



Libyan Human Identification Needs Assessment and Gap Analysis

March 2013

ABOUT PHYSICIANS FOR HUMAN RIGHTS

For more than 25 years, Physicians for Human Rights (PHR)'s use of science and medicine has been on the cutting edge of human rights work.

- 1986 — Led investigations of torture in Chile, gaining freedom for heroic doctors there
- 1988 — First to document the Iraqi use of chemical weapons on Kurds, providing evidence for prosecution of war criminals
- 1996 — Exhumed mass graves in the Balkans for International Tribunals, and sounded the alarm about refugee camps in Bosnia and Kosovo.
- 1996 — Provided evidence of genocide for the Rwanda Tribunal
- 1997 — Shared the Nobel Peace Prize for the International Campaign to Ban Landmines
- 2003 — Warned US policymakers on health and human rights conditions prior to and during the invasion of Iraq
- 2004 — Documented genocide and sexual violence in Darfur in support of international prosecutions
- 2010 — Investigated the epidemic of violence spread by Burma's military junta
- 2012 — Trained doctors, lawyers, police, and judges in the Democratic Republic of the Congo, Kenya, and Syria on the proper collection of evidence in sexual violence cases
- 2013 — Won first prize in the Tech Challenge for Atrocity Prevention with MediCapt, our mobile app that documents evidence of torture and sexual violence

2 Arrow Street | Suite 301
Cambridge, MA 02138 USA
1 617 301 4200

1156 15th Street, NW | Suite 1001
Washington, DC 20005 USA
1 202 728 5335

physiciansforhumanrights.org
©2013, Physicians for Human Rights. All rights reserved.

ISBN:1-879707-72-1

Acknowledgements

This human identification and needs assessment report was written by Stefan Schmitt MS, International Forensic Program (IFP) Director at Physicians for Human Rights (PHR); Amanda Sozer, PhD, forensic geneticist and mass fatality and human identification expert; William Haglund, PhD, forensic anthropologist and former United Nations' Senior Forensic Advisor for the International Criminal Tribunals for Rwanda and the Former Yugoslavia; Nizam Peerwani, MD, forensic pathologist and Chief Medical Examiner for Tarrant, Denton and Parker counties in the state of Texas and forensic expert to various international tribunals; Howard Varney, advocate at the Johannesburg Bar and former chief investigator for the Sierra Leone Truth & Reconciliation Commission; and Robert Lamburne, rule of law and policing expert and former Director of Forensic Services at the British Embassy in Baghdad.

This report is based on field research conducted by the above-mentioned team in October and November 2012 in Tripoli, Benghazi, and Sabha, Libya. Team members spent ten days to three weeks in-country.

The recommendations and action items are the result of the PHR expert team's assessment of the Libyan government's human identification effort of the remains of people killed or "disappeared" during the recent conflict and during the regime of Colonel Muammar Qaddafi. The authors acknowledge that during the intervening months between the visit to Libya and the final release of the present report, the human identification effort in Libya has continued to receive and develop additional resources and taken steps to address some of the challenges outlined in the present report.

The report has benefited from review by Catherine D. DeAngelis, MD, MPH, PHR Board Member; Jennifer Leaning, MD, former PHR Board Member; and Stephen Greene, PHR Acting Media Relations Director. It was prepared for publication by Gurukarm Khalsa, PHR Web Editor/Producer.

Funding for this assessment was provided by the governments of the Netherlands and Switzerland.

The authors would like to thank Mubrouka Elharram, MSc, program consultant for PHR, and Lucas Manley, MPH, program assistant at PHR, for their assistance with project management and support.

The willingness to take on the difficult task of assessing current resources and striving for change is commendable. PHR wishes to acknowledge and thank the Ministry for the Affairs of Families of Martyrs and Missing Persons - especially the Technical Department for affording us their time amidst facing the challenging responsibility of heading Libya's human identification effort; the Ministry of Interior Criminal Investigations Department and the forensic DNA Laboratory; the Ministry of Justice's Forensic Science Department; the Biotechnology Center; and the University of Tripoli; and Mervat Mhani and the Free Generation Movement for mobilizing the families to share their experiences with the team.

Prior to the release of the current report, a draft was circulated to stakeholders involved in Libya's human identification effort for input and corrections. These include the Ministry for the Affairs of Families of Martyrs and Missing and the organizations working with it. Namely, the International Commission for Missing Persons, the South Korean Ministry of National Defense Agency for KIA (Killed in Action) Recovery and Identification Team, the Sudanese Forensic Medical Specialists contracted by the Ministry, UNSMIL's Human Rights Section, and the International Committee of the Red Cross. Other stakeholders were the University of Tripoli Medical School, the Biotechnology Center in Tripoli, the former head of the Ministry of Interior's recently established DNA laboratory, and the head of the Free Generation Movement. PHR appreciates this input and changes were made where appropriate while minimizing the introduction of new text. The present report is the reflection of PHR's expert team's opinion and does not imply that all stakeholders agree with all opinions and recommendations.

PHR is deeply indebted to the Libyan families who shared their painful stories of loss and the many doctors, educators, government officials, and civil society organization members who met with the assessment team and provided their expertise and recommendations. Without their patience, cooperation, and support, this project would not have been possible.

This report was written in its original in English and translated into Arabic.

Contents

Executive Summary	5
Introduction	7
Background	7
Purpose	9
Document Organization	10
Methods	11
Mass Fatalities and Human Identification Efforts	11
Forensic Human Identifications	11
Methodology	12
Legal Context and Gap Analysis Table	14
Libya's obligations under international law	14
Current legal framework	15
Comments on the current legal framework	16
Differentiation between support to families of martyrs and the missing	17
Forensic Human Identification and Gap Analysis Table	23
Human identification efforts	23
Recommendations and Conclusions	48
Appendix A - Team Meeting Schedule	52
Appendix B - Documents Reviewed by PHR Expert Team	55

Abbreviations

ABA	American Bar Association
GNC	General National Congress
ICMP	International Commission of Missing Persons
ICRC	International Committee of the Red Cross
ICTJ	International Center for Transitional Justice
MAFMM	Ministry for the Affairs of Families of Martyrs and Missing Persons
MAKRI	Ministry of National Defense Agency for KIA (Killed in Action) Recovery and Identification (South Korea)
MoEH	Ministry of Higher Education and Scientific Research
MoI	Ministry of Interior
MoJ	Ministry of Justice
MoU	Memorandum of Understanding
PGO	Prosecutor General's Office
UNSMIL	United Nations Support Mission in Libya
SSC	Supreme Security Council

The identification and repatriation of individuals killed and “disappeared” during the recent conflict in Libya and the previous regime of Colonel Muammar Qaddafi constitute one of the most urgent challenges facing the interim government of Libya. The legitimacy of any future government will be based in part on the way in which these identifications and repatriations, as well as any truth-seeking efforts, are conducted.

Physicians for Human Rights (PHR) is an independent organization that mobilizes medical professionals and scientists to protect internationally guaranteed rights of individuals and civilian populations. PHR was founded in 1986 on the idea that health professionals, with their specialized skills, ethical duties, and credible voices, are uniquely positioned to stop human rights violations. Today, our expertise is sought by local human rights organizations, governments, the United Nations, international courts, and regional groups like the African Union and the European Union. The power of our investigations allows us to work with others to raise awareness and press for change regarding the most severe human rights violations of the day.

Since 2011, PHR has collaborated with the Libyan Ministry for the Affairs of Families of Martyrs and Missing (MAFMM), the Libyan Prosecutor General’s Office (PGO), the Ministry of Interior (Moi), and the UN Support Mission in Libya (UNSMIL) to enhance forensic human identifications. The following Human Identification and Repatriation of Remains Needs Assessment and Gap Analysis Report is the result of a request to PHR by the MAFMM, the PGO, and the nongovernmental civil society organization “Free Generation Movement - Mafgood.” PHR’s assessment is funded by the governments of the Netherlands and Switzerland.

From October 14 through November 15, 2012, PHR’s International Forensic Program Director Stefan Schmitt and his team of expert consultants met in Libya with representatives of civil society, government, and nongovernmental organizations relevant to Libya’s human identification effort. PHR’s expert team was composed of a forensic geneticist and mass fatality and human identification expert who has worked internationally, including the identification of victims from 9/11 and Hurricane Katrina; a forensic anthropologist and former United Nations’ senior forensic advisor for the International Criminal Tribunals for Rwanda and the Former Yugoslavia; a forensic pathologist and chief medical examiner overseeing a medico-legal laboratory in Texas and forensic expert to various international tribunals; an advocate at the Johannesburg Bar and former chief investigator for the Sierra Leone Truth & Reconciliation Commission; and a rule of law and policing expert and former director of forensic services at the British Embassy in Baghdad. The expert team represents over 120 years of combined international experience in forensic and legal operations.

A mass fatality human identification initiative is perhaps one of the most complex forensic science undertakings. The content of this report should not be taken as a criticism of the work that has been done to date but rather as an affirmation of the many accomplishments in Libya and as a roadmap to enhance these efforts toward the development of modern, sustainable, and effective forensic sciences for the entire country.

The observations and steps necessary to implement the recommendations are detailed in the report. The following high-level recommendations are based on the expert team’s assessment:

1. Continue developing an internationally recognized legal framework addressing missing and disappeared persons by:
 - Ratifying and implementing the International Convention for the Protection of All Persons from Enforced Disappearance.
 - Enacting a new law on missing persons.
 - Formulating and implementing national DNA data and privacy laws.

- 6
2. Completely separate the human identification effort from any administrative and institutional effort that deals with the support and affairs of families of martyrs. A human identification effort is scientific and must be completely independent of any differentiation between missing persons on the basis of language, race, sex, nationality, religion, or political affiliation.
 - Create an independent institution with the specific mandate of searching for missing persons and identifying human remains. This could be a commission or an oversight board that is viewed by all Libyans as free of any bias.
 - Establish a comprehensive central information registry that facilitates effective tracing of missing persons.
 - Establish a list of missing persons that includes all families with missing loved ones, regardless of language, race, sex, nationality, religion, or political affiliation.
 - Develop a strong and credible public information campaign on the human identification process to manage family expectations.
 3. Build and enhance national forensic science capacity with the objective of establishing a government that will be prepared to deal with human rights and criminal issues in the future. Minimizing initial delays in human identifications through outsourcing should not be done at the expense of building Libyan-owned knowledge. Attention should be paid to the following key considerations for building national capacity:
 - The MoI DNA laboratory's accomplishments to date must be recognized as a valuable testing resource in Libya. The laboratory needs to be provided with the appropriate resources to continue operations. With the proper mandate, resources, and support, this laboratory is capable of immediately supporting a Libyan human identification effort.
 - The MoJ's Forensic Science Department needs the resources necessary to build forensic capacity and implement international standards.
 - Improve the cooperation between the different judicial institutions to address technical issues and effectively implement medico-legal examinations, criminal investigations, and collection of evidence within Libya's legal framework according to international standards.
 - Efforts must be made to engage Libya's scientists in the development of forensic operations, since the development of sustainable and credible forensic science initiatives will require the cooperation of educators, researchers, and practitioners.
 - International support needs to be coordinated between the different existing national forensic agencies and integrated into the Libyan judiciary and human identification effort to maximize forensic capacity-building across the country and its judicial institutions.
 4. Recognize the importance of mental health and integrate it into a human identification effort. Psychosocial support is needed in Libya for both the families of the missing and those working on the human identification effort.

Based on the PHR expert team's assessment, the following report contains recommendations with specific action items directed to the government of Libya and civil society for how best to achieve the integration and development of existing resources and capacities into a Libyan-owned forensic human identification effort. These include recommendations on the modernization of Libya's forensic capacity necessary for the immediate human identification effort and for the implementation of rule of law.

As Libya struggles to deal with a legacy of past atrocities, it is in the unique position to mobilize existing resources and local scientists to develop in-country sustainable forensic capacities. Libya's human identification effort addresses the immediate need of families searching for their loved ones and seeking to know the truth about what happened to them. Effectively harnessing the power to identify the truth and give names to the many missing, while also developing a strong and sustainable forensic operation in Libya, will in the long term aid in developing a modern forensic and judicial system.

The revolution in Libya began with demonstrations on February 15, 2011, by family members of victims of the 1996 massacre of a reported 1,276 prisoners in the Abu Salim prison. The protests against the Qaddafi administration's repressive measures escalated into an armed rebellion. On September 16, 2011, the United Nations recognized the "National Transitional Council" (NTC) as the legal representative of Libya, which effectively replaced the Qaddafi government.

Since then Libya's government continues to face serious challenges in governance. On October 20, 2011, Libyan militia members captured Qaddafi during his attempted escape from Sirte and he was subsequently killed. To date, the circumstances surrounding his death have not been investigated in a manner consistent with proper judicial processes. On October 23, 2011, the NTC declared "Liberation Day" as the official end of the armed revolt. Despite that declaration of an end to the armed revolt, armed conflict occasionally erupts in parts of the country at the local level. Local armed groups continue to challenge the central government, which is having difficulties extending its authority nationwide. On July 7, 2012, Libya elected its constituent assembly, the General National Congress (GNC), which appointed a prime minister, who in turn appointed his Cabinet of ministers.

The identification and repatriation of people who were killed and "disappeared" during the recent conflict in Libya and the previous years of the regime of Colonel Muammar Qaddafi constitutes one of the most urgent challenges facing the government of Libya. The legitimacy of the current and future governments will be based in part on the way in which these identifications and repatriations, as well as any truth-seeking and judicial efforts, are conducted.

Background

In September 2011, the Physicians for Human Rights (PHR) International Forensic Program, led by Director Stefan Schmitt, provided the Libyan authorities and the International Criminal Court (ICC) with forensic documentation on the massacre in the Khalat Al Forjan neighborhood in Tripoli and made recommendations and proposed next steps regarding the human identification process in Libya. PHR made recommendations regarding the immediate steps to be taken to ensure the forensic identification of human remains — evidence not only from crimes of the recent conflict, but also from the four decades of gross human rights violations committed by the Qaddafi regime.

At the time, the NTC recognized the need for a human identification project to identify the missing during the conflict against the Qaddafi regime and created the Commission for the Search and Identification of Missing Persons. The NTC appointed a biochemist with a PhD from McGill University in Canada to head this commission. This biochemist previously lead efforts to establish forensic services for the Ministry of Interior — including the development of a forensic DNA laboratory and also provided access to the crime scene at Khalat Al Forjan, as this was considered high priority in regards to identifying the human remains that were retrieved.

In December 2011, the NTC created the MAFMM. In this political restructuring, the MAFMM took over responsibility for the human identification effort under its Missing File Department. The human identification effort of the Missing File Department is headed by two people who hold degrees from Tripoli University in medicine and veterinary medicine, respectively. Both received six months of training in forensic genetics at the University of Denver's Biological Research Laboratory in the USA and were employed previously as research assistants at the Biotechnology Center, a biochemical research facility in Tripoli where they worked with the ABI Prism 310 Genetic Analyzer.

The head of the Commission for the Search and Identification of Missing Persons did not agree to the relocation of its human identification effort to the newly formed ministry, as he felt that would not be in

8 the best interest of all families of missing persons in Libya. The United Nations Support Mission in Libya (UNSMIL), in a January 12, 2012, letter to the commission, expressed the importance of maintaining an approach of neutrality and independence in the investigation of the plight of the missing.¹

The commission was dissolved by Decree 16 by the Interim Government on January 17, 2012. UNSMIL in February, 2012 expressed that it remained committed to supporting the human identification efforts within the government's framework, and that this effort should remain neutral and independent, and implemented in accordance with international standards.²

In February 2012, after an initial assessment of the identification effort, PHR IFP Director Schmitt made recommendations to the MAFMM, the Ministry of Foreign Affairs, and the PGO that included:

1. Suspend all exhumation efforts where possible and secure suspected mass graves from inexperienced excavations until proper forensic capacity and resources are available in Libya.
2. Suspend all DNA sample collection until a realistic and operational human DNA identification plan is developed, which includes proper sample collection approaches and procedures.
3. Assure proper preservation of forensic evidence necessary for truth-seeking purposes.
4. Conduct a needs assessment with the participation of individuals with mass fatality and DNA operations expertise to help Libya lay the foundation and develop a robust plan for a comprehensive, forensically sound, national human identification effort that meets the needs of the Libyan people while complying with international standards.³

The former head of the commission continued to establish the Ministry of Interior's (MoI) DNA laboratory, which began initial operations in March 2012. The construction and equipping of this laboratory was achieved by implementing previous plans and calling in contracts for construction and equipment negotiated under the Qaddafi administration. Since then this laboratory has provided several DNA identifications in Libya.⁴

On February 26, 2012, the Forensic Medicine Department's medical examiner witnessed one of the MAFMM's human identification efforts. Subsequently he raised concerns about the improper excavation of remains, and warned that this practice would result in damaging remains to the extent that it would be very difficult, if not impossible, to determine cause and manner of death. Furthermore, he raised the issue that the inconsistent collection of DNA samples would require exhumations and collection efforts to be repeated later.⁵ That particular exhumation was suspended at the time by order of the PGO. Nevertheless, the excavation of bodies and collection of DNA samples under the MAFMM's human identification effort continued.

