes DNA reports are resubmitted with a new protocol number), or sometimes there may be minor dif-

ferences in the presentation of case labels (i.e. an extra space inserted between parts of the label).

Initially, all but two records from the July 2008 update were found in the November 2008 update. The remaining two records (one main case and one re-association of that main case; protocol number 314/02) had the same protocol number, case ID, and ID ICMP in both updates, but the reported names were different. ICMP clarified the issue (see below for further discussion), and after corrections, all records from the July update were found linked to the November update, making it easy to move information about previous matching with ICRC to the new update.

For further work, it is also necessary to identify all unique DNA profiles. Again, in theory, this should be easy, as all main cases are unique DNA profiles (one protocol can only cover one DNA profile, and one DNA profile only ever gets one protocol). However, as the ICMP sometimes resubmit report for a second review, there are cases where the main case is not included in the update, but corresponding re-associations are included. These re-associations with, as stated by ICMP, “main case in process”, represent unique DNA profiles in addition to the main cases, but note that there may be more than one re-association for each profile. In order to get to the total number of unique DNA profiles, and therefore the total number of identifications represented, it is necessary to identify all re-associations for which there are no corresponding main cases (all re-associations with comment “main case in process”). From each set of re-associations with the same protocol number, one record is selected to represent the set (i.e. a selected “main case” in the absence of the proper main case). These cases are added to the “proper” main cases. The main cases and selected main cases for re-associations with main case in process are collectively referred to as derived main cases. These are the unique (from a DNA profile perspective) identifications used when later matching with the 2005 OTP list of missing and dead from Srebrenica (the 2005 OTP list).

In the November 2008 update, 67 re-association records were marked as “main case in process”. These represented 31 unique DNA profiles in addition to the 5,524 main cases, for a total of 5,555 derived main cases.

### **Issues and corrections**

While working with the ICMP Srebrenica November 2008 update, some issues with the reporting were discovered. Some of these issues might theoretically have an impact on the work described below, whereas some are very minor issues with no impact. Either way, all issues identified were sent back to ICMP for comments and clarifications. All individual records for which any issues were identified are included in the spreadsheet attached to this memo; the comments and corrections received back from ICMP are included in the same attachment (ICMP comments are in the column aptly named “ICMP Comment”, specific corrections are also colour-highlighted in the cell where the corrections occur; the comments and clarifications were originally received in an excel spreadsheet called “Ewa clarification ICD commented 040209 (From ICMP\_12 Feb 2009).xls”).<sup>91</sup>

The issues discovered can be classified in four different categories:

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<sup>91</sup> The CD which contains the Excel file with the ICMP clarifications has the ERN: D000-2512- D000-2512.

1. Two records with the same Case ID, one record marked as main case and one as re-association. As only one case is listed as a main case, this does not affect any analysis by the Demographic Unit (DU). The ICMP confirms that this concerns two different samples, and as such the records are correct as listed.
2. One specific case were apparently the name associated with a given protocol number changed from the July 2008 update to the November 2008 update. This would affect the work described below, as the name is necessary for matching with the 2005 OTP list. ICMP confirmed that this was a mistake in the November update; the July update is correct, and the correct name from the July update was substituted for the incorrect name in the November update before matching.
3. Some records were reported with different dates of birth in the main case and in the corresponding re-association(s). This potentially could have an effect on matching, depending on the degree of discrepancy. ICMP confirmed that this was due to better information received from the donors, but that this information was not always updated for previously submitted reports. ICMP also confirmed which dates are the correct dates. Corrections were made correspondingly.
4. For some sets of main cases and corresponding re-associations, some records would have one name listed (i.e. a unique identification) and some would have more than one name (i.e. sibling identifications). In order to proceed properly, we needed to know, for each case, what was correct, one name or multiple names. For each set, i.e. for each protocol number, the ICMP confirmed whether this should be considered a unique identification or sibling identification. The cases were corrected correspondingly before matching.

In addition, for some records there were minor errors in the ID ICMP numbers as listed. ICMP corrected all reported instances.

After this spreadsheet was sent and comments received, one more issue was discovered and clarified separately. This additional issue concerns two records marked as main cases, but that are apparently duplicates. After receiving clarifications from ICMP, one record (the multiple name record, corresponding to the explanation received from ICMP) was excluded from further analysis. The records in question are shown in Table (6.5)1 below.