On March 31, 2012, five Libyan biochemists and geneticists, all PhD holders from international universities, wrote a letter to the head of the NTC, the prime minister, and the ministers of the MAFMM, MoI, Higher Education and Scientific Research, as well as the general prosecutor, the head of the National Scientific Research Authority, and the head of the Biological Ethics Committee. This letter raised concerns about attempts by the MAFMM's human identification effort to outsource DNA testing and identifications, which

1. Ravindran Daniel, Head of Human Rights Section, UNSMIL, to Head of the Commission for the Search for and Identification of Missing Persons. January 12, 2012.

2. Speech by UNSMIL Special Representative of the Secretary General, Ian Martin, in a speech to the UNSC in February 2012.

3. Letter to Minister Nasser Jbril (MFMM), Minister Dr. Mohamed Abdel Aziz (MoFA), and General Prosecutor Abdul Aziz Al Hasadi from February 20, 2012, by Director of PHR's International Forensic Program Stefan Schmitt.

4. The PHR expert team assessed the testing capabilities of the laboratory by providing their DNA samples for testing. The laboratory tested the samples and reported accurate DNA profiles within 24 hours of collection. See gap analysis table on detailed information on this laboratory.

5. Dr. Anwar Arbie correspondence with the Deputy General Prosecutor's Office. February 2, 2012.

would not be in Libya's national interest.⁶ Importantly, the letter outlined that there was a laboratory within Libya that was capable of testing these samples.

DNA testing and identifications since the conflict ended in late 2011 have been the focus of the human identification effort in Libya. To date, only a few DNA identifications carried out by foreign DNA laboratories have been generated. As predicted, pressure continues to mount on political stakeholders, as well as the human identification effort, to identify and repatriate remains. As witnessed during the visit, amongst the families of the missing contacted and some technicians at the MAFMM there is the general impression that DNA testing alone is all that is necessary to reclaim remains and that this can be expedited by quickly building a DNA laboratory or through outsourcing it to foreign DNA laboratories.

A number of outside organizations have provided support to the human identification effort. It is beyond the scope of this report to address in detail the international assistance to Libya's current human identification effort. Table 1 (page 8) lists the organizations and a brief description of their support.

The collection of DNA samples started very soon after the cessation of the armed conflict and the liberation of Tripoli, toward the end of 2011. When the Tripoli morgue facility was taken by the revolutionaries, samples were collected of 17 remains located in refrigeration units. The provenance of these bodies is unknown, but the assumption has been that these are remains of those killed under the Qaddafi regime in the late 1990's. Since then, DNA testing through the Dubai Police DNA laboratory, the DNA laboratory at the Mol, and parallel testing by the ICMP have reportedly confirmed several identities. One set of remains, which was subjectively identified by family members and given to them shortly after the liberation of Tripoli, was determined through DNA testing to not be that person.

Most identifications to date have been subjective, based on family recognition of physical features of the body, or personal artifacts associated with the remains. Disputes over bodies have also occurred. Misidentifications complicate human identification efforts, depriving two families of the actual remains of their loved ones. This will need to be addressed, as more such instances are likely as the human identification effort progresses and previous subjective identifications of remains are determined to be incorrect.

Purpose

As a result, As PHR had made recommendations regarding the development of a human identification effort, the MAFMM, the PGO, and the nongovernmental civil society organization "Free Generation Movement - Mafqood" invited PHR's International Forensic Program to assemble a team of scientists and legal experts to conduct a human identification needs assessment and gap analysis to address some of the challenges faced by the current human identification effort in Libya. The assessment team was also supported by the United Nations Support Mission in Libya's Human Rights Division.

This Needs Assessment and Gap Analysis Report is the effort of a team of consultants to identify requirements and gaps for Libya's human identification effort. The analysis was done on the premise that developing sustainable forensic science with the capacity to support a Libyan human identification effort is an integral part of the country's developing judicial and law enforcement system. Director Schmitt and his team worked with stakeholders and representatives who had an interest in defining requirements for an implementable and sustainable solution. Specifically, the gap analysis presented in the report identifies the gaps in Libya's current human identification effort, the desired outcome, and the next steps that need to be taken.

6. Dr. Ahmed Elageili Zaid, Vice Dean of Faculty of Medicine, University of Tripoli; Dr. Abdullah Masoud be Sheen; Dr. Othman Abdel Jaleel Mohamed, Head of Forensic Laboratory Supervision Committee; Dr. Muftah Abdulatti al Fitoory, Professor, Faculty of Medicine, Benghazi University; Dr. Nabeel Sabri Enattah, Head of the Biotech Center, Tripoli, letter to Head of the NTC; the Prime Minister, Minister of MAFMM, Minister of Mol, Minister of MoEH, General Prosecutor, Head of the National Scientific Research Authority; Head of the Biological Ethics Committee. May 31, 2012.

Table 1 – International Organizations Currently Supporting the MFMM Human Identification Effort

Organization	Support
International Commission of the Red Cross (ICRC)	<ul style="list-style-type: none"> • Provided a two-week basic training course on exhumations to the staff involved in exhumations • Ongoing advice to the MAFMM on the human identification effort
International Commission of Missing Persons (ICMP)	<ul style="list-style-type: none"> • Provided training on DNA sample collection for the MAFMM’s human identification effort. • Provided DNA analysis of samples and generated a limited number of DNA identifications. • Forwarded a proposal offering to provide: <ul style="list-style-type: none"> ◦ DNA analysis and identification support ◦ Training to human identification staff • Currently is in the process of establishing a support office in Tripoli to include a forensic anthropologist and archaeologist
South Korean Ministry of National Defense Agency for Killed in Action Recovery and Identification (MAKRI)	<ul style="list-style-type: none"> • Dispatched a permanent team of experts in investigation, recovery, and identification to the MAFMM • Pledged funds to build a DNA laboratory and provide supplies, forensic equipment, and vehicles for the MAFMM human identification effort • Provides training in Libya to MAFMM staff, and training at South Korea’s MAKRI facilities
Spanish oil company Refinería de Petróleos de Escombreras del Sol (REPSOL)	<ul style="list-style-type: none"> • Made funds available for the MFMM to build a DNA laboratory and training of staff.
Finnish government - Finnish Forensic Expert Delegation in Tripoli	<ul style="list-style-type: none"> • Visited Tripoli in April 2012 and issued recommendations.¹
United Nations Support Mission in Libya (UNSMIL) - Human Rights Division.	<ul style="list-style-type: none"> • Provides support on transitional justice, a law for missing persons, and human rights.

1. The report outlined a number of important recommendations, many of which have not yet been adopted.

Document Organization

The Libyan Forensic DNA Needs Assessment and Gap Analysis Report is organized in the following sections:

- **Executive Summary** - provides an overview of the entire report.
- **Introduction** - Provides the background, the need, and the content of the Human Identification Needs Assessment and Gap Analysis Report.
- **Methods** - Provides working definitions and describes the approach used to conduct the needs assessment and gap analysis.
- **Legal Context and Gap Analysis** - Describes the overarching legal issues that are applicable to the entire identification effort, and the legal gap analysis, which provides recommendations for bridging the gaps between current and desired states.
- **Forensic Human Identification and Gap Analysis** - Discusses the current status of human identifications in Libya and the desired state based on stakeholders needs. The gap analysis provides recommendations for bridging the gaps between current and desired states.
- **Recommendations and Conclusion** – Summarizes the findings in the gap analysis.

Mass Fatalities and Human Identification Efforts

Human identification efforts as part of a response to a mass fatality are based on the following concepts:

1. The human identification effort in response to a mass fatality is temporary in nature.⁷
2. A mass fatality response exceeds normal public health (mortuary), law enforcement and judicial capacities and requires additional resources for the identification of human remains.
3. It might take many years to identify a significant number of human remains. Some may never be identified, and some families might not receive the remains of their loved ones. At some point the remaining human identifications and missing persons cases should be fully integrated into routine governmental operations.⁸
4. A human identification effort in response to a mass fatality needs to address the right of victims' families to know the truth about what happened to their missing loved ones.
5. The identification of human remains involves the application of science to the judicial decision to identify a person as he or she is identified at birth by the state.

Forensic Human Identifications

Identification of human remains in cases of mass fatalities, such as those resulting from natural disasters, accidents, and conflicts like the one in Libya, are often perceived to require an immediate "humanitarian" response. Legal aspects of the identification of human remains are often marginalized in an effort to provide a quick response to grieving families, resulting in the tendency to identify human remains without following standard forensic practices.

To properly place the present human identification needs assessment and gap analysis for purposes of this report, the following explains the term "forensic human identification":

Forensics is defined as the application of science to a legal context. In order for it to be sustainable and effective, it requires the existence of a sound academic and scientific community as well as a proper supporting legal framework.

Civil identity is generally the responsibility of the state; the state issues a birth certificate, which in turn grants each person a name linked to rights and responsibilities within society and the state. In much the same way, the certification of death is the state's responsibility, as a person's death has a legal impact on living family members – such as marital status of a wife, inheritance, etc. This death certificate also generally includes the determination of cause and manner of death (natural, accidental, homicide, suicide), which can have further legal implications, such as the launching of a criminal investigation. Both birth and death therefore are part of the system by which the state imposes the norms and regulations of the society it represents on the individual. This is the context in which a "human identification" effort has to be understood.

The determination of *human identity* is the result of the judicial decision to identify a person as he or she is identified at birth - civil identity.

Therefore, the process of generating one's civil identity is performed through **forensic human identification**. For forensic purposes, an identity in such a case can be based on various factors, ranging from documen-

-
7. Even with human identification efforts of mass fatalities resulting from conflicts in transitional justice contexts, the goal is to reach a state in which no human rights violations occur and the practice of enforced disappearances is a thing of the past. In this sense, even if it takes decades, it should be viewed as a temporary state of transition with a defined goal when the effort is concluded.
 8. Expediting DNA Analysis might provide a limited number of immediate identifications to some families, but many will have to wait. Managing family expectations about prioritization in identifying remains is important in addressing the sense of urgency families might have in receiving the remains of their loved one.

12 tary evidence (adoption papers), to fingerprints, to DNA (affiliation with biological parents). In some cases, a subjective identification based on recognition of the remains in a controlled environment by witnesses and circumstantial evidence (e.g., someone died in his bed surrounded by family members) is confirmed judicially by a forensic expert, usually the medical examiner.

The exact method of forensic human identification depends on the circumstances surrounding the death and the available evidence. In cases like Libya where people died in uncontrolled circumstances and human remains have been "lost," i.e., people have gone missing, DNA identification plays an important role in establishing an individual's identity. DNA is only one piece of evidence in the human identification process and needs to be evaluated along with all other evidence.

An identification effort in Libya needs to identify and integrate those authorities that are involved in the determination of civil identity.

Methodology

From October 14 through November 15 2012, PHR International Forensic Program Director Schmitt and his team of expert consultants visited Libya (See schedule in Appendix A) . Due to security concerns, travel to Benghazi and Sabha by the entire team of experts was not possible. Both cities were visited by Director Schmitt. Meetings with stakeholders in the identification process and family associations in these cities were coordinated with the MAFMM. The team of experts spent 14 consecutive days conducting a needs assessment and gap analysis for the human identification project. Stakeholders and representatives from civil society, government, and nongovernmental organizations participated in the needs assessment and gap analysis. Each was provided prior to the meeting with an executive summary of PHR's assessment project.

Meetings were held with:

- Ministry for the Affairs of Families of the Martyrs and Missing Persons
- Ministry of Interior - Forensic DNA Laboratory
- Ministry of Justice
 - Center of Judicial Expertise
 - Forensic Medicine Department, Tripoli Hospital Morgue
- Ministry of Higher Education
- University of Tripoli
- Biotechnology Research Center
- Nongovernmental Organizations
 - Mafqood Family Association
 - Association of Abu Salim Families
 - Association of Missing in Action of Libyan Wars⁹
- Private Industry
 - AlFarabi (molecular biology supply distributor)
- International Stakeholders
 - United Nations Support Mission in Libya (UNSMIL)
 - International Committee of the Red Cross
 - International Commission of Missing Persons
 - American Bar Association
 - Embassy of the Kingdom of the Netherlands
 - Embassy of Switzerland
 - Embassy of the United States

9. Name of this association is not clear.

The team conducted meetings to assess the human identification situation and discuss (as appropriate) the following topics:

13

- The legal context for making identifications
- Human identification and forensic science assumptions
- Expectations for the human identification effort
- Requirements for developing sustainable forensic operations in Libya
- Potential barriers to the successful identification effort and mitigation strategies
- Roles and responsibilities for the identification effort
- Organizational capabilities and capacity for:
 - Excavation of graves
 - Postmortem examinations of human remains
 - Collection of antemortem data
 - DNA testing and profile analysis
 - Interactions with families/psychosocial support
 - Comparison of postmortem and antemortem information
 - Identification of human remains
- Stakeholders and needs
- Estimated number of:
 - Missing
 - Individuals who were missing but were not reported by their families
 - Individuals were reported missing and the family thought they were deceased but were actually alive (for example, in prison)
 - Mass graves
- Budgets (current and future)
- Offers of support from international organizations
- Impact of current and future identification efforts on families
- Current forensic capabilities in Libya
- Current and anticipated educational and training needs
- AABB Guidelines for Mass Fatality DNA Identification Operations
- Generally accepted and reliable approaches for:
 - Training to establish competency in performing the various steps of the identification process
 - Collecting antemortem data from families
 - Obtaining DNA reference samples (including collection methods and authorization for testing)
 - Conducting proper excavation of graves and handling of human remains
 - Collecting postmortem information/autopsies
 - Maintaining proper chain of custody
 - Recording (documenting) examinations, analyses, and findings
 - Maintaining data, data integrity, data security, and data ownership
 - Performing DNA data analysis and reporting
 - Obtaining laboratory accreditation
 - Discussing outsourcing of DNA testing (including maintaining control and ownership of the identification effort)

The team answered various technical questions pertaining to forensic identification of human remains. In addition, the team reviewed the documents outlined in Appendix B.

- 14 Following the trip, the team analyzed the findings and made recommendations for improving the human identification effort focusing on the development of sustainable and credible forensic operations in Libya. The following outlines the team’s findings and recommendations, which were reviewed by each team member and circulate for comments to outside experts from UNSMIL, the ICRC, the ICMP, the MoI, and the MAFMM for comments.

Legal Context and Gap Analysis

The legal challenges currently faced by Libyan families and communities of the missing and disappeared are many and varied. Some of these challenges need to be addressed by adhering to international law and addressing specific issues within an appropriate national legal framework.

Libya’s obligations under international law

Although Libya has not signed or ratified the *International Convention for the Protection of All Persons from Enforced Disappearance*,¹⁰ it nonetheless has certain obligations it is required to fulfill under international humanitarian law and international human rights law. In terms of international humanitarian law, Libya is a party to several treaties that require it to take steps to protect civilians, combatants, and prisoners during times of war and internal armed conflicts.¹¹

Under international human rights law, Libya is a party to a number of international and regional conventions that oblige it to protect at all times the rights of men, women, and children who are missing and disappeared at all times. These include the *International Covenant on Civil and Political Rights*¹²; the *Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment*¹³; the *Convention on the Rights of the Child*¹⁴; *United Nations Convention on the Elimination of All Forms of Discrimination against Women*¹⁵; and the *African Charter on Human and Peoples’ Rights*.¹⁶

As a member of the United Nations, Libya is obliged to give effect to the *United Nations Declaration on the Protection of All Persons from Enforced Disappearance*.¹⁷

In terms of its international law obligations, Libya is obliged to take steps to ensure that families have the right to be informed of the whereabouts of their missing and disappeared members and have the right to approach the government to obtain information. Libya is accordingly obliged to trace missing persons and take steps to restore contact between family members who have been separated by conflict. Libya also has responsibilities toward the dead. It must trace, recover, and identify the remains.

Compliance with international law also means that Libya is obliged to enact national laws to protect and uphold the right not to be arbitrarily deprived of life; the right not to be arbitrarily deprived of liberty; the right to respect family life; the right not to be subjected to torture or other forms of cruel, inhuman or degrading treatment; the right not to be subjected to enforced disappearance; and the right to recognition as

10. Entry into force and registration: 23 December 2010, No. 48088

11. Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (1949); Geneva Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (1949); Geneva Convention (III) relative to the Treatment of Prisoners of War (1949); Geneva Convention (IV) relative to the Protection of Civilian Persons in Time of War (1949); Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts [Protocol I] (1977); Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts [Protocol II] (1977). The Geneva Conventions I to IV were acceded to 22 May 1956. The 2 Protocols were acceded to on 7 June 1978.

12. See article 9. Libya acceded to the ICCPR on 15 May 1970. The Optional Protocol was acceded to on 16 May 1989.

13. Libya acceded to the CAT on 16 May 1989.

14. Libya acceded to the CRC on 15 April 1993.

15. Libya acceded to the CEAFW on 16 May 1989.

16. Ratified in 1986.

17. General Assembly resolution 47/133 of 18 December 1992.

a person before the law. It is relevant to note that the new Minister of Justice has proposed several draft laws that would help to give effect to these obligations, including a draft law that criminalizes enforced disappearances and a draft law on transitional justice.

Current legal framework

Currently the Ministry for the Affairs of Families of Martyrs and Missing Persons (MAFMM) is charged with dealing with issues arising for martyrs and the missing in Libya. The MAFMM derives its legal mandate from the following documents:

1. Council of Ministers' Decision No. 28/ 2012: Concerning the Regulation of the Administrative body of the Ministry for the Affairs of Families of Martyrs and Missing Persons¹⁸
2. Resolution of the Cabinet of Ministers No. (85) of 2012 regarding the Care and Honoring the Families of the Missing¹⁹
3. Resolution of the Minister for the Affairs of Families of Martyrs and Missing Persons No. (32) of 2012 regarding payment of financial gratuities to families of the missing²⁰

Council of Ministers' Decision No. 28/ 2012

Under Council Decision 28/ 2012, the MAFMM was authorized to develop policy and execute measures of legislation in force²¹ and in particular to care for the families of the martyrs and missing, set the necessary controls, and handle the files of the missing in coordination with the relevant authorities.²² The MAFMM is also required to make proposals for new legislation regarding martyrs and the missing. In particular, the MAFMM is authorized to set up the necessary training and rehabilitation programs for family members of the martyrs and missing.²³

Among the departments required to be established under Article 3 are the Department of Martyrs' Affairs and the Department of Missing Persons' Affairs. According to Article 5, the Department of Martyrs' Affairs has the power to collect data on martyrs and their families; facilitate moral support for martyrs' families; ensure that they are provided with education, health care and training; and establish mechanisms for distributing grants to martyrs' families.

Article 6 requires the Department of Missing Persons' Affairs to collect data on the missing and their families; collect DNA samples from the families of the missing; search for grave sites; collect DNA samples from corpses at grave sites; analyze DNA samples and inform families of the test results; and establish mechanisms for distributing grants to martyrs' families.

Resolution of the Cabinet of Ministers: No. (85) of 2012 regarding the Care and Honoring the Families of the Missing

This decision of the cabinet sets out the amounts payable to families of the martyrs and the missing and the type of moral support to be provided. Article 1 provides that a monthly gratuity of 500 Libyan Dinars (LYD) is payable to each family of a martyr plus an additional 100 LYD to each dependent in the martyr's family. In the case of a missing person, a monthly gratuity of 500 LYD is payable to each family.

18. Issued on 5 February 2012

19. Issued on 3 March 2012

20. Issued on 17 April 2012

21. Such laws include: Law no. 19/1989 pertaining to the declaration of benefits for those killed, missing and imprisoned as a result of military operations and its amendments; Law no. 12/1991 deciding the rights and benefits of the military and civilians who lose their lives doing their duty; Decision no. 128/2005 of the "former" General People's Committee to set the foundations, rules, and provisions for deciding the rights and benefits of those who lose their lives doing their duty; and Decision no. 62/2011 of the "former" National Transitional Council's Executive Office to re-organize the Fund of the Families of the Martyrs, Wounded, and Missing,

22. Article 1 of Cabinet Decision 28/ 2012.

23. *Id*

16 Article 2 sets out the moral support to be provided to martyrs' families, namely the creation of a Martyr's Day to commemorate the martyrs' anniversary; erecting a monument for martyrs of February 17th; and awarding the Order of the Martyrs to the family of each martyr. Under Articles 3 and 4, the MAFMM is responsible for identifying the relevant beneficiaries and arranging the payments.

Resolution of the Minister: No. (32) of 2012 regarding payment of financial gratuities to families of the missing

Article 1 provides that each family of the missing for the year 2011 shall receive a payment of 2,000 LYD. Article 2 this amount is to be regarded as deducted from the amounts provided to the families of the missing under Cabinet Resolution 85 of 2012.

Aside from the above difference in payments between families of martyrs and families of the missing, families whose missing loved ones were not classified as martyrs reported that their pension payments were suspended after four months. Families of martyrs continued to receive such payments.

Comments on the current legal framework

While the current legal framework provides for urgent support to be made available to families of the martyrs and missing, it falls considerably short of international norms and standards.

The obligations of the state and the rights of the missing, disappeared, unaccounted persons, and their families are not set out. The institution responsible for the tracing of the missing and the support of their families, as an arm of the executive branch, lacks the necessary independence and autonomy.

The provisions do not facilitate a serious investigation of the fates of the missing and the disappeared. No investigatory powers and procedures are provided. International best practices have vested such responsibilities in a dedicated commission with the necessary powers to conduct thorough investigations.

A one-size-fits-all approach has been adopted. Aside from the differentiation between families of the martyrs and the missing, each family receives the same support regardless of the harm suffered and their particular circumstances. The legal framework does not provide for an individual assessment of need.

It does not appear that families or stakeholders were consulted with respect to the particular provisions of these legal instruments.

The current legal framework is discriminatory in the following respects:

1. Council of Ministers' Decision no. 28/ 2012 appears to discriminate against the families of the missing. While the Departments of Martyrs' Affairs and Missing Persons' Affairs hold similar mandates, only the former is empowered to facilitate moral support to martyrs' families and ensure that they are provided with education, health care, and training.²⁴
2. While families of the martyrs and missing receive similar monthly financial support under Article 1 of Cabinet Resolution 85/ 2012, only families of the martyrs are authorized to receive an additional 100 LYD for each dependent. Families of the missing complain further that they only received financial support from the MAFMM for a period of four months.
3. Ministerial Resolution No. 32 of 2012, while providing for a lump sum payment to the families of the missing, appears to claw back such payments by providing that such payments are to be deducted from monthly payments made under Cabinet Resolution 85. The lump sum payments under Ministerial Resolution No. 32 of 2012 do not appear to be payable to the families of the martyrs, and appear to have led to a suspension of additional payments to families of missing, whereas payments to families of martyrs continue..

24. Article 3. Note however that Article 1 authorizes the MAFMM to set up the necessary training and rehabilitation programs for family members of both the martyrs and the missing.

- 4. No provision is made to give any support to families of those who died in the conflict who were not martyrs.

“Martyrs” and “the missing” are not defined, a finding also reported by the Finnish Expert Delegation in May 2012. Clear and transparent criteria for determining such status should be incorporated into law. It is assumed that the missing include all those who went missing during the Qaddafi regime and the recent conflict. However, no legal process appears to be in place for the determination of martyrdom and missing status.

Differentiation between support to families of martyrs and the missing

Those who made the ultimate sacrifice in the struggle for liberation ought to be publicly acknowledged. However, those who struggled for liberation but who are not confirmed dead should not be forgotten.

Efforts to commemorate martyrs are essentially political choices, whereas efforts to support the families of the missing, disappeared, and deceased are essentially humanitarian efforts that are required under international law. In the former category, political choices are justified, whereas under the latter category they are not. It is appropriate for commemorative efforts of martyrs to be handled by an arm of the executive branch acting under directives of a political head. However, efforts to provide humanitarian support, including a human identification effort, ought to be conducted by a credible body that applies fair criteria consistent with international norms and standards. Accordingly, differentiation within humanitarian support for families of the missing, including the human identification effort, on the basis of language, race, sex, nationality, religion, or political affiliation should not be permitted.

This especially holds true for a human identification effort, which must be carried out on a scientific basis. Therefore, it is necessary to separate the human identification effort from the duties of the MFMM. This will ensure that all relatives of missing persons report to the human identification effort. An independent program will have considerably better prospects of gaining the confidence and respect of the families of the missing and increase the success rate at which identifications are made.

Legal Gap Analysis Table

1. Convention for the Protection of All Persons from Enforced Disappearance	
<p>As-Is</p> <p>Libya has not ratified or implemented the Convention for the Protection of All Persons from Enforced Disappearance, but currently a draft law is pending before the General National Congress. Families with missing loved ones belonging to groups perceived to be in opposition to the revolution reported four instances of abductions by armed groups as they were on their way to the MAFMM to report a missing person. Subsequently, others have not come forward to report their missing loved ones.</p>	<p>Steps for Moving Forward</p> <p>Criminalize enforced disappearances in Libyan law and distinguish the new Libya from its oppressive past.</p> <p>Libya should ratify the <i>Convention for the Protection of All Persons from Enforced Disappearance</i> without expressing any reservations or making statements that are inconsistent with the convention’s purpose, and invite the United Nations Working Group on Enforced or Involuntary Disappearances to conduct a mission to Libya to assess the country’s progress in complying with the United Nations Declaration on the Protection of All Persons from Enforced Disappearance.</p> <p>Such a mission will provide confidential advice to the Libyan Government and provide practical recommendations for purposes of complying with international standards.</p>
<p>To-Be</p> <p>The Convention for the Protection of All Persons from Enforced Disappearance is ratified and implemented by Libya.</p> <p>Enforced disappearances will be criminalized. All Libyans will be protected by such legislation.</p>	

2. Non-Discriminatory Law On The Missing And Disappeared	
<p>As-Is</p> <p>Libya does not have a comprehensive law to address the many different aspects of the obligations of the state and the rights of the missing and disappeared.</p> <p>While Mandate 28 outlines tasks assigned to the MAFMM, it falls short in terms of providing a non-discriminatory approach to missing and disappeared persons in general.</p>	<p>Steps for Moving Forward</p> <p>Enact a new law on the missing and disappeared. The Libyan government, members of the General National Council, and civil society stakeholders should:</p> <ul style="list-style-type: none"> ◦ Hold meetings with those affected by disappearances, solicit written submissions from experts, and arrange workshops on the contents of the proposed law ◦ Follow the comprehensive guide to the obligations of the state provided by the International Committee of the Red Cross: Missing Persons: Handbook for Parliamentarians (Handbook No. 17) 2009, ICRC, Inter-Parliamentary Union ◦ The law should: <ul style="list-style-type: none"> • Give official status to victim organizations and include provisions for their support. • Acknowledge that it is the state's responsibility to provide material, financial, psychological, and legal support to families of missing persons. Note: Support may include emergency or urgent assistance such as food, housing, and physical safety. • Address the legal status of wives, children, and dependents arising from the lack of defined status of missing persons by granting an official status of "disappeared," under which a missing person is declared not dead but "absent" for legal purposes. • Include a legal framework that deals with other problems arising, such as rights to administration of property, custody of children, eligibility for benefits, and remarriage. ◦ Engage with civil society and the public before finalizing the draft law.
<p>To-Be</p> <p>A non-discriminatory law on the missing and disappeared is enacted and will facilitate the identification of all individuals.</p>	
3. Comprehensive Law - Obligation of State & Rights of Missing Relatives and Disappeared	
<p>As-Is</p> <p>Libya needs a comprehensive law to address the many different aspects of the obligation of the state and the rights of relatives of the missing and disappeared, which includes persons arrested, detained, or interned as well as the relatives of all such persons.</p> <p>Depriving detainees of the right to communicate with their families, lawyers, and medical practitioners constitutes cruel, inhuman, or degrading treatment.</p>	<p>Steps for Moving Forward</p> <p>The Libyan Government, members of the General National Council, and civil society stakeholders should take steps to ensure that these rights are enshrined in national law and in the constitution. These need to include:</p> <ul style="list-style-type: none"> ◦ The right of detainees to communicate with their families, lawyers, and medical practitioners ◦ A comprehensive registration of persons deprived of their liberty, including date and place of arrest, place of detention, transfer, and death, should be maintained ◦ Notification to families upon release or death of a detainee
<p>To-Be</p> <p>A comprehensive law is enacted that upholds and enforces the right of relatives to know the fates of missing family members. The law ensures that missing persons and their families are not discriminated against on the basis of language, race, sex, nationality, religion, or political affiliation. It provides that arrested and detained persons have the right to make immediate contact with family members, legal counsel, and medical practitioners.</p>	

4. Clarification of Legal Status of Missing Persons	
<p>As-Is</p> <p>The law does not clarify the legal status of missing persons and does not help families and dependents of missing persons address a range of concerns.</p> <p>In the absence of an official declaration of presumptive death, wives and dependents may not be entitled to financial and material support normally accorded to widows. Such a legal provision permits property and pensions to be passed on to dependents or heirs.</p>	<p>Steps for Moving Forward</p> <p>The Libyan government, members of the General National Council, and civil society stakeholders should take steps to ensure that these issues are addressed in national law.</p>
<p>To-Be</p> <p>A new law sets out the criteria and procedures for the declaration of death status and provides assistance to families to apply for presumptive death status in appropriate cases. It also provides for the “declaration of absence status” on the request of the family or dependents where a person has been missing for at least one year. This will help facilitate administrative and pension claims. Other clauses deal with issues arising with respect to marriage, property, and custody and guardianship of children.</p>	

5. Separation of Human Identification and Affairs of Martyrs	
<p>As-Is</p> <p>The existing legal framework is problematic in that the concept of “martyrs” is introduced alongside the concept of “missing” and support for both categories is implemented through the recently founded MAFMM. Those determined to be families of martyrs get preferential support. Reports of alleged mistreatment by some families of the missing add to the perception of bias by the MAFMM²⁵. These factors are likely to increase the perception of bias in the human identification effort over time.</p>	<p>Steps for Moving Forward</p> <p>Separate the human identification effort from the affairs of martyrs by creating a temporary and independent institution, such as a commission or an oversight board, tasked with a clearly defined human identification effort governed by a board of commissioners/members.</p> <p>In order to mitigate any perception of bias and to promote such a commission’s or oversight board’s independence, it needs to include on its governing board the appointment of commissioners/members who can:</p> <ul style="list-style-type: none"> ◦ Liaise and provide input from Libya’s ongoing effort in developing transitional justice legislation, such as the Fact Finding and Reconciliation Commission, the Transitional Justice Law, the legislation surrounding the Enforced and Disappeared Persons convention/law and the new law on missing persons. ◦ Facilitate resource allocations on a governmental level as needed. This should include high-level representatives from the MoJ’s Forensic Science Department, the GPO, the Mol’s Forensic Science Department and Criminal Investigations Department, and the MAFMM Social Affairs Department. ◦ Make or facilitate policies for the ministries involved in the legal determination of death (e.g., the MoJ and the Mol). ◦ Develop and implement governmental contracts and MOUs. ◦ Facilitate academic resource allocation and training in Libya and liaise with international higher education institutions involved in forensic science and the identification of human remains. This should include academics from universities in Libya as well as from the Biotechnology Center. ◦ Liaise with civil society organizations representing families of the missing in Libya. ◦ Serve as a national scientist liaising with international subject matter experts in the various disciplines of mass fatality human identification (archaeology, anthropology, pathology, and DNA).
<p>To-Be</p> <p>A human identification effort is scientific and must be completely independent of any effort to differentiate between missing persons on the basis of language, race, sex, nationality, religion, or political affiliation.</p> <p>Within the human identification effort there is no discrimination between missing persons on the basis of language, race, sex, nationality, religion, or political affiliation.</p> <p>An independent institution (such as a commission or an oversight board) will oversee the identification effort.</p> <ul style="list-style-type: none"> ◦ Number of members: The number of commissioners or members of an oversight board should be large enough to fairly represent society but small enough to constitute a manageable and sustainable group.²⁶ ◦ Fair representation: Appointments should be broadly representative of society. Commissioners or oversight board members should have diverse perspectives and backgrounds to avoid bias or the appearance of bias. To this end, selection committees should bear in mind regional balance and political affiliation, as well as religion, language, class, and ethnicity, among other factor. ◦ Human rights track record: Each commissioner or members of the oversight board should be above reproach and not in any way have been involved in criminal acts, inclusive of human rights violations or corruption. ◦ Neutrality: Prospective commissioners or members of the oversight board should be vetted to ensure that they have no questionable links to the subject matters or organizations under inquiry.²⁷ ◦ Gender: It is important to incorporate gender-based criteria in the commissioner/oversight board membership selection process. 	

25. Two families reported differential financial support from the MAFMM, three other families reported having family members detained upon travelling to report missing family members, and on two separate occasions family members were witnessed vocally alleging discrimination at the MAFMM. Even though this is not linked directly to the human identification effort, it nevertheless has created a perception by these families of being discriminated against by the MAFMM which houses the human identification effort.