**Table (6.5)1. Two additional records sent to ICMP for clarifications**

Missing Person (M.P.)	Date of Birth	Protocol Number	Case ID	ID ICMP
Ramic (Redzep) Ibrahim or Enver		8410/06	CR05B-488B	3422 or 3423
Ramic (Redzep) Ibrahim	25-May-71	8410/06P	CR05-488B	3422

## ANNEX 6.6 MATCHING OF THE 2005 OTP LIST OF SREBRENICA MISSING WITH THE NOVEMBER 2008 ICMP UPDATE ON THE SREBRENICA IDENTIFIED

In the discussion below, the following expressions will be used:

- Potential match – a potential match is a match between two records strictly based on what the computer sees as identical based on the criteria. Because the criteria are sometimes, intentionally, too broad, some of these matches will be between records that, when viewed by a human operator, are obviously different. Also, for the same reason, sometimes the same record in one source can match two or more records in the other source; again, a human operator needs to select at most one of the potential matches as the proper match.
- Proper match – a proper match is generally a match that either conforms to strict (and therefore easily accepted) criteria, or a potential match that is deemed a unique (possibly by excluding other, similar, potential matches) and sufficient match by a human operator. In the context of matching ICMP identification records, a proper match also entails that the DNA profile being matched concerns a uniquely identified individual, i.e. not “sibling identification” (see below).
- Possible match – a possible match is, in the context of matching ICMP identification records, a match that is too difficult to call, one way or the other. When matching the ICMP identifications with the 2005 OTP list, one might consider that any unmatched records are additional, identified, victims to those listed on the 2005 OTP list. However, both because of the sibling identifications (next bullet point) and because of the difficulty of matching some records, it is necessary to exclude some unmatched records from the new and additional records. The possible matches are the records thus excluded. This ensures that individuals are not counted twice, both as missing and as dead, even if the information is insufficient to make a proper match.
- Possible sibling match – a match between a “sibling identification” (these cases are based on type 2 as described below), or a multiple name record in the ICMP data, and one or more records of missing persons. In the case of a possible sibling match, some of the missing persons, that is one or more, have been identified, but it is not possible to conclusively say which persons. These cases can neither be considered as matched, nor can they be considered as new and additional cases, and they are therefore marked and listed as possible matches, along with those described in the previous bullet point.
- Unique sibling match – unique sibling matches (type 1 as described below) are matches where all missing persons have been identified, but it is still unclear exactly which person has been identified by which set of remains. For purposes of listing identified persons among those reported as missing, this is sufficient to say that they have been identified, but not sufficient to list an exact exhumation location.

As used in the discussion above, “sibling identification”, or multiple name match, is a DNA profile that has been matched to donor samples, but with not enough information to make the identification unique. That is, the profile may belong to two or more (up to, at present, five) closely related persons reported missing by the donors. These cases are reported with two or more first names, one for each possibly identified individual. They are referred to as sibling matches because this situation only occurs for closely related individuals, generally either brothers or sisters (though not both brother and sisters in the same case, as sex can be determined from DNA). Also, for all these cases, the last name (family name) and father’s name is

reported as the same. So these are, mostly, list of brothers who are all reported as missing, and some of whom have been identified. For purposes of matching with the 2005 OTP list, there are two significantly different cases to consider:

1. There are an equal number of unique profiles (as counted by different protocol numbers) as there are possible candidates for the identifications. In these cases, all of those reported missing by the donors have been identified, and there are different sets of remains for each identified, but it is still unclear exactly which set of remains belongs to which individual reported missing. For our purposes, it is sufficient to know that the individuals have all been identified to say that the persons reported as missing on the 2005 OTP list have been identified. The remaining problem, however, is that it is not generally possible to conclusively say that a certain missing person was found at a specific site; it can only be concluded, for each person, that the person was found at one of two or more sites.
2. There are fewer unique profiles (as counted by protocol numbers) than there are possible candidates for the identifications. In these cases it is possible that a given candidate has been identified, but not certain. It is therefore not possible to conclusively say that missing persons match to these records have been identified, but it is still necessary to take into account that they may have been identified.

The matching is carried out in a series of successively broader criteria. Only records not already matched by earlier, narrower, criteria, will be attempted matched when using the broader criteria. The effect of this approach is that the majority of matches will be made using narrow criteria, leading to easily accepted matches, whereas fewer records will remain to be matched when using the broader criteria, thereby minimising the need for manual checks and intervention by a human operator.

Of the records carried over from the July 2008 update, 4,697 had previously been marked as proper matches. In the November 2008 update, 3 of those records have been “downgraded” to possible matches based on information from ICMP, and one match was removed, as the previously matched ICRC record now is a closer match to a new (in the November 2008 update) ICMP identification. A further 283 records had previously been marked as possible matches. Finally, 10 records from the July 2008 update that had previously not been matched, have been matched in the November 2008 update; 7 records are matched against the ICRC Srebrenica related update from October 2008, and 3 are matched with records added to the 2005 OTP list (1 previous exclusion as possible survivor, and 2 previous excluded duplicates).

In addition, 364 records (354 main cases plus 10 re-associations with “main case in process”) marked as new records in the November 2008 update, were attempted matched with the 2005 OTP list, according to the following successive criteria:

1. Full name as reported (i.e. first, father’s, and last name) and complete date of birth. 140 records were matched, and all were accepted as proper matches.
2. Full name as reported (i.e. first, father’s, and last name), the same year of birth reported, and reporting of day and month of birth incomplete or missing in both sources. 48 records were matched, and all were accepted as proper matches.