26. Most commissions have had between three and 17 members. Generally, an uneven number of commissioners or members to an oversight board should be appointed.

27. While it is not uncommon for state personnel to be seconded to commissions of inquiry, this is normally done in a way that protects the commission’s independence and integrity — for example, by keeping permanent posts and commission functions entirely separate.

6. Oversight of Human Identification Effort	
<p>As-Is</p> <p>Libyan law does not establish and oblige an independent body to search for missing persons, identify human remains, and provide regular feedback to families.</p>	<p>Steps for Moving Forward</p> <p>The Libyan government, members of the General National Council, and civil society stakeholders should take steps to ensure that these issues are addressed in national law.</p>
<p>To-Be</p> <p>An independent institution, such as a commission or an oversight board tasked with the human identification effort, with a defined mandate is established under law tasked with the search for missing persons and the identification of human remains. It provides regular feedback to families and relevant state authorities. One of the key components of this body is a central information registry that facilitates effective tracing of unaccounted persons. It collects data on the identities, locations, and circumstances of the missing and disappeared. The data is subject to independent verification. All organs of the state are required under law to cooperate with and support the work of the independent body. The law imposes an obligation on the independent body to comply with international best practices when exhuming and handling human remains and conducting burials. The law stipulates how the unidentified dead should be handled.</p>	
7. Oversight of Human Identification Effort	
<p>As-Is</p> <p>The current human identification effort does not have a clear definition of who constitutes a missing person.</p> <p>It is necessary for a specialized human identification effort to develop and publish written rules and regulations defining which cases of missing persons will be included in such a human identification effort.</p>	<p>Steps for Moving Forward</p> <p>Include such a definition in the new law on the missing and disappeared.</p>
<p>To-Be</p> <p>There will be a clear definition of what period of time the human identification effort will cover and how the identification of missing in general will be included as an obligation of the Libyan state.</p>	

8. Human Identification Investigations and Postmortem Examination	
<p>As-Is</p> <p>There is an apparent lack of cooperation between the MoI, the MoJ, the PGO and the MAFMM, leading to a disagreement by different stakeholders over the jurisdiction the MAFMM has over medico-legal procedures (autopsies establishing cause and manner of death) arising from criminal matters. As a consequence, mass graves and missing person cases have not so far been investigated as criminal cases.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort will create an Investigations Unit with established terms of reference under which the MoI will second criminal investigative capacity to the human identification effort. This Investigations Unit will collaborate closely with other investigative efforts such as the Fact Finding and Reconciliation Commission and law enforcement. The Investigations Unit will collect antemortem data on missing persons registered at the human identification effort, and will also be able to collect DNA samples from families searching for their missing loved ones.</p> <p>The MoJ will second medico-legal capacity to a Postmortem Examination Unit that will conduct medico-legal postmortem examinations on exhumed remains, establishing cause and manner of death and preserving forensic evidence.</p>
<p>To-Be</p> <p>The human identification effort will include the necessary capacity to conduct criminal and medico-legal investigations. Inter-institutional cooperation will be established.</p>	
9. DNA Data and Privacy Laws	
<p>As-Is</p> <p>There are no legal provisions in Libya defining the use and protection of personal information and data derived from DNA profiling.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort should provide assistance in formulating DNA data and privacy laws.</p>
<p>To-Be</p> <p>Laws and regulations will be in place defining the use of DNA profiling and protecting data and the right to privacy.</p>	
10. National Law for Unlawful Conduct and Punishable Offenses	
<p>As-Is</p> <p>Libyan law does not provide for punishable offenses for a range of acts and omissions relevant to the missing and disappeared.</p>	<p>Steps for Moving Forward</p> <p>The Libyan government, members of the General National Council, and civil society stakeholders should take steps to ensure that these issues are addressed in national law.</p>
<p>To-Be</p> <p>The new law provides for punishable offenses for the following unlawful conduct:</p> <ul style="list-style-type: none"> ◦ Causing enforced disappearances ◦ Illegal arrest, detention, or internment ◦ Unwarranted refusal, neglect, or delay to provide relevant information on a missing person ◦ Intentional provision of false information on a missing person ◦ Soliciting of money or reward in exchange for information on a missing person ◦ Unlawful use and disclosure of private information ◦ Deliberate denial of the right to inform relatives of a capture, arrest, location, and state of health ◦ Desecration of human remains 	

Human identification efforts

Mass fatality human identifications are organized as outlined in Figure 1. Bodies are recovered and post-mortem information is collected from the remains. Additionally, families report loved ones missing. A list of all those persons who are missing, some of which might not be dead, or whose remains have not been recovered is compiled. The comparison of the postmortem and antemortem data then leads to the identification of remains that have been recovered.

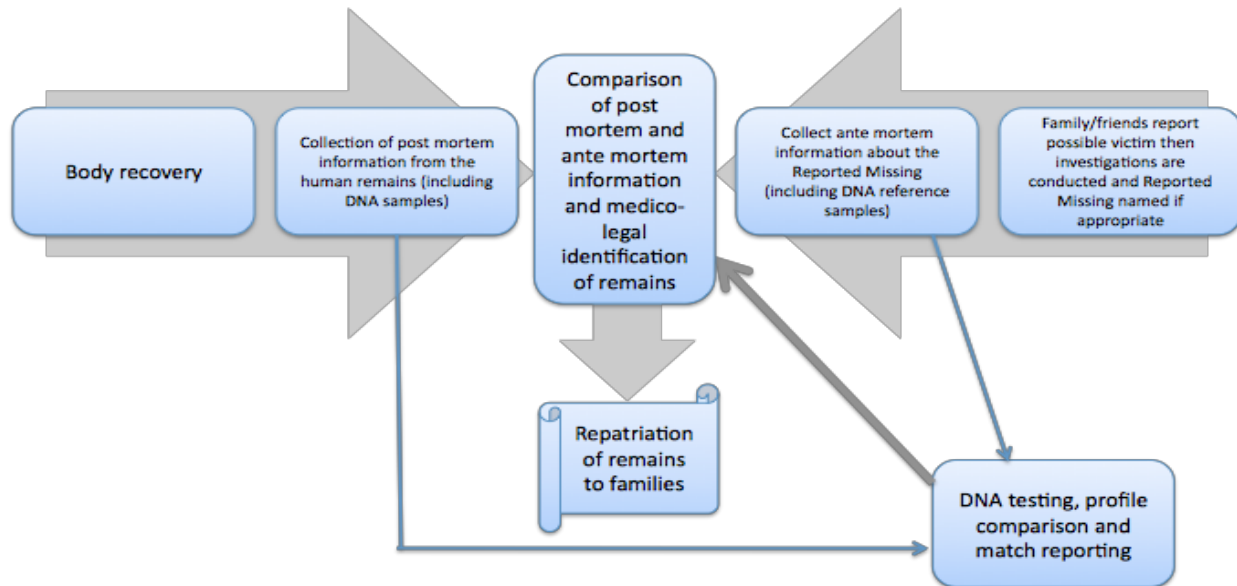


Figure 1 - The Human Identification Process

Following its visit to Libya, PHR’s International Forensic Program team of experts conducted an analysis of gaps to identify the needs and requirements for implementing sustainable forensic human identification capabilities on a national level in Libya. The analytic approach assumed Libyan ownership of the process that would address immediate needs and ensure that human identifications were set within a forensic context for long-term sustainability.

The results of the gap analysis are organized in table format. The first cell identifies the issue that needs to be addressed - the “As Is”; the second cell identifies the desired goal to be reached — the “To Be”; and the last cell in each row makes recommendations on what steps need to be taken — “Steps for Moving Forward” — to reach the desired goal.

- Overarching Issues
 - Governance
 - Fact Finding and Prosecutions
 - Data Management
 - Education and Research
 - Psychosocial Support
 - Managing Family Expectations
 - Outside Assistance
 - Transitioning Operations
 - Use of Internationally Recognized Procedures
- Body Recovery
 - Crime Scene Management and Forensic Archaeology
 - Evidence Collection and Storage

- Collection of Postmortem Information
 - Medico-legal Examinations of Human Remains
- Reported Missing Registration
 - Determining the Number of Missing Persons
- Antemortem Data Collection
 - Antemortem Data Collection
- DNA Collection, Testing, and Reporting
 - Collection of Postmortem DNA Samples
 - Collection of DNA Reference Samples
 - Testing Capacity in Libya
 - Outsourcing
 - Profile Comparison/Data Management
 - Match Reporting
- Data Comparison, Medico-Legal Identifications, and Repatriation of Remains
 - Comparison of Antemortem and Postmortem Data
 - Identifications
 - Repatriation of Remains

Forensic Human Identification and Gap Analysis Table

1. Overarching Issues - Governance	
<p>As-Is</p> <p>The Libyan government currently faces challenges in providing security and justice to its citizens. Security forces are not under a uniform command and some unregulated armed groups remain that do not yet recognize civilian authorities. This poses a challenge to overall governance and central government control as implementation of policies is not effective on a nationwide scale. This equally affects the implementation of criminal investigations as a whole, and in particular the investigations related to the human identification effort in Libya.</p> <p>The identification of the missing is a concern common to all Libyans. A specialized and well-defined human identification effort will integrate staff and capacity of the Libyan government (MoI, MoJ), thereby building confidence in government by providing equal rights, government services, and rule of law.</p>	<p>Steps for Moving Forward</p> <p>A human identification effort will produce statements of work, defining the role and responsibilities, and memoranda of understanding with the MoI and MoJ. This will include identifying:</p> <ul style="list-style-type: none"> ◦ Staff to be seconded to the human identification effort by each ministry ◦ Jurisdiction ◦ Necessary additional resources ◦ Budgeting <p>A specialized training and mentoring program will be implemented (to include competency testing) with the support of international experts and the Libyan academic community. This will include mentoring and training in:</p> <ul style="list-style-type: none"> ◦ Forensic anthropology and archaeology ◦ Forensic pathology ◦ Forensic DNA and kinship analysis ◦ Crime scene and evidence
<p>To-Be</p> <p>The Libyan government will create a body, such as a commission or an oversight board, tasked with the human identification effort. This commission/oversight board will have a defined and prioritized mandate, under which parts of the existing governmental structure (the MoI and MoJ) will be integrated.</p> <p>The human identification effort will be able to act independently and efficiently in exhuming human remains, identifying the missing, and repatriating remains to family members of the missing, while utilizing existing governmental infrastructure.</p> <p>A specialized training and mentoring program for the human identification effort will be implemented.</p>	

2. Overarching Issues - Fact Finding and Prosecutions	
<p>As-Is</p> <p>Confusion exists as to which jurisdiction the collection of human remains and collection of physical evidence (and personal effects) fall under. Currently, these are done by the MAFMM staff, which is not trained in evidence collection and storage, and needs written procedures and protocols governing the handling of evidence.</p> <p>For evidence to be of value for fact finding and/or prosecutorial purposes, standard protocols for evidence and chain of custody procedures need to be followed.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort will liaise with the:</p> <ul style="list-style-type: none"> ◦ PGO ◦ Mol ◦ MoJ, and ◦ Fact Finding and Reconciliation Commission <p>to set up terms of reference that clearly define and integrate judicial and fact-finding mechanisms into the human identification effort.</p>
<p>To-Be</p> <p>The possibility of criminal investigations into the deaths of people whose remains are exhumed will be ensured through the integration of the proper judicial authorities in the human identification effort, starting with the investigation and exhumations of remains.</p> <p>Evidence identification, documentation, recovery, and storage will be handled by trained crime scene technicians with the proper jurisdiction, and will be available for fact-finding purposes.</p>	
3. Overarching Issues - Data Management	
<p>As-Is</p> <p>While the MAFMM has information in electronic format, there is a need for a comprehensive secure data management system for all information, samples, and physical evidence collected.</p>	<p>Steps for Moving Forward</p> <p>The Libyan human identification effort shall work with international experts to define software requirements for the Human Identification Data Management System, such as the one offered by ICMP.</p> <p>In addition to reviewing the technical requirements the following should be evaluated:</p> <ul style="list-style-type: none"> ◦ Ownership ◦ Effectiveness for integration into routine law enforcement functions ◦ Costs: <ul style="list-style-type: none"> • Initial purchase • Long term • Maintenance and ongoing development
<p>To-Be</p> <p>The human identification effort shall use a secure and integrated Human Identification Data Management System as appropriate to track all information, physical evidence, and DNA samples. All agencies involved with the identification effort will be integrated into this data management system.</p>	

4. Overarching Issues - Education and Research	
<p>As Is</p> <p>While the University of Tripoli is staffed with PhD holders from reputable international universities, the professors suffer from Qaddafi-era policies that undermined the success of the educational institutions. Some of these challenges included a very high student-to-educator ratio, a shortage of resources for effective student teaching laboratories, lack of access to up-to-date books and scientific publications, lack of time for meaningful research, and sufficient ongoing budgets for long-term planning and operations. While the faculty is interested in supporting forensics, these issues are currently an impediment to meaningful and effective academic development.</p> <p>The Biotechnology Center is headed and staffed with eleven PhD holders from reputable foreign universities in molecular biology, genetics, chemistry, and other fields. The center was looted during the revolution and is currently attempting to make major improvements in organization and policies to increase the caliber of research and the number of scientific publications. The Biotechnology Center has supported the Mol with reagents and supplies as needed for day-to-day operations.</p> <p>Some of the leading scientists from these institutions have also provided consultation to the Libyan government and in one instance provided a written opinion on the testing of DNA samples outside of Libya. The scientists expressed an interest in supporting the human identification effort through research initiatives.</p> <p>Successful forensic initiatives actively engage their educational and research stakeholders as these stakeholders play a significant role in supporting sustainable operations.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort will include members on its board who are accomplished Libyan academics from universities and the Biotechnology Center.</p> <p>The institution tasked with the human identification effort will identify needs and determine roles for educational and research institutions for how they can best support the human identification effort. These could include:</p> <ul style="list-style-type: none"> ◦ Possible development of relevant allele frequency population databases ◦ Ethical guidelines for DNA testing in Libya ◦ Assist in formulating DNA data and privacy laws in Libya ◦ Assist in the development of procedures and protocols for a human identification effort ◦ Serve as scientific advisors to the human identification effort ◦ Necessary funding <p>Create a professional organization within Libya to foster dialogue and interactions between the Libyan forensic scientists.</p> <p>Participate in an international meeting of forensic scientists to foster dialogue and discuss research.</p>
<p>To-Be</p> <p>National academics will formally be included in the human identification effort and provide scientific input where necessary.</p> <p>The universities will have the resources and capacity to develop educational and research programs that will support ongoing forensic operations in Libya. These programs will include education in:</p> <ul style="list-style-type: none"> ◦ Forensic laboratory disciplines ◦ Law ◦ Forensic medicine ◦ Law enforcement <p>The Biotechnology Center will serve as a resource to the forensic community in Libya.</p>	

5. Overarching Issues - Education and Research	
<p>As-Is</p> <p>There is a lack of educational resources to provide forensic anthropology, forensic pathology, and general forensic science training in Libya.</p>	<p>Steps for Moving Forward</p> <p>The University of Tripoli will offer fellowships to internationally and academically renowned forensic anthropologists to help develop a curriculum in forensic anthropology, forensic pathology, and forensic sciences.</p>
<p>To-Be</p> <p>Internationally renowned forensic science resources will be part of establishing necessary educational resources in Libya.</p>	
6. Overarching Issues - Psychosocial Support	
<p>As-Is</p> <p>Psychosocial support for those who do not know the fate of their loved ones is complex and to be effective, should involve individuals with specific training. The MAFMM currently does not have the training and staff to provide meaningful psychosocial support to family members of the missing.</p> <p>There is a need for psychosocial support in Libya for both families of the missing and staff working on the human identification effort. The right to mental health needs to be recognized and integrated into a human identification effort.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will enter into an agreement/contract with qualified psychologists with internationally recognized experience in psychosocial support for missing persons' families and human identification effort staff to develop the necessary psychosocial support infrastructure. They will provide training and mentoring and develop a training program, protocols, and procedures.</p>
<p>To-Be</p> <p>Families of missing persons and staff of the human identification effort will receive adequate psychosocial support.</p>	
7. Overarching Issues - Managing Family Expectations	
<p>As-Is</p> <p>There is a need for informational material and family interaction procedures to help manage family expectations.</p> <p>The MAFMM DNA reference collection office in the city of Sabha was not able to provide accurate information on the identification effort when questioned.</p> <p>It is difficult to manage family expectations without formal communication procedures and informational documents for the families. This is especially critical when the identification efforts involve multiple DNA reference sample collection offices throughout the country.</p>	<p>Steps for Moving Forward</p> <p>Develop a public information campaign complete with written materials by:</p> <ul style="list-style-type: none"> ◦ Reviewing similar brochures for relevance; see: https://www.findthemissing.org/documents/Identifying_Victims_Using_DNA_Family_Guide.pdf ◦ Developing written informational material that is appropriate for the level of education of the families ◦ Testing and evaluating the information prior to wide-scale dispersal ◦ Evaluating and updating the material as needed <p>Develop procedures and policies for interacting with families that include:</p> <ul style="list-style-type: none"> ◦ Documenting what was said to the family, when and by whom ◦ Answers to commonly asked questions ◦ A process for appropriately addressing nonstandard questions <p>Develop a training program for staff interacting with families, including role playing as needed.</p>
<p>To-Be</p> <p>Accurate information will be provided to families. The human identification effort will implement a public information campaign and will have established policies and procedures for interacting with families.</p>	