3. Last name, first three letters of first name(s), first three letters of father's name, and year of birth. 69 potential matches found. After manual checks, 61 unique matches were accepted as proper matches.
4. First three letters of last name and length of last name +/-1 character, first three letters of first name(s), first three letters of father's name, and year of birth no more than 5 years different. 48 potential matches found. After manual checks, 39 unique matches were accepted as proper matches.
5. First three letters of last name and length of last name +/-1 character, first three letters of first name(s), and year of birth no more than 5 years different. 26 potential matches found. After manual checks, 6 unique matches were accepted as proper matches.
6. The remaining 70 records were searched for individually. 10 proper matches were found and marked. A further 31 possible sibling matches were found and marked.

After searching for proper matches, a search was conducted for possible matches on the remaining, unmatched, records:

7. First three letters of last name and length of last name +/-1 character and first three letters of first name(s). 50 potential matches were found whereof 14 were marked as possible matches.
8. The remaining 13 unmatched new (non-sibling) records were searched manually, and 1 record was marked as a possible match.

After marking new possible matches, all possible matches (including those carried over from matching with the July 2008 update), were checked to see if new identifications in the November update would result in additional unique sibling matches. Partly because of additional sibling identifications (i.e. new protocol, or new unique DNA profiles) and partly because of corrections received from ICMP in response to issues raised by the OTP, 31 cases were "upgraded" from possible matches to proper (sibling) matches.

In total 5,050 records were matched between the ICMP Srebrenica November 2008 update and the 2005 OTP list. A further 281 records were matched as possible matches, including both possible sibling matches and matches to close to disregard, but to different to accept as proper matches.

In addition, one record that had previously been excluded as a possible survivor was added back to the 2005 OTP list, as this persons has been identified (and is therefore conclusively dead) on the November 2008 update.

Furthermore, it was discovered that two records from the ICRC list received in 2005 that had previously been excluded as duplicates on the 2005 OTP list, had both been identified. That is, from a pair of duplicates, both the included record and the excluded record have been found to have unique identifications (unique in the unique DNA profile sense). A separate check in the 1991 Census confirmed that the excluded records could be linked to separate individuals reported in the Census. The two previously excluded records can not be considered duplicates in light of this new information, and the two records have therefore been added back to the 2005 OTP list, both, obviously, as matched with ICMP.

With these three records previously not on the 2005 OTP list, but now added, the number of ICMP records matched against the updated 2005 OTP list is 5,053.

**LISTS: SREBRENICA MISSING INTEGRATED WITH THE 2009 PROGRESS  
REPORT ON THE DNA-BASED IDENTIFICATION BY ICMP**

*(attached separately)*

Table (6.4)2. 220 Cases with Inconsistent Date of Death/Disappearance between the 2005 OTP List of Srebrenica Missing and ABiH Records

Last Name (OTP)	First Name (OTP)	FATHER'S NAME (OTP)	DoB (OTP)	DoD Military	DoD Corrected	DoD Corrected	Classification Requested	ICMP Protocol	ICMP Grave Site (July 2008)
GUTIC	MUJO	ALJO	2906919	2604992			yes		
GUTIC	BERIZ	MUJO	2910951	2604992			yes		
SINANOVIC	ALJO	MUJO	3101935	1001994				3763/04	Kozluk
JAHIC	RAMO	HAKIJA	101946	1001994			yes	1602/03	Other Sites (Kravica)
HASANOVIC	HAKIJA	NEZIR	2103948	1805992				1152/02	Orshovac 2 (Lazete 2)
MALAGIC	MUHAMED	RAMIZ	409972	1001994	12.07.95	Buljim		1935/03	Glogova 2
AVDIC	HAMDEJA	HAMED	966	2009994			yes		
AVDIC	AVDULAH	SABAN	1706927	1001994			yes		
HASANKOVIC	NIJAZ	ZAIM	2008957	1902993			yes		
MUJIC	IDRIZ	IBRAHIM	1102940	1001994			yes	250/02	Kuziuk
AHMETOVIC	MEHMEDALIA	MUSTAFA	1203956	1808994	12.07.95	put Srebrenica - Tuzla		5080/04	Other Sites (Zvornik)
SALIHOVIC	HUSEIN	HUSO	943	1001994			yes		
ALIC	SEFIK	SEFIK	905977	1001994	12.07.95	put Srebrenica - Tuzla		1654/03	Glogova 2
HODZIC	MUJO	MUSTAFA	1201971	612993				9721/07	Other Sites (Jagostica-B.Basta)
SELIMOVIC	AHMO	HASIB	948	309992				4813/04	Čančari Road 2
SALCINOVIC	SALIH	CAMIL	1510939	101994			yes	2454/03	Hodžići Road 5
OMEROVIC	SAKIB	SULJO	966	2107993				10651/07	Liplje 4
KANDZETOVIC	OMER	AHMET	968	101994			yes	687/02	Other Sites (Kravica)
JUSIC	HAKIJA	ALAGA	703935	2204993	11.07.95	put Srebrenica - Tuzla		7684/06	Hodžići Road 5
MUSTAFIC	ENEZ	IBRO	1007947	1704995				1940/03	Liplje 2
SELIMOVIC	JUSO	HASO	2007950	1003995			yes		
MUMINOVIC	SABAN	SALKO	963	1001994			yes		
AHMETOVIC	MAHMUT	KARO	402927	101994	12.07.95	Potočari			
ARNAUT	HILMO	RAMO	930	107992			yes	2435/03	Čančari Road 12
DZANIC	RAMIZ	DZANO	946	1001994			yes	8005/06	Hodžići Road 6 (Snagovo 1)
AHMETOVIC	DZEMAL	DERVIS	801977	1001994	12.07.95	put Srebrenica - Tuzla			
IBRAHIMOVIC	SMARO	IBRAHIM	102938	1001994	12.07.95	put Srebrenica - Tuzla			
MEHMEDOVIC	SEID	HUSEIN	1611965	106995			yes		
HAJRIC	MEHMED	IDRIZ	1908968	105995			yes	4946/04	Other Sites (Vragolovi)
ISAKOVIC	DZEMO	HAKIJA	1502961	1001994			yes	3238/03	Cerska
HUKIC	SABIT	MUJO	401972	1809993	12.07.95	Konjevic Polje		2279/03	Čančari Road 3
MEMIC	NEZIR	HUSO	955	1001994	12.07.95	put Srebrenica - Tuzla		6335/05	Liplje 2
HUSIC	IDRIZ	AVDO	906935	1001994			yes	9946/07	Čančari Road 3
OMEROVIC	AMIR	OMER	2803974	1001994	12.07.95	put Srebrenica - Tuzla		4793/04	Hodžići Road 4
ZUIDRIC	ESAD	MEHMED	1605973	909994	12.07.95	put Srebrenica - Tuzla			
MASIC	SADJA	MUSTAFA	1208950	1001994	12.07.95	put Srebrenica - Tuzla			
HASANOVIC	IRSO	DURMO	8976	1505992					
HARBAS	BEGO	JUNUZ	936	1107992			yes	2092/03	Čančari Road 7
OMEROVIC	MUSA	NURKO	106962	1003994			yes	9821/07	Glogova 1
KADRIC	MUJO	ALIJA	945	102994			yes		
SALIHOVIC	RAMO	HUSO	510943	1001994			yes	7448/06	Hodžići Road 6 (Snagovo 1)
HASANOVIC	KASIM	RESO	1111944	1001994	12.07.95	put Srebrenica - Tuzla			
CEHIC	NURIJA	ISMET	954	1001994			yes	2330/03	Ravnice 1 and Ravnice 2
MALAGIC	NURIF	RAMO	604943	1001994			yes	202/02	Zeleni Jadar 5
SULEJMANOVIC	KEMAL	ADIL	3974	1001994	12.07.95	Buljim			
OMEROVIC	AMIR	FEHIM	1707969	1001994			yes		
MUJIC	MEHO	RASIM	1007958	2204994	12.07.95	put Srebrenica - Tuzla		9295/07	Branjevo Military Farm
MUMINOVIC	SALKO	SECO	933	1001994	12.07.95	mjesto Buljim		1366/03	Čančari Road 3
DEDIC	SACIR	IBRO	1403940	1001994	12.07.95	put Srebrenica - Tuzla			
RIZVANOVIC	RAMO	ALIJA	1903954	1001994	12.07.95	put Srebrenica - Tuzla		776/02	Rahunici