8. Overarching Issues - Outside Assistance	
<p>As-Is</p> <p>A number of International organizations have donated and pledged support to the identification effort. These focus on the MAFMM as a partner.</p> <ul style="list-style-type: none"> ◦ REPSOL, a private oil company, has pledged funds to the MAFMM to build its own DNA laboratory. ◦ ICRC provided a two-week course to a limited number of staff in September 2011. The ICRC continues to provide support to the MAFMM. ◦ The South Korean Ministry of National Defense Agency for KIA (Killed in Action) Recovery and Identification (MAKRI) is providing support to the MAFMM in the form of a team of forensic experts in anthropology and medicine. ◦ ICMP has opened an office in Tripoli and plans to establish a “Libyan Identification Center” with the MAFMM. They also will provide forensic support in the form of qualified forensic anthropologist and archaeologist staff, and have made their DNA laboratory in Sarajevo available for DNA analysis of samples from Libya. ◦ There has been no specialized outside assistance for a human identification effort, nor the collection of evidence from such an effort for potential criminal cases provided to the MoJ and Mol. 	<p>Steps for Moving Forward</p> <p>N/A - Falls outside the scope of the PHR team’s expertise.</p>
<p>To-Be</p> <p>The Libyan government will ensure that international support is coordinated between the different agencies and integrated into the Libyan government and judicial system as a whole to maximize forensic capacity building across the country and its judicial institutions.</p>	

9. Overarching Issues - Transitioning Operations	
<p>As-Is</p> <p>Based on the nature of the fatalities and the initial exhumation/identification efforts, it is highly probable that the current identification efforts will result in human remains that have not been identified and families who have provided reference samples which have not resulted in the identification of remains.</p> <p>The MAFMM does not have a clear mandate as to which human remains and missing persons are to be included in the human identification effort. The general understanding appears to be that the MAFMM human identification effort includes only those that went missing during the revolutionary conflict (i.e. approximately February 17th, 2011 through October 23rd, 2011).</p> <p>There are also efforts by civil society, which attempt to locate missing persons from the different wars Libya has been involved in, dating back to 1911.</p> <p>It is not clear how cases will be handled that clearly fall outside the time period, for instance remains of those that went missing before or after the defined time period. For the human identification effort to be credible and independent, it is necessary to address the issue of the missing and their identification as a whole.</p>	<p>Steps for Moving Forward</p> <p>An independent human identification effort will establish the means to transition human identifications to the routine law enforcement functions. This plan will manage family expectations, maximize fiscal resources, and address possible identifications that are a result of missing persons cases which are unresolved, or date to earlier and/or later cases.</p> <p>As a first step, the institution tasked with the human identification effort will define its mandate to include:</p> <ul style="list-style-type: none"> ◦ The time frame from which missing persons will be included in the human identification effort ◦ How human identifications and missing persons cases falling outside of the established time frame will be addressed ◦ The handling of cases where remains are not repatriated to families
<p>To-Be</p> <p>There will be an operationally sound plan for concluding the current identification operations and transitioning the identifications to the routine law enforcement functions.</p>	

10. Overarching Issues - Use of Internationally Recognized Procedures	
<p>As-Is</p> <p>While the MAFMM received some outside training on the use of DNA in mass fatalities (e.g., DNA reference sample collection training), they still fall short of meeting standards set in international guidelines, such as the <i>AABB Guidelines for Mass Fatality DNA Identification Operations</i>.</p> <p>It is important to follow international guidelines, which:</p> <ul style="list-style-type: none"> ◦ Capture lessons learned (e.g., mistakes made in past mass fatality efforts) so that they are not repeated. ◦ Demonstrate to families that a standardized and accepted process has been implemented. 	<p>Steps for Moving Forward</p> <p>Obtain outside support to:</p> <ul style="list-style-type: none"> ◦ Collect and review relevant guidelines ◦ Host a conference with the focus of: <ul style="list-style-type: none"> • Introducing common “best practices” • Educating the Libyan scientists • Creating synergy among the Libyan forensic scientists ◦ Develop an advisory board that includes a variety of outside independent experts: <ul style="list-style-type: none"> • Different disciplines • Members independent of the identification effort • Academics
<p>To-Be</p> <p>Human identification efforts will follow internationally accepted guidelines for the use of DNA in Mass fatality operations including:</p> <ul style="list-style-type: none"> ◦ ISO/IEC 17025:2005-ILAC-G19 ◦ US FBI’s SWGDVI ◦ <i>Recommendations Regarding the Role of Forensic Genetics for Disaster Victim Identification (DVI)</i>, DNA Commission of the International Society for Forensic Genetics (ISFG), 2007 ◦ <i>Disaster Victim Identification Guide</i>, Interpol, 2009 ◦ <i>Missing People, DNA Analysis and Identification of Human Remains: A Guide to Best Practices in Armed Conflicts and Other Situations of Armed Violence</i>, International Committee of the Red Cross (ICRC), 2009 ◦ <i>Guidelines for Mass Fatality DNA Identification Operations</i>, AABB, 2010 	

11. Body Recovery - Crime Scene Management & Forensic Archaeology	
<p>As-Is</p> <p>There is a need for crime scene security and for properly trained and experienced forensic archaeologists and crime scene and evidence technicians to prevent the tampering with and/or the loss of evidence and information on the context from which human remains are exhumed. Such expertise is necessary to ensure the collection of forensic evidence necessary for both identification and judicial purposes.</p>	<p>Steps for Moving Forward</p> <p>Develop and implement policies and procedures in collaboration with the Mol's Criminal Investigation Department, the MoJ, and the PGO to protect mass graves as crime scenes.</p> <p>Create a Field Exhumation Unit that will be headed by forensic archaeologists and crime scene technicians who have received training in evidence documentation, recovery, and storage.</p> <p>Develop a training program to ensure that crime scene technicians receive specialized didactic and hands-on training in the following areas:</p> <ul style="list-style-type: none"> ◦ Evidence identification ◦ Documentation ◦ Recovery and storage ◦ The role of exhumation in the human identification effort <p>The training program should include:</p> <ul style="list-style-type: none"> ◦ Learning and outcome objectives ◦ Training materials, handouts, and audio-visuals ◦ Practical exercises ◦ Competency-testing tools and techniques <p>The human identification effort will designate an experienced forensic archaeologist and an experienced crime scene technician to provide training and mentorship for a Field Exhumation Unit.</p>
<p>To-Be</p> <p>Mass grave sites/irregular burials of human remains will be treated as crime scenes and evidence will be protected accordingly.</p> <p>Bodies will be exhumed in a manner that retains all forensic evidence necessary for both identification and investigative efforts.</p>	
12. Body Recovery - Crime Scene Management & Forensic Archaeology	
<p>As-Is</p> <p>A standardized approach is needed to govern exhumations. This approach should include policies and procedures.</p>	<p>Steps for Moving Forward</p> <p>Develop written exhumation policies and procedures based on industry best practices.</p>
<p>To-Be</p> <p>All personnel will be trained and competency tested, and will follow standard procedures documenting all activities associated with the exhumations.</p>	
13. Body Recovery - Crime Scene Management & Forensic Archaeology	
<p>As-Is</p> <p>Improper body recovery on occasion has caused remains to be commingled.</p>	<p>Steps for Moving Forward</p> <p>The Field Exhumation Unit will identify those instances where improper excavations have led to commingling of remains, and develop protocols and procedures for the exhumation, analysis, evidence recovery, and DNA sample collection.</p>
<p>To-Be</p> <p>Commingled remains require specialized identification procedures and methods. Procedures and protocols governing exhumation, analysis, evidence recovery, and DNA sample collection will be written prior to re-exhuming remains that previously were commingled through improper excavations.</p>	

14. Body Recovery - Crime Scene Management & Forensic Archaeology	
<p>As-Is</p> <p>Since the revolutionary conflict ended, uncontrolled excavation of human remains has resulted in the reburial of these bodies in other locations, in some cases without identifying markers. Information that links these reburied human remains to the original scene of the crime has potentially been lost in some cases.</p> <p>Even though some cursory GIS tracking information has been collected by staff at the MAFMM, a comprehensive database, integrating tracking information with investigative information, needs to be established.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort's <i>Field Exhumation Unit</i> will create a list of all known primary and secondary graves with their locations recorded. This should include a number of reported remains in these burials.</p>
<p>To-Be</p> <p>A comprehensive database will be established, which will include information linking excavated and then reburied human remains to their primary burial site and crime scene (context).</p>	
15. Body Recovery - Evidence Collection & Storage	
<p>As-Is</p> <p>There is no standardized and coordinated long-term storage solution for exhumed remains and physical evidence (such as personal effects) from mass graves/irregular burials. This often leads to the reburial of remains in secondary locations.</p> <p>The MAFMM is in the process of identifying special, secured cemeteries for the reburial of unidentified human remains exhumed from mass graves/irregular burials.</p> <p>Reburial of exhumed remains will lead to the degradation of DNA and other associated buried evidence.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will secure both refrigerated long-term storage for exhumed human remains, and dry evidence storage for physical evidence associated with human remains.</p> <p>The human identification effort in consultation with the MoJ Forensic Medicine Department and the MoI DNA laboratory will identify and procure a laboratory information management system that will include an Evidence Management System.</p>
<p>To-Be</p> <p>Remains will only be exhumed if long-term storage for both human remains and any associated evidence are secured.</p> <p>Physical evidence associated with human remains will be secured and properly stored. Forensic examinations of physical evidence will be carried out when necessary.</p>	
16. Body Recovery - Evidence Collection & Storage	
<p>As-Is</p> <p>MoI has acknowledged that it lacks staff and training capacity to deal with jurisdiction over criminal investigations regarding the missing and disappeared.</p>	<p>Steps for Moving Forward</p> <p>The MoI will set up a <i>Special Missing Persons Task Force</i> to carry out criminal investigations relating to missing persons. This task force will liaise with the General Prosecutor's Office and the human identification effort.</p>
<p>To-Be</p> <p>Sufficient staff will be hired and trained to assist in the recovery of human remains and evidence from mass grave exhumations.</p>	

17. Body Recovery - Evidence Collection & Storage	
<p>As-Is</p> <p>Some crime scene training of members of the MoI Criminal Investigations Department has been done through an initiative by the British government. However, this did not include specialized training on evidence documentation, recovery, and storage related to mass graves.</p>	<p>Steps for Moving Forward</p> <p>Specialized training requests will be made.</p>
<p>To-Be</p> <p>The MoI will designate staff to be trained in mass grave exhumations and evidence recovery. This staff will be seconded to the human identification effort's <i>Field Exhumation Unit</i>.</p>	
18. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>The MoJ Forensic Medicine Department needs standardized protocols and procedures governing the medico-legal examination of human remains.</p>	<p>Steps for Moving Forward</p> <p>As part of an overall effort to modernize the MoJ Forensic Medicine Department, it will adopt a strategic plan to:</p> <ul style="list-style-type: none"> ◦ Develop written standard protocols and procedures governing the medico-legal examination of human remains ◦ Evaluate the feasibility of gaining accreditation (i.e., International Association of Coroners and Medical Examiners) ◦ Arrange for mentoring by forensic pathologists and forensic anthropologists with internationally recognized experience ◦ Develop an ongoing operational budget
<p>To-Be</p> <p>The MoJ Forensic Medicine Department will have the required resources, including written standard protocols and procedures, governing the medico-legal examination of human remains.</p>	
19. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>To date, the MoJ's Forensic Medicine Department has not been able to adhere to international standards (Minnesota Protocol - http://www.theadvocatesforhumanrights.org/4Jun20046.html) in their medico-legal examinations. There is a need for qualified forensic pathologists and forensic anthropologists to support the examination of human remains.</p>	<p>Steps for Moving Forward</p> <p>As part of the strategic plan, the MoJ Forensic Medicine Department will enter into an agreement/contract with qualified forensic pathologists and forensic anthropologists with internationally recognized experience in these disciplines to provide training and mentoring and to develop a training program with the goal of accreditation.</p>
<p>To-Be</p> <p>The MoJ Forensic Medicine Department will have qualified forensic pathologists and forensic anthropologists conducting medico-legal examinations according to internationally recognized standards. (Minnesota Protocol).</p>	

20. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>The current human identification effort lacks proper medico-legal facilities to conduct postmortem examinations of remains exhumed from mass graves/irregular burials in Libya.</p> <p>Due to the lack of resources at the MoJ's Forensic Medicine Department, the MAFMM human identification effort contracted forensic medical specialists from Sudan to conduct postmortem examinations. These specialists were sworn in by a judge from the MoJ and are reportedly supervised by a Libyan consultant medical examiner to the MAFMM and MoJ.</p> <p>Examinations conducted by these forensic specialists do not follow international standards for medico-legal examinations and take place outside the routine practice of standard forensic examinations conducted by the MoJ Forensic Medicine Department.²⁸</p>	<p>Steps for Moving Forward</p> <p>The MoJ Forensic Medicine Department's forensic pathology and forensic anthropology mentors will assist in the creation of the human identification effort's Postmortem Examination Unit. They will assist in acquiring the necessary facilities, equipment and supplies to conduct postmortem examinations of remains relating to the human identification effort according to international standards.</p>
<p>To-Be</p> <p>The human identification effort will set up a Postmortem Examination Unit with support from the MoJ Forensic Medicine Department. The MoJ Forensic Medicine Department will second staff to the Postmortem Examination Unit.</p> <p>The MoJ Forensic Medicine Department will have the necessary facilities, equipment and supplies to be able to conduct postmortem examinations of remains relating to the human identification effort according to international standards.</p>	
21. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>The MAFMM does not establish cause and manner of death during the postmortem examination of remains, and there is no integrated judicial process for initiating criminal investigation where necessary.</p>	<p>Steps for Moving Forward</p> <p>The Postmortem Examination Unit will apply the MoJ Forensic Medicine Department's written standard protocols and procedures governing the medico-legal examination of human remains, developed under its strategic plan.</p>
<p>To-Be</p> <p>The human identification effort's Postmortem Examination Unit will include the establishment of cause and manner of death as an integrated judicial process within the responsibilities of the MoJ Forensic Medicine Department.</p>	

28. Dr. Anwar Arbie, Head of Libya's Forensic Medicine Department reported that his department did not receive, nor have knowledge of these reports.

22. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>The MoJ historically issues death certification for deceased individuals upon notification from the Forensic Medicine Department. It is not clear how death certificates are issued within the current identification effort by the MAFMM, as the MoJ's Forensic Science Department is not involved in the MAFMM's current postmortem examinations.</p>	<p>Steps for Moving Forward</p> <p>Death certificates will be issued upon notification from the MoJ's Forensic Medicine Department, which will be part of the human identification effort's <i>Postmortem Examination Unit</i>.</p>
<p>To-Be</p> <p>Death certificates will be issued within the Libyan legal framework upon positive identification of human remains by the human identification effort.</p>	
23. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>The MoJ's Forensic Medicine Department lacks the facilities, supplies, and staff to be able to adequately address medico-legal needs in Libya. It lacks the additional facilities necessary to deal with the exhumation and medico-legal examination of human remains from mass graves.</p> <p>The MAFMM currently does not possess the capacity, facilities, equipment, and supplies to deal with exhumation and medico-legal examination of human remains from mass graves according to internationally recognized standards (Minnesota Protocol).</p>	<p>Steps for Moving Forward</p> <p>The human identification effort's <i>Postmortem Examination Unit</i>, in consultation with the MoJ's Forensic Medicine Department will identify and provide the necessary resources for additional facilities, equipment, supplies, and staff to deal with the exhumation and medico-legal examination of human remains from mass graves.</p>
<p>To-Be</p> <p>As part of its strategic plan, the MoJ Forensic Medicine Department's facilities, equipment, supplies and staff will be brought up to date according to written standard protocols and procedures governing the medico-legal examination of remains.</p> <p>The human identification effort's <i>Postmortem Examination Unit</i> needs for facilities, equipment, and supplies will be identified. Resources will be made available to the MoJ's Forensic Medicine Department under the human identification effort.</p>	

24. Collection of Postmortem Information - Medico-Legal Examinations of Human Remains	
<p>As-Is</p> <p>Since the conflict, postmortem information has been collected by different stakeholders and agencies. This information needs to be collected and centralized.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will:</p> <ul style="list-style-type: none"> ◦ Identify those cases where postmortem data collection will be necessary ◦ Integrate postmortem data where possible in a human identification data management system, which will allow for comparison of antemortem and postmortem data
<p>To-Be</p> <p>The human identification effort will centralize and verify all post-mortem data collected so far.</p>	
25. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>While a precise assessment of the total number of missing can be difficult to obtain, it is important to determine a realistic number. This number is needed for planning and resource allocation purposes, and is used in the statistical analysis of the DNA kinship analysis reports.</p> <p>Following many mass fatalities, the initial numbers of missing are inflated. However, the current numbers may under represent the actual numbers as the list of reported missing is driven by the DNA collections rather than establishing a list of missing persons.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will be designated to head the missing persons and disappeared database as a means to establish an accurate estimate of the number of missing and disappeared.</p>
<p>To-Be</p> <p>The human identification effort will identify and address those instances where underreporting may have occurred.</p>	
26. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>The documentary evidence (such as photographs, identification cards, family books, etc.) listed as necessary on the MAFMM collection forms when families donate DNA reference samples and report a missing person are difficult to fulfill for those families who have lost their documentation during the conflict, or who belong to groups that do not have such documentation.</p>	<p>Steps for Moving Forward</p> <p>Written protocols and procedures on collecting information on missing persons and subsequent DNA reference samples will be included in a public information campaign, mitigating any impression of bias.</p>
<p>To-Be</p> <p>Written protocols and procedures will address instances where not all documentation is available and provide means to those not able to furnish certain documentation/evidence of a missing person.</p>	
27. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>Family members of missing persons who are under the impression that their missing loved one is still alive may not be willing to donate a DNA reference sample.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort's <i>Investigations Unit</i> will actively investigate and track down leads on missing persons who are suspected to be alive. Information gathered will be included in the missing persons database and communicated to the families as appropriate.</p>
<p>To-Be</p> <p>Clear protocols and procedures on the collection and use of DNA reference samples will be communicated to families, encouraging them to allow for the inclusion of their DNA profiles.</p>	

28. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>Family members of the missing who do not qualify as Martyrs have reported feeling discriminated against. If this perception is widespread these families may not be donating DNA reference samples.</p>	<p>Steps for Moving Forward</p> <p>The affairs of Martyrs are dealt with separately from the human identification effort.</p>
<p>To-Be</p> <p>The human identification effort will be separated from affairs dealing with martyrs and will be publicly recognized to be unbiased.</p>	
29. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>Currently the list of missing is generated from family members who are residing in Libya, and are willing and able to donate DNA reference samples. There was no evidence that reports were being taken from individuals outside of Libya.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will establish the means to collect information on missing persons from family members living abroad. This will include international travel for investigative staff when necessary.</p> <p>The human identification effort will establish protocols and procedures for DNA reference sample collections outside of Libya. This will include entering into agreements with international DNA laboratories and collections facilities, to properly collect the samples.</p>
<p>To-Be</p> <p>An international outreach campaign is established to facilitate the reporting of a missing persons, the collection of antemortem information and the collection of DNA reference samples for Libyan expatriates.</p>	
30. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>Allegations were made that family members had been detained by a variety of irregular security forces and are being held for extensive periods without charge or trial. It is possible that some persons currently believed to be missing may be languishing in prisons and temporary detention facilities.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will establish the means to collect information on missing persons who might be detained.</p>
<p>To-Be</p> <p>Detention centers are operated by the government. Lists of detained prisoners are made available to the human identification effort.</p>	
31. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>There are no provisions for non-Libyan citizens to report missing persons or donate DNA reference samples of a missing family member.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will establish the means to collect information on missing persons from family members of foreign nationals suspecting their loved one is missing in Libya. This will include international travel for investigative staff when necessary.</p> <p>The human identification effort will enter into agreement with foreign DNA laboratories and establish protocols and procedures for DNA reference sample collection.</p>
<p>To-Be</p> <p>An international outreach campaign is established to facilitate the reporting of a missing person and the collection of DNA reference samples for foreign nationals suspected to be missing in Libya.</p>	

32. Reported Missing Registration - Determining the Number of Missing Persons	
<p>As-Is</p> <p>Several family members of missing persons reported instances of possible fraud. They were asked for monetary remuneration in return for information on the whereabouts of their missing loved one. These families have not received investigative support in protecting them from this type of extortion, and the criminal prosecution of such crimes. Some cases involve offers of information and requests for remuneration from outside of Libya.</p>	<p>Steps for Moving Forward</p> <p>The <i>Special Missing Persons Task Force</i> at the MoI will carry out criminal investigations in collaboration with the human identification effort's <i>Investigations Unit</i>. Support from international law enforcement initiatives, such as INTERPOL and others should be requested.</p>
<p>To-Be</p> <p>Criminal investigations into alleged fraudulent claims of locating missing family members involving extortion/remuneration will be carried out. International law enforcement support will be given when required.</p>	
33. Antemortem Data Collection	
<p>As-Is</p> <p>Current data collection within the MAFMM's DNA reference sample collection initiative is insufficient in establishing an antemortem biological profile of a missing person.</p> <p>To date, family reference samples have been reportedly collected for approximately 2,100 reported missing persons cases. These family members might need to be re-interviewed to provide necessary antemortem data.</p> <p>There is a need for standardized written policies and procedures governing the collection of antemortem data and the interaction with families.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will:</p> <ul style="list-style-type: none"> ◦ Identify those cases where antemortem data collection will be necessary ◦ Identify the appropriate antemortem data to collect ◦ Design and test the appropriate antemortem forms ◦ Develop written procedures and protocols ◦ Train and competency-test staff ◦ Evaluate effectiveness of data collection ◦ Identify a database system appropriate for antemortem and postmortem comparisons
<p>To-Be</p> <p>Antemortem data collection will be comprehensive and appropriate to the identification effort. The data will be collected in such a way that it can be effectively used in the identification process, including electronic comparison with postmortem data.</p> <p>The human identification effort's <i>Investigations Unit</i> is trained in antemortem data collection.</p> <p>Antemortem data collection procedures and protocols will be written and used.</p> <p>Comparing a missing person's biological antemortem profile with postmortem findings will lead to a higher success rate in identifying human remains.</p>	

34. Collection of Postmortem DNA Samples	
<p>As-Is</p> <p>Postmortem DNA samples have been collected by the MoJ Forensic Medicine Department, MoI DNA laboratory, and MAFMM. While the MoI has written procedures for postmortem sample collection, the MoJ and the MAFMM still need to document their procedures.</p>	<p>Steps for Moving Forward</p> <p>Develop written procedures to ensure that the samples are:</p> <ul style="list-style-type: none"> ◦ Sufficient in volume to allow for retesting and duplicate testing as needed ◦ The preferable type for the DNA laboratory to test ◦ Accurate and have complete chain of custody ◦ Properly stored to minimize deleterious change <p>Develop training materials to educate staff on postmortem sample collection. Perform random evaluations of postmortem samples to evaluate compliance with procedures and perform appropriate corrective action as needed.</p>
<p>To-Be</p> <p>The human identification effort will have and follow written post-mortem DNA sample collection procedures that produce samples of appropriate quality to provide accurate DNA profiling results.</p>	
35. Collection of Postmortem DNA Samples	
<p>As-Is</p> <p>The initial collection of postmortem samples from human remains may have resulted in samples that have questionable chain of custody and are insufficient in quantity for necessary multiple retests.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort should develop a written sample acceptance policy that includes:</p> <ul style="list-style-type: none"> ◦ Minimum sample volume for testing ◦ Documented sample integrity (chain of custody and intact seals) ◦ Appropriate sample information tracing the sample back to the human remains <p>The human identification effort will evaluate the previously collected postmortem DNA samples and associated meta-data that have been collected to date by the MoJ, MoI, and MAFMM, including:</p> <ul style="list-style-type: none"> ◦ Location of the sample ◦ Sample type ◦ Sample quantity ◦ Collection documentation ◦ Associated human remains including <ul style="list-style-type: none"> • Body recovery and postmortem information • Possible identification information ◦ Plan for data centralization ◦ Plan for possible re-collection including prioritization of sample collections
<p>To-Be</p> <p>The human identification effort will have a sample acceptance policy to ensure the integrity of all samples. All samples that do not meet the acceptance criteria will be re-collected.</p>	

36. Collection of DNA Reference Samples	
<p>As-Is</p> <p>Prior to sample collection by the Mol DNA laboratory, families donating DNA samples were required to obtain a judicial order for DNA testing.</p> <p>Families voluntarily donated their samples to the MAFMM without a judicial order. While the DNA donors at the MAFMM signed the identification document, informed consent was not obtained from the donors. Informed consent is important to obtain as it documents that the family was told why the samples were collected, how they would be used, and any potential risks associated with having the samples tested.²⁹</p> <p>While the Mol collects samples according to written procedures, the MAFMM follows standard steps but does not have written procedures.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort should develop standard written procedures for the collection of family reference DNA samples. The procedures should include:</p> <ul style="list-style-type: none"> ◦ Information provided to the donor on how the sample will be used ◦ Collection forms that include proper authorization (informed consent) ◦ Steps to maintain sample integrity (chain of custody) and privacy of the donor family ◦ Standard answers for commonly asked questions such as: <ul style="list-style-type: none"> • What will happen to the samples • How long the testing may take • What will happen if an identification is made • Why an identification may not be made ◦ Directions for how to address other questions/concerns the family may have
<p>To-Be</p> <p>Standard procedures will be used for all reference sample collections:</p> <ul style="list-style-type: none"> ◦ All potential DNA donors will feel comfortable to donate samples knowing that they will not be used for any other purpose than stated. ◦ Donors will be aware of how their sample will be used and will authorize such use. ◦ The integrity of the sample will be maintained. <p>If people have already voluntarily donated DNA samples, they will be informed about how the samples will be used during the antemortem data collection process conducted by the Investigations Unit (see above). An informed consent document will be developed. This document will be reviewed and signed by the donor prior to DNA sample collection.</p>	
37. Collection of DNA Reference Samples	
<p>As-Is</p> <p>It is important that all required DNA reference samples are obtained to maximize identifications. Families have reported that they were informed that DNA identifications required three to five family members to donate reference samples. Families who are dispersed feel discouraged to donate DNA reference samples in the event they cannot unite enough family members.</p> <p>This may be due to the fact that MAFMM case file folders for the collection of DNA reference samples are pre-assembled and utilized by collection teams. The folders and all associated documents are then sent to the MAFMM in Tripoli and are not available for follow up at the collection offices/points.</p>	<p>Steps for Moving Forward</p> <p>Implement a centralized process that allows for individual DNA collections at multiple locations and on multiple occasions.</p> <p>Implement tracking of DNA reference samples.</p> <p>Integrate DNA reference sample information into the Human Identification Data Management System.</p> <p>Ideally this process of DNA reference sample collection should be linked to the collection of antemortem information.</p>
<p>To-Be</p> <p>Methods and tools will be put in place to collect DNA references from dispersed family members and allow for repeated collection of reference samples in a missing persons case.</p>	

29. See: L.S. Parker, et al., Incidental findings in the use of DNA to identify human remains: An ethical assessment, *Forensic Sci. Int. Genet.* (2012)

38. Collection of DNA Reference Samples	
<p>As-Is</p> <p>The MAFMM has established DNA reference sample collection offices throughout the country, which are generally staffed with medical technicians with limited specialized training in human identification. This infrastructure is a valuable resource and should be retained.</p>	<p>Steps for Moving Forward</p> <p>The identification effort will develop processes and procedures that will facilitate the collection of:</p> <ul style="list-style-type: none"> ◦ Information for investigations ◦ Antemortem data ◦ DNA samples and associated metadata
<p>To-Be</p> <p>The identification effort will implement a coordinated process for the families to provide complete and accurate information for investigations and antemortem information collection (including DNA samples). This process will minimize the number of times families have to provide information and will take into account situations where:</p> <ul style="list-style-type: none"> ◦ Families have provided partial information (such as DNA samples) ◦ Data needs to be re-collected from the family. 	<p>The process will:</p> <ul style="list-style-type: none"> ◦ Minimize the number of times that information is collected from the family ◦ Verify the accuracy of the data collected ◦ Include steps to ensure that the family is involved in the investigative and identification processes

39. DNA Testing Capacity in Libya	
<p>As-Is</p> <p>The DNA testing for the human identification effort could be instrumental in developing long-term robust forensic DNA profiling capabilities, as the identification effort involves:</p> <ul style="list-style-type: none"> ◦ Duplicate testing of samples ◦ Kinship validations <p>Both serve as internal quality controls.</p> <p>The MAFMM is currently tasked with the identification effort. However, it currently does not have a facility to conduct DNA profiling. With international support (REPSOL, MAKRI, ICMP), the MAFMM plans to build, equip, and accredit (ISO 17025) a fully functional laboratory. While there was a proposed plan for the laboratory development (e.g., equipment lists, supply lists, and a laboratory layout), the plan needs more detail to support long-term sustainable operations with consideration for the other DNA profiling laboratories that exist in Libya (i.e., MoJ, Mol, University of Tripoli, the Biotechnology Center).</p> <p>The Mol DNA laboratory is tasked with testing evidence from criminal cases where DNA analysis is necessary. The current estimates of the reported missing (approximately 2100) could be handled by the Mol DNA laboratory and would support the further development of robust forensic DNA profiling capabilities. This human identification work could be done while the Mol trains their investigators to identify, collect, preserve and transport biological evidence to the crime laboratory in a manner that will maintain sample integrity and maximize the benefit of DNA testing.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort as part of its mandate, will develop, with the help of outside experts who have the experience of implementing nationally coordinated programs, a Forensic DNA Mission Capability Plan. This plan will evaluate the current and future forensic DNA needs in Libya and make recommendations for long-term coordinated forensic DNA efforts before the establishment of any additional laboratories. This plan will include:</p> <ul style="list-style-type: none"> ◦ Common mission & vision ◦ Stakeholders' needs ◦ Scope <ul style="list-style-type: none"> • Education • Research • Operational Requirements <ul style="list-style-type: none"> - Projected type and number of samples - Required turnaround times ◦ Goals ◦ Objectives for each laboratory to include: <ul style="list-style-type: none"> • Laboratory-specific issues • Staffing • Equipment • Supplies • Data and sample tracking tools • Accreditation • Reporting of findings • Budgets ◦ Agreement between government agencies to include: <ul style="list-style-type: none"> • Maximizing the assistance from international organizations (e.g., combined training) • Coordination of operations to minimize duplication of efforts • Clearly defined roles and responsibilities • Policies and procedures to handle human identification cases that are criminal in nature • Transition plans for the ongoing identification of missing persons cases after the surge in missing person cases has been processed and reported
<p>To-Be</p> <p>The public forensic DNA laboratories in Libya will have defined roles and responsibilities. Each government DNA laboratory will have a clear mission that is not redundant or in conflict with other government laboratories. Forensic DNA capability development will be coordinated among all agencies (education, research, and operations) to meet the goal of long-term stability, integration into the Libyan judiciary system, and worldwide recognition.</p>	

40. DNA Testing Capacity in Libya	
<p>As-Is</p> <p>The MoI DNA laboratory does not have a clear mandate for its role in the human identification missing persons effort. However, it is a “model laboratory” demonstrating Libya’s ability to conduct DNA analysis in-country and the initial process for obtaining ISO 17025 accreditation. The MoI DNA laboratory is the only laboratory in Libya that successfully produces DNA profiles from reference samples and human remains, performs profile comparisons, and generates DNA based identifications.</p> <p>The MoI DNA laboratory does not have designated operational funding. Supplies thus far have been limited to legacy supplies (remaining supplies from the Qaddafi era), or donations from the Biotechnology Center. While staff members receive a salary, the amount is not commensurate with their education, skills, and responsibilities.</p> <p>Without a defined budget and adequate funding, the MoI DNA laboratory will not be able to sustain its current successful operations.</p>	<p>Steps for Moving Forward</p> <p>As the only currently functioning forensic DNA laboratory in the country, it is imperative that a detailed Mol Requirements Analysis be performed as soon as possible. The decision as to the role of the MoI DNA laboratory within the human identification effort is a prerequisite to the Mol Requirements Analysis. The requirements analysis will establish plans to:</p> <ul style="list-style-type: none"> ◦ Obtain ISO 17025 /ILAC G19 Accreditation ◦ Retain trained staff ◦ Obtain and implement tools for efficient sample tracking and data management <ul style="list-style-type: none"> • Laboratory Information Management Systems • Continue implementing CODIS³⁰ • Develop a comprehensive and ongoing budget ◦ Identify needs for additional advanced training <p>These requirements will be used by the MoI management to ensure that the DNA laboratory has the resources it needs to support ongoing operations.</p>
<p>To-Be</p> <p>The MoI DNA laboratory will be an ISO 17025 / ILAC G19 accredited forensic DNA profiling facility and have appropriate resources to support its role in meeting the forensic DNA needs in Libya. These resources include:</p> <ul style="list-style-type: none"> • Sufficient operating budget to obtain and maintain accreditation • Additional equipment so that there is redundancy in all operations • Appropriately compensated staff • Tools for efficient sample tracking and data management • Staff with knowledge, skills, and abilities in complex kinship analysis and statistics 	
41. DNA Testing Capacity in Libya	
<p>As-Is</p> <p>The MoJ Forensic Medicine Department has a small DNA laboratory equipped with instruments but lacking resources that was never put into operation. The laboratory is in need of policies, procedures, and qualified staff. The potential for this laboratory to support human identifications is limited and the mandate for this laboratory is unclear.</p>	<p>Steps for Moving Forward</p> <p>The Forensic DNA Mission Capability Plan will include an evaluation for the feasibility of a DNA laboratory at the MoJ Forensic Medicine Department. If appropriate, conduct a requirements analysis for the long-term sustainability of a laboratory (see Mol requirements analysis description above for specifics).</p>
<p>To-Be</p> <p>The MoJ Forensic Medicine Department’s DNA laboratory will have a clearly defined mandate.</p>	

30. CODIS (Combined DNA Index System) is a DNA profile management system which is provided by the US government to international law enforcement agencies upon request. CODIS is specifically designed for law enforcement agencies who handle criminal, mass fatality and missing persons DNA profile data.