Last Name (OTP)	First Name (OTP)	FATHER'S NAME (OTP)	DoB (OTP)	DoD Military	DoD Corrected	PoD Corrected	Clarification Requested	ICMP Protocol	ICMP Grave Site (July 2008)
HUSIC	DEMIR	OSMAN	945	2004993			yes	1995/03	Čančari Road 7
OMEROVIC	ALJO	KADRIJA	2710945	1001994	12.07.95	put Srebrenica - Tuzla		8232/06	Liplje 7
OMEROVIC	ALIJA	KADRIJA	1004950	1001994	12.07.95	put Srebrenica - Tuzla			
IBRAHIMOVIC	HASIB	ZUHDO	1811968	908993	12.07.95	Konjevic Polje		568/02	Other Sites (Kravica)
MASIC	MUJO	IBRO	940	2108992			yes	1939/03	Zeleni Jadar 5
MEHANOVIC	SMAIL	ATIF	968	2007992	20.07.95	Potocari			
MEHANOVIC	ATIF	HASAN	932	1001994			yes	5009/04	Čančari Road 3
MEHANOVIC	SABAHUDDIN	ATIF	960	1001994	12.07.95	put Srebrenica - Tuzla		1943/03	Liplje 2
AVDIC	ISMET	ZAHIR	501943	1001994	12.07.95	put Srebrenica - Tuzla			
KARIC	BEKIR	SEMSO	960	1001994			yes		
ORLOVIC	RAMIZ	SAHIN	977	1001994	12.07.95	put Srebrenica - Tuzla			
SMAJIC	ISMET	JUSUF	105955	1001994	12.07.95	put Srebrenica - Tuzla		3637/04	Čančari Road 2
SELIMOVIC	HASAN	HASIB	2106948	2004993	12.07.95	put Srebrenica - Tuzla		485/02	Vlasenica (Vlasenicka Jelovacka Cesma)
SALIHovic	SEAD	MEHEMED	109974	1001994			yes		
SALIHovic	NEVRES	MEHEMED	2304970	1001994			yes		
SALIHovic	SAMIR	MEHEMED	103973	1001994					
BEGOVIC	AVDIJA	HABIB	1304970	1001994			yes		
MALUHIIJA	EMIR	SMAJO	2204969	110992	12.07.95	put Srebrenica - Tuzla			
OMEROVIC	TAHIR	ZAHIR	946	1009993			yes	190/02	Hodžići Road 5
SUSIC	JAKUB	MESAN-MEHMED	963	1007993			yes		
ATIC	SULJO	AVDURAHMAN	946	1001994	12.07.95	put Srebrenica - Tuzla		3268/03	Čančari Road 5
JAHC	SEJAD	AHMO	961	1207994					
ORLOVIC	SULEJMAN	ABDULKADIR	945	1001994	13.07.95	put Srebrenica - Tuzla		4955/04	Other Sites (Kamenica-Bratunac)
DURAKOVIC	JUNUZ	ALIJA	2109954	2204995	12.07.95	put Srebrenica - Tuzla			
SINANOVIC	KEMAL	NURIF	507940	1001994	12.07.95	put Srebrenica - Tuzla			
DURAKOVIC	ZULFO	MEHO	1002942	1001994	12.07.95	put Srebrenica - Tuzla		10390/07	Liplje 2
ALIC	NISVAD	MEVLUDIN	301977	1001994	12.07.95	put Srebrenica - Tuzla		3621/04	Čančari Road 2
MURATOVIC	ISLAM	MUJKO	1904937	1001994	11.07.95	put Srebrenica - Tuzla		6249/05	Blječeva 3
HALILOVIC	BAIRO	HUSO	934	1001994	11.07.95	put Srebrenica - Tuzla			
HASANOVIC	AHMO	ALIJA	608977	1001994			yes		
RIDZIC	VEJIL	HASAN	1708945	1001994	12.07.95	put Srebrenica - Tuzla			
SINANOVIC	KASIM	SMAJO	935	1001994	12.07.95	Konjevic Polje		4586/04	Čančari Road 7
SALIHovic	SAIH	SALCIN	967	1001994	12.07.95	put Srebrenica - Tuzla		9838/07	Glogova 1
JUSUPOVIC	MIRALEM	MUSTAFA	2104933	1001994	12.07.95	put Srebrenica - Tuzla		1831/03	Čančari Road 2
GABELJIC	HAMDIJA	HASIM	2509972	1207992					
HAFIZOVIC	HASAN	MUSAN	1705951	2204995				9785/07	Čančari Road 10 (Kamenica 10)
HALILOVIC	SABAN	HALIL	1308978	101994	12.07.95	put Srebrenica - Tuzla		6718/05	Čančari Road 5
AHMETOVIC	SENAD	KIRAM	2803972	1001994	11.07.95	put Srebrenica - Tuzla		2018/03	Ravnice 1 and Ravnice 2
MUMINOVIC	HASIB	HASAN	953	101994	12.07.95	put Srebrenica - Tuzla		7122/06	Hodžići Road 7 (Snagovo 2)
HAJDAREVIC	SABIT	NUMO	605955	2004993	11.07.95	put Srebrenica - Tuzla		573/02	Other Sites (Kravica)
HAJDAREVIC	AMIR	SABIT	1701976	1001994	12.07.95	put Srebrenica - Tuzla		2655/03	Ravnice 1 and Ravnice 2
ISAKOVIC	SADIK	HASIB	2307974	1001994	12.07.95	put Srebrenica - Tuzla			
HAKIC	NURDIN	HAMDIJA	101973	1204995				10781/07	Čančari Road 5
MEHANOVIC	OSMAN	HASAN	2002951	1001994			yes	10356/07	Liplje 2
DZANANOVIC	REDZO	RAGIB	2511975	1001994	13.07.95	put Srebrenica - Tuzla			
MUJIC	MIRALEM	RASIM	1510948	1001994	12.07.95	put Srebrenica - Tuzla		5729/05	Blječeva 2
MUJIC	IBRO	MIRALEM	2306974	1001994	12.07.95	put Srebrenica - Tuzla			
HASANOVIC	FAJKO	ALIJA	930	1001994	12.07.95	Srebrenica		9402/07	Čančari Road 5
GUSIC	PASAN	SABAN	503950	3008992	12.07.95	put Srebrenica - Tuzla		9697/07	Čančari Road 10 (Kamenica 10)
SUBASIC	OTHRAN	HASIM	505939	3110992	12.07.95	Buljin		5718/05	Hodžići Road 6 (Snagovo 1)

Last Name (OTP)	First Name (OTP)	FATHER'S NAME (OTP)	DoB (OTP)	DoD Military	DoD Corrected	PoD Corrected	Classification Requested	ICMP Protocol	ICMP Grave Site (July 2008)
IBRAHIMOVIC	SABIR	MUJAN	702976	1001994	12.07.95	put Srebrenica - Tuzla			
MUJGINOVIC	HALID	ALIJA	1703941	1001994	12.07.95	put Srebrenica - Tuzla		1617/03	Čančari Road 2
SULJIC	MEHO	SECAN	932	1001994			yes	3624/04	Čančari Road 7
SALIHOVIC	ALIJA	SACIR	3107938	1001994	12.07.95	put Srebrenica - Tuzla		3414/04	Hodžići Road 4
DAUTBASIC	ZIJAD	JUNUZ	1801977	1001994	12.07.95	put Srebrenica - Tuzla		7202/06	Hodžići Road 7 (Snagovo 2)
BUHIC	DZEVAD	SERIF	1708973	406992	12.07.95	put Srebrenica - Tuzla			
MURATOVIC	HAKIJA	MUJKO	932	1001994			yes	1970/03	Čančari Road 7
SULJIC	NESIB	JAKUB	3003971	101993	12.07.95	Konjevic Polje		1444/03	Zeleni Jadar 5
HASANOVIC	MUSTAFA	ADEM	935	2108992					
JUGOVIC	CAMIL	NURIF	935	101994				9393/07	Čančari Road 10 (Kamenica 10)
HALILOVIC	OSMO	OSMAN	1808958	1207992				10006/07	Other Sites (Kamenica-Bratunac)
HRŠIC	MEHMED	NUJAZ	976	1001994	12.07.95	put Srebrenica - Tuzla		3904/04	Hodžići Road 4
AJSIC	RAMO	SECAN	2707970	1204995				1666/03	Zeleni Jadar 5
SALKIC	MIRZA	SEJFO	979	1001994			yes	2634/03	Čančari Road 13
LOLIC	AZEM	RAMIZ	973	1001994	12.07.95	put Srebrenica - Tuzla		646/02	Glogova 2
MUJANOVIC	VEJSUDIN	SELMAN	966	1001994	12.07.95	put Srebrenica - Tuzla		8207/06	Cerska
RAMIC	ADMIR	SELIM	1504971	1001994	12.07.95	put Srebrenica - Tuzla		5706/05	Čančari Road 11
BEGOVIC	DAMIR	MEDO	2509975	1001994	12.07.95	put Srebrenica - Tuzla		7971/06	Liplje 7
MUJIC	ZAHID	MEHO	1212937	1001994	12.07.95	put Srebrenica - Tuzla		2395/03	Koziuk
MEMIC	ADEM	OSMAN	204956	1001994	12.07.95	(put Srebrenica - Tuzla)		10156/07	Liplje 4
HUSIC	ENVER	SACIR	701977	1001994	12.07.95	put Srebrenica - Tuzla		2475/03	Glogova 2
HAJDAREVIC	IBRAHIM	SULJO	1012943	1001994	12.07.95	put Srebrenica - Tuzla			
MEHMEDOVIC	HASAN	MEHO	936	1001994			yes	1458/03	Kozluk
BEGOVIC	SEAD	MUHAREM	2404960	1001994	12.07.95	put Srebrenica - Tuzla		2574/03	Glogova 2
MUHIC	HAMED	SUKRIJA	601956	1001994	12.07.95	put Srebrenica - Tuzla		3895/04	Kozluk
HAFIZOVIC	ABDULAH	TAHIR	710976	1707993	17.07.95	put Srebrenica - Tuzla		8595/06	Čančari Road 5
ZILDZIC	SEMSO	NAZIF	934	1001994			yes	2083/03	Čančari Road 7
OSMANOVIC	NERMIN	HAJRULAH	975	1107992	11.07.95	Konjevic Polje			
ADEMOVIC	AVDO	TAIB	2009968	108993	17.07.95	Konjevic Polje			
EFENDIC	JUSUF	SALIH	2008942	1001994			yes	6935/05	Čančari Road 11
RAMIC	IBRO	BEGO	1111969	1001994	12.07.95	Konjevic Polje		5529/05	Glogova 1
MUMINOVIC	ISMET	ADEM	948	1001994	12.07.95	put Srebrenica - Tuzla		9843/07	Zeleni Jadar 5
SINANOVIC	SEMŠO	REFZO	2008926	1001994	12.07.95	Buljim		9442/07	Čančari Road 10 (Kamenica 10)
MUJGINOVIC	NEZIR	MUJGIN	978	1001994	12.07.95	put Srebrenica - Tuzla			
SALIHOVIC	EDHEM	RAMO	1401945	1001994	12.07.95	Putučari		1759/03	Orahovac 2 (Lazete 2)
SMAJLOVIC	MESAN	ADEM	944	1001994				6932/05	Čančari Road 11
MUJIC	ESAD	MALCO	107977	2204995			yes		
PETINIC	SEVKO	HUSEIN	930	1001994	12.07.95	put Srebrenica - Tuzla		10825/07	Čančari Road 3
OMEROVIC	RIFET	SEJFO	917	1001994			yes		
AHMETOVIC	SULEJMAN	RAMO	935	1001994	12.07.95	put Srebrenica - Tuzla		11137/08	Hodžići Road 2 (Snagovo 3)
MEHIC	EDO	RESO	2411967	2204995	17.07.95	put Srebrenica - Tuzla			
KAVAZBASIC	MIRSAD	HUSEIN	3105954	1001994	12.07.95	put Srebrenica - Tuzla			
HODZIC	AHMET	MUSTAFA	1001947	1001994	11.07.95	put Srebrenica - Tuzla		3596/04	Čančari Road 3
DELALIC	SALKO	ISMET	808966	607992	12.07.95	Konjevic Polje		3582/04	Čančari Road 5
SALIHOVIC	SAFET	HUSO	953	1001994			yes	10666/07	Liplje 7
MUJIC	KASIM	MUSTAFA	944	2808992			yes	9466/07	Liplje 2
NUKIC	FADIL	RAMO	2002962	1001994	12.07.95	put Srebrenica - Tuzla		2017/03	Liplje 2
SULJANOVIC	IFET	MUHAREM	1203935	1407993	12.07.95	put Srebrenica - Tuzla		6997/06	Hodžići Road 7 (Snagovo 2)
MUSTAFIC	JUSUF	SADO	511963	1207992	12.07.95	put Srebrenica - Tuzla		721/02	Liplje 1
MASIC	DZELMAL	OSMO	104943	1001994	12.07.95	put Srebrenica - Tuzla		9068/07	Čančari Road 10 (Kamenica 10)