42. Outsourcing the DNA Testing	
<p>As-Is</p> <p>There is a general impression that outsourcing will expedite human identifications. This is not necessarily the case.</p> <p>For example, outsourcing reference samples without outsourcing the human remains that they match will not result in an expedited identification. Outsourcing will only expedite all identifications if all of the reference samples and all of the human remains are outsourced together at the same time.</p> <p>Also, issues may arise where there will be conflicting information between what DNA testing from a contracted laboratory reports and the data collected in the field (both archaeological and antemortem). This may be difficult to resolve as each falls under a different authority and different jurisdictions. In addition, this will be complicated further if it is not possible to independently verify results from a contracted laboratory through duplicate testing.</p> <p>Outsourcing DNA testing (extraction of DNA profiles and kinship analysis for the purposes of human identification) is complex in scientific methods, and there are ethical and legal considerations surrounding the ownership of DNA samples and the data derived from it. These issues led national Libyan biochemists and geneticists from Tripoli University and the Biotechnology Center to express their concerns regarding the export of large amounts of DNA samples. After contacting the Libyan Attorney General's Office, the export of DNA samples was stopped through a judicial order.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort should carefully consider the benefits and limitations of performing testing outside of the country. The following jurisdictional considerations should be addressed before any samples are outsourced:</p> <ul style="list-style-type: none"> ◦ The Libyan judiciary will have appropriate jurisdiction over the foreign laboratory and/or the staff involved if they are needed for answering questions during an investigation or court proceeding. Logistics will need to be addressed as to who will incur the associated expense. ◦ Libya will retain ownership of all samples, information generated (data), and DNA profiles as these are critical to the entire identification effort. If the outside laboratory is contracted to perform the data comparison and subsequent statistical analysis for identifications, they must return all the samples, information, and profiles. This ensures that Libya will be able to take ownership of the identification effort once the surge in testing is completed. <p>Recommendations about outsourcing should be incorporated into the Forensic DNA Mission Capability Plan.</p>
<p>To-Be</p> <p>Any decision to outsource DNA testing will ensure that Libya retains ownership of DNA samples (including resulting DNA extracts and amplified products), all information (data) generated during the testing of the samples, and all DNA profiles generated so that Libya has complete ownership of the identification effort.</p>	
43. Outsourcing the DNA Testing	
<p>As-Is</p> <p>Because there has not been a large-scale outsourcing initiative conducted in Libya to date, it will, in the near future, be a challenge to develop independent, effective, and comprehensive contracts for DNA profiling. Libya needs to have a clear understanding of contract requirements for the testing and data analysis. This will ensure that contracts are managed in the best interests of the Libyan people.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort should carefully review the sample outsourcing statement of work provided by PHR to the MAFMM and use it as a template for DNA testing contracts, making sure that Libya, not vendors, maintains control and ownership of all DNA data and associated testing records. Statements of work in contracts will include provisions that define:</p> <ul style="list-style-type: none"> ◦ The nature and scope of testing ◦ DNA profile data protection and ownership ◦ Disposition of DNA samples after testing has concluded ◦ Testing methods ◦ Appropriate procedures and protocols ◦ The ability to independently verify testing data and results. ◦ Appropriate quality control and assurance requirements ◦ Instructions for what data is reported and in what format
<p>To-Be</p> <p>Any outsourcing of DNA testing services (e.g., sample testing, validation, and confirmatory testing) will have written contracts to ensure transparency for independent verification and review of conclusions if questions arise involving the testing and data interpretation. Additionally all contracts will ensure that testing and associated services fall under Libyan jurisdiction.</p> <p>All contractual arrangements with DNA laboratories will have comprehensive contracts.</p>	

44. DNA Profile Comparison/Data Management	
<p>As-Is</p> <p>During the current human identification effort, DNA profiles have been generated by the recently established MoJ DNA laboratory (March 2012), the police laboratory in Dubai, and the ICMP. These efforts were initiated by different agencies and stakeholders in Libya. The results of these DNA tests have not been centralized for effective searching and comparison of results.</p> <p>To maximize identifications for current and future missing persons cases, the final DNA profile information needs to be centralized.</p>	<p>Steps for Moving Forward</p> <p>The institution tasked with the human identification effort must decide which agency will provide the management and oversight of the data. Once that decision is made, the designated agency should have access to all DNA profile information, including appropriate metadata, for all samples associated with the human identification effort. The agency will evaluate and implement a centralized DNA profile analysis program to support the storing, retrieval, comparison analysis, and reporting of DNA profile data.</p> <p>In deciding which DNA data analysis and management system to use, compatibility (data sharing and transfer) with other systems used by law enforcement laboratories needs to be ensured.</p>
<p>To-Be</p> <p>All DNA profiles associated with the missing person effort will be located in the centralized DNA profile analysis program that allows for mass fatality DNA kinship analyses. Searches between references and human remains will be performed on all profiles at the same time. All DNA profiles associated with the missing person effort will be stored in the centralized DNA analysis program, which will be used by law enforcement for ongoing and future missing persons investigations.</p>	
45. DNA Match Reporting	
<p>As-Is</p> <p>The DNA identifications made by the MoJ DNA laboratory to date involved the comparison of human remains to extensive family references using a number of different test systems. Matches generated from the use of multiple test systems and close family references will result in high relationship indices. Large-scale kinship statistical analyses are difficult to implement as they require training and software solutions but are critical as operations continue.</p>	<p>Steps for Moving Forward</p> <p>Implement statistical evaluations of human identification cases to include the use of International resources such as PHR, ICRC, and ICMP to:</p> <ul style="list-style-type: none"> ◦ Provide training in complex kinship analysis ◦ Determine appropriate numbers to be incorporated into the prior probability calculation ◦ Develop appropriate population allele frequency databases ◦ Set a threshold for reporting identifications based on DNA evidence alone
<p>To-Be</p> <p>Statistical thresholds will be set for DNA-only identifications. The statistical approach will be consistent with the approaches outlined in the <i>Guidelines for Mass Fatality DNA Identification Operations</i>, AABB (2010).</p>	
46. Comparison of Antemortem and Postmortem Data	
<p>As-Is</p> <p>The current human identification effort is primarily “DNA centric” and does not significantly include other methods (e.g., forensic anthropology, forensic pathology, and investigative leads). Comprehensive comparison between antemortem and postmortem data does not occur. This may hamper the overall success at which identifications will be generated.</p>	<p>Steps for Moving Forward</p> <p>The human identification effort will adopt policies and procedures on how identifications will be made and authorized. The procedures will :</p> <ul style="list-style-type: none"> ◦ Incorporate the evaluation and comparison of all available antemortem and postmortem information in addition to the DNA results ◦ Include steps to take when there are apparent inconsistencies in the data ◦ Include the use of an integrated Human Identification Data Management System in coordination with: <ul style="list-style-type: none"> ◦ MoJ Forensic Medicine Department ◦ The MoJ DNA laboratory
<p>To-Be</p> <p>The identification effort will be comprehensive and involve all available information.</p> <p>Data will be secure and centralized for tracking, searching, and making comparisons in the Human Identification Data Management System.</p>	

47. Identification of Human Remains	
<p>As-Is</p> <p>Identifications are often generated without input from the medico-legal institution in Libya.</p>	<p>Steps for Moving Forward</p> <p>The MoJ Forensic Medicine Department will identify the appropriate personnel within their department and assign them to the identification effort. These individuals will receive additional training in mass fatality human identifications and will lead the development of written policies and procedures.</p>
<p>To-Be</p> <p>Identifications produced by the human identification effort will be authorized by the medico-legal system.</p> <p>The MoJ Forensic Medicine Department, as part of its duties, will make a medical examiner available to oversee identifications generated by the human identification effort. Identities will be assigned to human remains by authority of the medical examiner.</p>	
48. Repatriation of Human Remains	
<p>As-Is</p> <p>As an obligation of the Libyan government, remains are repatriated to their respective families upon positive identification. It is not uncommon for family members of missing persons to reject human identifications made through DNA and other means by designated authorities. Identifications need to be explained and communicated to families in ways that they can understand. The process of repatriating remains sometimes requires that families be emotionally satisfied with an identification and willing to accept the remains.</p> <p>Some human remains may not be identified at all. These could be partial remains or complete remains to which no family members can be found.</p> <p>Currently, there are no standard protocols and procedures that address such a need.</p>	<p>Steps for Moving Forward</p> <p>A needs assessment will be conducted by the human identification effort to ensure:</p> <ul style="list-style-type: none"> ◦ Proper procedures for repatriation of remains are established ◦ Available facilities (e.g., washing) in those locations that human remains will be handed to their families ◦ Available staff with necessary cultural and religious awareness ◦ Proper psychosocial care for both families of the missing and staff involved in the repatriation effort ◦ The long term storage/burial of human remains that are not identified
<p>To-Be</p> <p>The human identification effort will identify and provide all the necessary resources, facilities, and staff to repatriate identified human remains to their respective families with the necessary cultural and religious care.</p>	

49. Repatriation of Human Remains	
<p>As-Is</p> <p>The majority of bodies returned to families so far have been identified by subjective means (recognition of clothing, personal effects, and/or physical features). This has led to confirmed misidentifications and in some cases, as witnessed in Benghazi, disputes between different families over bodies that were returned. The actual number of such misidentifications is unknown.</p> <p>Families have received remains after subjective identification. Subjective identifications are not based on scientific findings and sometimes are wrong. There are now cases where such identifications are disputed by families who claim that the remains of their loved ones were returned to the wrong family. In such cases it will be necessary to collect DNA samples from the remains (which will require exhumation) as well as from the family members.</p> <p>Confirmed cases of misidentification of remains will also require the collection of DNA samples from both remains and family members.</p> <p>There is a need for procedures to address the resolution of misidentifications which resulted in the wrong remains being repatriated to a family.</p>	<p>Steps for Moving Forward</p> <p>Develop policies and procedures to address:</p> <ul style="list-style-type: none"> ◦ Re-collection of human remains that may have been incorrectly given to family members ◦ Re-collection of DNA samples required for additional testing ◦ Interactions with families
<p>To-Be</p> <p>Repatriation of remains will occur after positive identification through the human identification effort.</p> <p>The MoJ and Mol will identify the legal framework within which DNA samples can be collected to resolve possible misidentifications.</p>	

Recommendations and Conclusions

Based on the team's findings, detailed in the present report, the following recommendations are made:

1. Part of what will define Libya's human identification effort is implementing an internationally recognized legal framework addressing missing and disappeared persons by:
 - Criminalizing enforced disappearances in Libyan law and distinguishing the new Libya from its oppressive past.
 - Continuing the process of ratifying and implementing the *International Convention for the Protection of All Persons from Enforced Disappearance*.
 - Enacting a new law on missing persons. This law will help address the rights of all families of the missing, define the obligations of the state, and ensure that missing persons and their families are not discriminated against on the basis of language, race, sex, nationality, religion, or political affiliation. It will also assist in defining which period of time the human identification effort will cover.
2. Libya's goal is to reach a state in which no human rights violations occur and the practice of enforced disappearances and acts of terror are a thing of the past. In order to attain and sustain this state, it is important to build and enhance national forensic science capacity. Attempting to minimize initial delays in human identifications at the expense of building Libyan owned knowledge, skills and abilities could result in a country that is less prepared to deal with human rights and criminal issues in the future. The importance of constructing solid forensic expertise within the law enforcement and judicial system in Libya should not be overlooked or undervalued.
3. A human identification effort is scientific and must be completely independent of any effort to differentiate between missing persons based on language, race, sex, nationality, religion and political affiliation. Therefore, it is necessary to separate the human identification effort from affairs dealing with martyrs and for it to be publicly recognized to be unbiased. This will ensure that all relatives of missing persons report to the human identification effort, which will increase the success at which identifications of human remains are made.
4. Create an independent institution, such as a commission or an oversight board, with a defined mandate tasked with searching for missing persons and the identification of human remains. In order to mitigate any perception of bias by the public, this agency needs to include on its governing board commissioners/members who can:
 - Liaise with and provide input from Libya's ongoing effort in developing transitional justice legislation, such as the Fact Finding and Reconciliation Commission, the Transitional Justice Law, the legislation surrounding the Enforced and Disappeared Persons convention/law, and the new law on missing persons
 - Facilitate resource allocations on a governmental level as needed. This should include high-level representatives from the MoJ's Forensic Science Department, the GPO, the Mol's Forensic Science and Criminal Investigations Departments, and the MAFMM's Social Affairs Department
 - Make or facilitate policies for the ministries involved in the legal determination of death (e.g., the MoJ and the Mol).
 - Develop and implement governmental contracts and MOUs.
 - Facilitate academic resource allocation and training in Libya and liaise with international higher education institutions involved in forensic science and the identification of human remains. This should include academics from universities in Libya as well as from the Biotechnology Center.
 - Liaise with civil society organizations, representing families of the missing in Libya.
 - Serve as national scientist liaising with international subject matter experts in the various disciplines of mass fatality human identification (archaeology, anthropology, pathology, DNA).

5. The human identification effort needs to establish a comprehensive central information registry that facilitates effective tracing of unaccounted persons by collecting data on the identities, locations, and circumstances of the missing and disappeared. This is important for effectively investigating missing persons cases.
6. To date, estimates of the number of missing are not based on complete and accurate data. For planning and resource allocation purposes it is important to determine an accurate number of missing persons for use in the statistical DNA analysis that leads to identifications. Some missing persons may not be reported by their families and friends as such because:
 - Families who believe their missing loved one is alive may not come forward to donate DNA samples with the human identification effort
 - Some families feel that they are discriminated against in the support they receive from the MAFMM, as their missing relative belonged to groups perceived to be in opposition of the revolution
 - Complicated administrative rules, such as having to present all relatives for DNA sampling at the same time in one location or requests for identifying paperwork that some families never had or lost during the conflict.
 - Families living abroad require international outreach, which to date hasn't occurred. This needs to include families of foreign nationals who went missing in Libya.

The process of establishing a list of missing persons needs to include all families with missing loved ones and to facilitate the reporting of missing persons.

7. Mass graves and irregular burials of human remains are crime scenes and must be treated as such. Develop and implement policies and procedures in collaboration with the MoI's Criminal Investigation Department, the MoJ, and the GPO to protect mass graves as crime scenes.
8. The MAFMM's human identification effort does not conduct medico-legal examinations within Libya's current legal framework for the remains it exhumes, nor is evidence documented and collected according to chain of custody standards for criminal investigation and fact-finding purposes. A specialized and well-defined human identification effort needs to integrate existing staff of the Libyan government (MoI, MoJ, PGO) into its operations and provide the necessary forensic capacity building by securing the assistance of internationally recognized experienced forensic professionals to provide training and mentorship. This inter-ministerial cooperation will also help establish and clarify necessary jurisdictions over potential criminal investigations or investigations relating to the Fact Finding and Reconciliation Commission and will build public confidence in government by providing equal rights, government services, and rule of law.
9. To date, the MoJ's Forensic Science Department does not have the resources to be able to adhere to internationally recognized standards for medico-legal and death investigations. In order to build necessary forensic capacity, the human identification effort will secure the assistance of internationally recognized forensic professionals to provide training and mentorship.
10. In some cases, comprehensive judicial investigations into the death and disappearance of missing persons might be necessary. Families of missing persons need investigative support, especially those who believe their relative is alive, or are victims of extortion by persons who fraudulently claim to have information on the location of missing family members. The MoI therefore needs to create a **Special Missing Persons Task Force** to carry out criminal investigations relating to missing persons. This task force in collaboration with the human identification effort's **Investigations Unit** needs to actively investigate and track down leads on missing persons who are suspected to be alive. In cases where the missing person is not located, the information gathered will be included in the missing persons registry. This initiative also needs to cooperate with the Fact Finding and Reconciliation Commission. International law enforcement agencies should be consulted when necessary.