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SALHOVIC	RIZAH	KEMAL	607975	1001994			yes		
BEGOVIC	HASIM	SEMSO	1101952	1001994	12.07.95	put Srebrenica - Tuzla		10125/07	Liplje 4
BEGOVIC	BAVLUDIN	HASIM	2505973	1001994			yes	2225/03	Zeleni Jadar 6
SMAJLOVIC	AHMEDIN	MEHO	976	2204992	17.07.95	put Srebrenica - Tuzla			
HAMZIC	ISAK	ISMET	968	2712992			yes		
RAMIC	FADH	RAMO	101960	1207992	12.07.95	put Srebrenica - Tuzla		6975/05	Bijecva 3
MESANOVIC	HAJRO	SALIH	2110964	1005995				9412/07	Čančari Road 10 (Kamenica 10)
OMEROVIC	SABAN	SALKO	935	1001994			yes		
RAHMIC	RAHMO	BEKTO	952	1001994	12.07.95	put Srebrenica - Tuzla		9834/07	Glogova 2
BAJIC	ZEMRJA	AZEM	1411969	1001994	12.07.95	put Srebrenica - Tuzla		4594/04	Zeleni Jadar 5
BULJUBASIC	HAMDJA	ISMET	1508956	1207992	12.07.95	Konjevic Polje			
MALAGIC	NUSRET	NURIJA	969	805992			yes		
MUJIC	SUAD	SALCIN	106967	2505993	12.07.95	put Srebrenica - Tuzla			
BEKTIC	SUAD	HUSO	612967	1212992	12.07.95	put Srebrenica - Tuzla		11108/08	Hodžići Road 2 (Snagovo 3)
DZANANOVIC	MUJO	MUSTAFA	1203975	1001994	12.07.95	put Srebrenica - Tuzla		1137/02	Glogova 1
HASANOVIC	BERIZ	MUJO	2910975	1001994	12.07.95	put Srebrenica - Tuzla			
MUSIC	HUSEIN	MUSTAFA	1003933	1306992			yes		
HAMIDOVIC	MUSTAFA	MUJO	907965	2204995					
IBRAHIMOVIC	AHMO	HASAN	945	1001994	12.07.95	put Srebrenica - Tuzla		10048/07	Čančari Road 5
HUREMOVIC	ZENUDIN	NURIJA	201959	1001994	12.07.95	put Srebrenica - Tuzla		3196/03	Čančari Road 5
SULJIC	ALIJA	SABAN	1003940	1001994			yes	6954/05	Čančari Road 11
ALIC	MESUD	JUSUF	111977	1001994	12.07.95	put Srebrenica - Tuzla		3655/04	Orahovac 2 (Lazete 2)
ALIC	JUSUF	HUREM	2103950	1001994	12.07.95	put Srebrenica - Tuzla		157/02	Hodžići Road 5
NUHANOVIC	SMAIL	ALIJA	1512959	1212992	12.07.95	put Srebrenica - Tuzla		9582/07	Čančari Road 10 (Kamenica 10)
SALHOVIC	ABDULAH	SALKO	201977	2004993			yes	5736/05	Čančari Road 11
SALKIC	RESID	HUSO	1901950	1001994	12.07.95	put Srebrenica - Tuzla		10761/07	Zeleni Jadar 4 (Zeleni Jadar 8)
BEKTIC	SECAN	SADO	954	1309992	11.07.95	Kravica			
MASIC	SADO	IBRO	947	1001994	12.07.95	put Srebrenica - Tuzla		843/02	Liplje 1
SMAJIC	REFIK	OMER	1006963	1601995	12.07.95	Konjevic Polje			
HAMZIC	MIRSAD	AHMET	105973	804993	10.07.95	Ljubisavici		996/02	Other Sites (Unknown)
SEJDIRNOVIC	ESED	MUJO	929	101994	12.07.95	put Srebrenica - Tuzla		1044/02	Kozluk
CAMDZIC	ILABIB	HASAN	1102976	1001994			yes	999/02	Other Sites (Kravica)
POROBIC	ADIL	RAMO	2711979	101994	12.07.95	put Srebrenica - Tuzla			
ALIC	ATIF	HIMZO	975	1001994	12.07.95	put Srebrenica - Tuzla		4051/04	Glogova 2
SIRUCIC	ABID	NURIJA	1612941	1001994	12.07.95	put Srebrenica - Tuzla			
SIRUCIC	MUJO	NURIJA	1004943	1001994	12.07.95	put Srebrenica - Tuzla			
AVDIC	HAMDJA	RAMIZ	1607971	1507992	15.07.95	put Srebrenica - Tuzla		8646/06	Čančari Road 11
RAHMIC	ENVER	RAHMO	977	1001994			yes	3906/04	Glogova 1
OMEROVIC	IBRAHIM	JUNUZ	705958	1001994	12.07.95	put Srebrenica - Tuzla		324/02	Ravnice 1 and Ravnice 2
DELIC	BUMEDIJEN	CAMIL	509973	1407992			yes		
ALIC	MUSTAFA	MEHO	951	1203993				830/02	Other Sites (Kravica)
MUSTAFIC	HAKIJA	MUJO	2803935	1001995	12.07.95	put Srebrenica - Tuzla		2975/03	Čančari Road 12
BORIC	MURADIF	HUSEJIN	1207942	1001994			yes	10095/07	Liplje 4
BEKTIC	HUSEIN	SULJO	2412932	2006992				3479/04	Čančari Road 5
MEMIC	RASID	HUSO	2109952	1001994	12.07.95	put Srebrenica - Tuzla			
HASANOVIC	OSMAN	AVDO	104975	1001994			yes	10255/07	Liplje 7
JUSUFOVIC	HIMZO	HUSO	940	1205992				415/02	Čančari Road 12
JAHC	IZET	ABDULAH	1006957	1001994			yes	6532/05	Čančari Road 7
BEKTIC	EDIN	SABAN	2007974	2801993			yes		
BEKTIC	AHMO	BEKTO	1604946	1001994	12.07.95	put Srebrenica - Tuzla			

Last Name (OTP)	First Name (OTP)	FATHER'S NAME (OTP)	DoB (OTP)	DoD Military	DoD Corrected	PoD Corrected	Clarification Requested	ICMP Protocol	ICMP Grave Site (July 2008)
MEHIC	MEHAN	OMER	808951	1001994	12.07.95	put Srebrenica - Tuzla		7766/06	Blječeva 2
SULEJMANOVIC	RASID	JAHIJA	804974	1001994	12.07.95	put Srebrenica - Tuzla		7556/06	Hodžići Road 7 (Snagovo 2)
SULEJMANOVIC	JAHIJA	ALJO	934	1001994	12.07.95	put Srebrenica - Tuzla		8131/06	Other Sites (Broševici)
DELIC	MEHMED	OMER	926	606993			yes		
CVRK	ISMET	CAMIL	3004942	1001994			yes		
OMEROVIC	ZIJAD	SABAN	2007970	1001994				9955/07	Čančari Road 5
OMEROVIC	MESAN	MEHMED	2502943	1001994	12.07.95	put Srebrenica - Tuzla		2873/03	Other Sites (Kravica)
OMEROVIC	MIRPET	MESAN	705970	1001994	12.07.95	put Srebrenica - Tuzla			
MUJICINOVIC	AVDULAJI	MUJO	964	1001994	12.07.95	put Srebrenica - Tuzla			
MEHIC	EDHEM	MEHMED	1606950	1001994			yes		
OMEROVIC	BAJRO	ISMET	2707952	1001994	12.07.95	put Srebrenica - Tuzla		461/02	Other Sites (Kravica)
OMEROVIC	SENAHID	BAJRO	109975	1001994	12.07.95	put Srebrenica - Tuzla		6983/05	Blječeva 3
ALIC	ABID	SELMAN	2902956	1001994	12.07.95	put Srebrenica - Tuzla			
MUMINOVIC	DZEMAL	BAJRO	944	1001994			yes	6974/05	Čančari Road 11
SMAJLOVIC	ABDULAH	AVDO	946	1001994			yes		
JUNUZOVIC	SABAN	HUSO	1506948	2802993					
MUSTAFIC	SEAD	BEKIR	1301962	1204995	12.07.95	put Srebrenica - Tuzla		5294/05	Hodžići Road 6 (Snagovo 1)
MUHIC	BESIM	MALCIN	1502933	1001994			yes	6915/05	Čančari Road 11
IBISEVIC	VEHBIJA	SECO	105943	1001994			yes	5293/05	Hodžići Road 6 (Snagovo 1)
DJELIC	MEHMED	OMER	926	606993			yes		