11. The current human identification effort at the MAFMM is primarily DNA-centric and does not significantly include other methods (e.g., forensic anthropology and pathology, investigative leads). Data collection within the MAFMM's DNA reference sample collection initiative is insufficient in establishing an antemortem biological profile of the missing person. This may hamper overall success in making identifications. The human identification effort needs to collect all necessary antemortem data on missing persons and make it available for comparison with postmortem data through the use of a human identification data management system in coordination with the MoJ Forensic Medicine Department and the DNA laboratory.
12. To date, the collection of postmortem DNA samples has been conducted by different stakeholders in Libya. Sample collection has not been consistent and some samples might require re-collection due to questionable origin (lack of chain of custody) or insufficient quantity collected. The human identification effort needs to centralize all postmortem samples and evaluate which ones will need to be re-collected.
13. In several cases where there is reason to believe that remains might have been returned to the wrong family, it will be necessary to collect DNA samples from the remains (which might require exhumation) as well as from family members. The human identification effort will need to develop an information campaign to inform families and the public about such measures, as well as to identify the legal mechanisms under which to carry out such exhumations and collection of DNA.
14. While the MAFMM has developed a considerable infrastructure in the form of DNA collection offices, outreach efforts to families who donate DNA samples must still be improved. As observed, some families were given the wrong impression that identification results would be forthcoming within a period of months, even though it is impossible to accurately predict when and even if identifications can be made. Families need to be provided with accurate information about the human identification process as a whole by ensuring that the DNA collection staff has a well-founded knowledge about the process and its limitations. The human identification effort needs to develop a strong and credible public information campaign on the human identification process. This campaign will include protocols and procedures for interacting with families
15. No written informed consent is obtained from families voluntarily donating DNA samples at the MAFMM DNA sample collection offices. Written informed consent is important to obtain from families donating DNA samples as it documents that donors were told why the samples were collected and how they would be used. An informed consent policy needs to be adopted as part of the antemortem data and DNA collection effort.
16. There is a need for DNA data and privacy laws to protect the individuals who provide information and donate DNA samples. Libya needs to formulate and implement national DNA data and privacy laws. This should be done in collaboration with the human identification effort and by reviewing international best practices.
17. Since March 2012, the MoI DNA forensic laboratory has processed casework, generated several identifications, and started the process of external accreditation. The MoI's accomplishments to date must be recognized as a valuable testing resource in Libya. The laboratory needs to be provided with the appropriate resources to continue operations. With the proper mandate, resources, and support, this laboratory is capable of immediately supporting a Libyan human identification effort.
18. Responsible outsourcing of DNA testing is a complex undertaking. Ethical and legal considerations surround the ownership of DNA samples and the data derived from it. Prior to sending DNA samples outside Libya, the benefits and limitations of performing testing outside the country need to be considered. Contracts should be in place to address scientific methods, jurisdictional issues with foreign laboratories, and ownership of all data and samples prior to outsourcing of DNA testing.
19. All DNA profiles associated with the missing person effort need to be centralized in a DNA profile analysis program that allows for mass fatality DNA kinship analyses. The agency that will provide the management and oversight of the DNA/genetic profile data and analysis must be determined. In

deciding which DNA data analysis and management system to use, compatibility (data sharing and transfer) with other systems used by law enforcement laboratories needs to be ensured.

20. A number of International organizations have donated and pledged support to the identification effort. These focus on the MAFMM as a partner. The Libyan government needs to ensure that international support is coordinated between the different existing national forensic agencies (e.g., MoJ and MoI) and integrated into the Libyan judiciary and government as a whole to maximize forensic capacity building across the country and in its judicial institutions.
21. In order to develop sustainable internationally recognized forensic services to support transitional justice and security, the Libyan government needs to identify and make available necessary resources for the MoJ, the MoI, and the MoHE.
22. There is a need for psychosocial support in Libya for families of the missing and for those working on the human identification effort. The importance of mental health needs to be recognized and integrated into a human identification effort. The human identification effort will enter into agreements or contract with qualified psychologists with internationally recognized experience in psychosocial support for missing persons' families and human identification effort staff to develop the necessary psychosocial support infrastructure. They will provide training and mentoring and develop a training program, protocols, and procedures.
23. The development of sustainable and credible forensic science initiatives will require the cooperation of educators, researchers, and practitioners. Efforts must be made to engage all scientists within Libya in the development of forensic operations as well as to reach out for support from international resources.

This report outlines important steps that Libya can take to leverage the scientists across a number of different ministries to promote justice. Implementing the recommendations will require the cooperation of scientists and will involve difficult decisions. However, the effort put forth now, as the country is still in its early stages of development, will be realized by the citizens of Libya in years to come.

Appendix A

Team Meeting Schedule

Date	Approx. Time	Location	Activity	Participants
Sun, Oct 14		Tripoli International Airport	Schmitt, Manley, Josey Arrive	
Mon. Oct 15	8:30 - 10:30	Embassy of the Netherlands	Briefing Meeting with Assessment Funders (Netherlands and Switzerland)	Schmitt, Manley, Josey
	11:00-13:00	MAFMM	Briefing meeting with Dr. Mervat Mhani, Dr. Essam Zreg, Dr. Adel (Human Identification Effort)	Schmitt, Manley, Josey
	13:30-14:30	Cafe di Roma	Briefing meeting with Udo Krenzer (ICRC)	Schmitt, Manley, Josey
	15:30-18:30	Free Generation Movement	Briefing meeting with Dr. Mervat Mhani	Schmitt, Manley, Josey
Tue. Oct. 16	11:00-13:30	MAFMM	Meeting with Khalid Ahmeda (MAFMM Branch Manager in Sabha)	Schmitt
	14:30-16:00	Bab el Bahr Hotel	Meeting with Dr. Othman Abdel Jalil	Schmitt
Wed. Oct 17	9:30-11:00	MAFMM	Meeting with Dr. Essam Zreg, Dr. Adel, and MAKRI Team	Schmitt
	17:00-19:00	UNSMIL - Palm City	Meeting with Marieke Wierda	
Thu. Oct 18	11:00-11:45	Mol	Meeting with Col. Abdel Salam Ashoor (Head over Criminal Investigation Department)	Schmitt, Manley, Josey
	12:30-13:30	Tripoli Medical Center	Meeting with Dr. Anwar Arbie	Schmitt, Manley, Josey
Sat. Oct 20	12:00-13:00	Waddan Hotel	Meeting with Howard Varney	Schmitt
	15:30-16:30	Waddan Hotel	Meeting with Claudio Cordone (ICTJ), Marieke Wierda (UNSMIL)	Schmitt, Manley
Sun. Oct 21	10:00-12:00	MAFMM	Meeting with MAFMM contracted Sudanese forensic specialists	Schmitt
Mon. Oct 22	11:45-13:45	University of Tripoli	Meeting with Dr. Zaid, Vice Dean of Faculty of Medicine	Schmitt, Manley, Josey
	14:45-15:45	Biotechnology Center, Tripoli	Meeting with Dr. Nabil Enatah, Dr. Abdul Munam Fellah, Dr. Abdul Wahab Ndeeb	Schmitt, Manley, Josey
Tue. Oct 23	20:00-22:00	Sabha Airport	Meeting with MAFMM staff in Sabha	Schmitt, Manley, Josey
Wed. Oct 24	10:00-15:00	Sabha - MAFMM DNA Collection Office	Meeting with MAFMM DNA collection staff	Schmitt, Manley, Josey
	20:00	Return to Tripoli		
Thu. Oct 25			Eid ul Adha	

Date	Approx. Time	Location	Activity	Participants
Fri. Oct 26			Eid ul Adha	
Sat. Oct 27			Eid ul Adha	
Sun. Oct 28			Eid ul Adha	
Mon. Oct 29	13:00-14:00	MAFMM, Tripoli	Meeting with Dr. Mervat Mhani and Dr. Essam Zreg	Schmitt
Tue. Oct 30	10:30-11:30	MoJ - Center for Judicial Expertise, Tripoli	Meeting with Abdalla Burzeza, Head of Center for Judicial Expertise	Schmitt, Manley
	12:00-13:00	MAFMM, Tripoli	Meeting with Col. Park (Makri), Dr. Essam Zreg, Dr. Adel	Schmitt, Manley
	15:00-17:00	Flight to Benghazi		Schmitt, Josey
	18:00-19:00	Tibesti Hotel, Benghazi	Meeting with MAFMM representative, Mohamad Tafur	Schmitt
	19:00-20:00	Tibesti Hotel, Benghazi	Meeting with Adel Bensoud, Association of Abu Saleem Families	
Wed. Oct 31	11:00-15:00	MAFMM Office, Benghazi	Meeting with MAFMM staff and families of missing	Schmitt, Josey
	20:00-22:00	Return to Tripoli		
Thu. Nov 1	13:55	Tripoli International Airport	Sozer Arrives	
	14:25	Tripoli International Airport	Lamburne Arrives	
Fri. Nov 2	10:35	Tripoli International Airport	Varney Arrives	
	13:55-14:40	Tripoli International Airport	Haglund & Peerwani Arrive	
	18:00	Attawfeek Hotel	Consultant Security Briefing	ALL
Sat. Nov 3	9:00	Attawfeek Hotel	Consultant Briefing	ALL
	11:00	Attawfeek Hotel	Othman Abdul Jalil	ALL
	12:30	Free Generation Movement Headquarters	Family Groups Meeting : Al-e-yarmouk, Abu Saleem, Other Groups	ALL
Sun. Nov 4	9:00 - 15:00	MAFMM	MAFMM tech team, South Korean, Sudanese meetings	ALL
	17:00	Palm City	Meeting with Marieke Wierda	ALL
Mon. Nov 5	10:00	Mol	Mol Meeting - CID/Forensics	ALL
	13:00	Salah Eddin Road	Mol DNA Laboratory	Peerwani, Sozer, Haglund
	17:00		ICRC	ALL
Tues. Nov 6	10:00-13:00	Tripoli Medical Center - Morgue	MoJ Meetings	ALL
	14:00	Attawfeek Hotel	Othman	ALL
	19:00	Al Janzoor	Twarga Council	Schmitt, Elharram
Wed. Nov 7	9:00	Cafe Lamma, Hay Andalous Seafront	Kevin George - ABA in Libya	Varney
	13:00	University of Tripoli- Medical and Law School	University Professors, Laboratory, Curriculum	ALL

Date	Approx. Time	Location	Activity	Participants
Thu. Nov 8	9:00	Attawfeek Hotel	Benghazi Lawyer	Varney, Schmitt
	11:00	Airport Road	Biotechnology Research Center	Sozer, Peerwani
	13:00	MAFMM	Benghazi team of MAFMM	
Fri. Nov 9		Meeting Room- Attawfeek	Report Writing	ALL
Sat. Nov 10	10:00	Meeting Room- Attawfeek 2	Team Meeting	ALL
Sun. Nov 11	11:00	Corinthia Hotel	UK Embassy Meeting	Lamburne, Schmitt, Manley
	13:00	Salah Eddin	Mol DNA Laboratory	Sozer, Elharram
	19:00	Restaurant	Dinner meeting with ICMP	Schmitt, Sozer, Lamburne
Mon. Nov 12	11:30	Mol	Mol Meeting (Col Abdulsalam Ashoor)	Lamburne, Schmitt
	12:00	Attawfeek Hotel	Representative of Life Technology	Sozer, Elharram
	13:00	Rixos Hotel	Obeidi, Othman meeting	Elharram, Schmitt
	14:00	MAFMM	MAFMM Meeting	Sozer, Elharram
	15:30	Corinthia Hotel	UK Embassy- Police Advisors	Bob, Schmitt
	19:00	Corinthia Hotel	ICMP Meeting	Sozer
Tue. Nov 13	9:00	MAFMM	MAFMM Meeting	Sozer, Elharram
	10:00	Mol	Col Abdul Salam Ashoor	Lamburne, Schmitt
	14:00	Swiss Embassy Offices	Swiss & Dutch Meeting (Michel & Hend/Claudia & Mohammed)	Schmitt, Sozer, Lamburne
	17:30	ICRC Tripoli	ICRC Meeting	Schmitt, Sozer, Lamburne
	19:00	Palm City	UNSMIL (Marieke Wierda)	Schmitt
Wed. Nov 14	10:00	MAFMM	MAFMM Meeting	Schmitt, Sozer, Lamburne, Elharram,
	13:00	Salah Eddin	Mol DNA Laboratory	Sozer, Elharram
	16:00	US Embassy	US Embassy	Sozer
	17:00	ICRC	ICRC Offices	Schmitt, Sozer, Lamburne, Elharram
Thu. Nov 15	15:50	Airport	Lamburne Departure	
Fri. Nov 16	15:10	Airport	Schmitt, Josey, Sozer, Manley Departure	

Documents Reviewed by PHR Expert Team³¹

Reports:

- Report on the International Commission of Inquiry on Libya – Human Rights Council – 1 June 2011
- Report on the International Commission of Inquiry on Libya – Human Rights Council – 2 March 2012
- 1996 Abu Salim Massacre Report – Human Rights Watch – 2003
- Forensic Needs Assessment in Libya – Finish Forensic Expert Delegation – April 2012
- Report on Transitional Justice: Foundation for a New Libya – UNSMIL – 16 September 2012

Legal Decrees:

- MAFMM - Ministry Mandate #28 - Caring for Families of Martyrs & Missing - 5 February 2012
- MAFMM - Ministry Mandate #32 - Payment of Financial Gratuities - 17 April 2012
- NTC Law Number 35 – Granting Amnesty (UNSMIL Translation)
- NTC Law Number 38 – Procedures Relating to the Transitional Phase (UNSMIL Translation)
- MAFMM - Council of Ministers Decree #85 - Welfare and Recompense for Families of Martyrs & Missing - 3 March 2012
- NTC Transitional Justice Law - 2011

Technical Documents:

- MMFM DNA Sample Collection Folder and Documents (Sabha Office):
 - FTA Micro Card
 - Registration Barcodes
 - Registration Flier
 - Registration Genealogy Sheet
 - Registration ID Card
 - Registration Sheet
- MAFMM - DNA Laboratory Proposed Equipment and Supply List
- MAFMM - Drawing for Proposed DNA Laboratory
- University of Tripoli - Packet of Textbook Information on Medical Genetics
- MoI DNA Laboratory Protocols
- MoI ISO 17025 Accreditation Preparation Document (English /Arabic)

Correspondence:

- Ravindran Daniel, Head of Human Rights Section, UNSMIL to Head of the Commission for the Search for and Identification of Missing Persons. January 12, 2012
- Dr. Anwar Arbie Correspondence with the Deputy General Prosecutor's Office. February 2, 2012
- Dr Ahmed Alogeeli Bayed, Dean of Faculty of Medicine, Tripoli University; Dr. Abdullah Masoud be Sheen; Dr Othman Abdel Jaleel Mohamed, Head of Forensic Laboratory Supervision Committee; Dr Muftah Abdulatti al Fitoory, Professor, Faculty of Medicine, Benghazi University; Dr Nabeel Sabri Enattah, Head of the Biotech Center, Tripoli Letter to Head of the NTC; the Prime Minister, Minister of MAFMM, Minister of MoI, Minister of MoEH, General Prosecutor, Head of the National Scientific Research Authority; Head of the Biological Ethics Committee. May 31, 2012
- Correspondence between Essam Zreg (MAFMM) and ISFG President

31. All Arabic documents were translated into English.

Proposals:

- ICMP: Summary of Proposed Activities to Assist the Government of Libya to Address the Issue of Missing Persons. Sarajevo, 8 November 2012. ICMP.DG.542.1.doc
- Summary of Proposed Activities to Aid the Libyan Government – ICMP – 8 November 2012
- GENOMA - Project for the establishment of a Forensic Molecular Genetics Laboratory in Benghazi

2 Arrow Street, Suite 301
Cambridge, MA 02138 USA
+1 617.301.4200

1156 15th Street NW, Suite 1001
Washington, DC 20005 USA
+1 202.728.5335

physiciansforhumanrights.org

