



2019

**BREATHES
NEW LIFE
INTO UNSAFE
ENVIRONMENTS**

INTRODUCTION:

MANDO SECURITY LAUNCHED IN 2010 IN ORDER TO CATER FOR THE SECURITY NEEDS OF LOCAL AND INTERNATIONAL COMPANIES WORKING IN KURDISTAN. OUR FIRST MAJOR CONTRACT WAS TO PROVIDE SECURITY SERVICES FOR THE FIRM TERRACES ON THEIR SEISMIC SURVEY OPERATION IN DUHOK PROVINCE ON BEHALF GULF KEYSTONE. GULF KEYSTONE REMAINS A CLIENT OF MANDO AND ALONG WITH OTHER OIL AND GAS FIRMS, WE ARE EMPLOYED ON PROJECTS THROUGHOUT THE WHOLE OF KURDISTAN.

IN 2011 MANDO EXPANDED ITS BUSINESS TO INCLUDE PERSONAL SECURITY DETAILS TRAINED TO INTERNATIONAL STANDARDS AND LED BY EXPATRIATE CLOSE PROTECTION OFFICERS (CPOs) IN BOTH COVERT B6 ARMORED VEHICLES AS WELL AS COVERT SOFT SKIN VEHICLES. PERSONNEL WERE SUPPLIED TO A NUMBER OF CONSULATES AND EMBASSIES. WE ALSO BEGAN PROVIDING SECURITY EXPERTISE AND GUARDS FOR SHOPPING MALLS AND HOTELS.

MANDO K9 SECURITY UNIT WERE INCORPORATED IN 2012 IN THE KURDISTAN REGION OF IRAQ. MANDO K9 IS A PREMIUM PROVIDER OF FAST RESPONSE IN EXPLOSIVE DETECTION DOG TEAMS (EDDTs). OUR WORLD-CLASS, HIGHLY TRAINED DOGS CONFIRM OR RULE OUT THE PRESENCE OF HAZARDOUS EXPLOSIVE MATERIALS AND ENABLE YOUR USUAL ACTIVITIES TO CONTINUE WITH MINIMAL OR NO INTERRUPTION. MANDO K9 SCOPE OF SERVICES WHICH INCLUDES EXPLOSIVE DETECTION DOGS, GUARD DOGS, NARCOTIC DETECTION DOGS, K9 TRAINING ACADEMY AND K9 BREEDING

MANDO MINE ACTION IS TRUSTED TO CREATE SAFER SPACES FOR CLIENTS AND COMMUNITIES AROUND THE KURDISTAN REGION OF IRAQ. IT DETECTS, IDENTIFIES AND MITIGATES POTENTIAL THREATS ON LAND, AND PROVIDES TRAINING AND CONSULTING SERVICES TO SUPPORT THE ACTIVITIES OF GOVERNMENTS, NGO'S AND OIL & GAS INDUSTRIES IN THE KURDISTAN REGION OF IRAQ.

THE TEAM BEHIND MANDO MINE ACTION HAS 15 YEARS' EXPERIENCE OF MINE ACTION PROJECTS AROUND THE KURDISTAN REGION OF IRAQ.

WHEREVER MANDO MINE ACTION GOES, IT BREATHES NEW LIFE INTO UNSAFE ENVIRONMENTS, AND POSITIVELY TRANSFORMS COMMUNITIES AND THE LIVES OF THOSE LIVING AND WORKING WITHIN THEM.



SERVICES OF MINES & UXO:

Mines
& UXO
Survey

Excavation
Method

Metal
Detector
Detection

Machines
&
Excavators

Mine
Detection
Dogs

BAC
Battle area
clearance

Demolition of
Mines &
unexploded
ordnance

MINES & UXO SURVEY:

MANDO MINE ACTION SITE INVESTIGATION SERVICE OFFERS A WIDE RANGE OF SURVEY TECHNOLOGIES FOR THE LOCATION OF BURIED UXO, DEPENDING ON THE SITE CHARACTERISTICS, THE TYPE OF THE ORDNANCE AND THE TARGET DEPTH OF THE INVESTIGATION.



REMOVAL OF IDENTIFIED MINES AND UXO BY EXCAVATION METHOD

THE FULL AREA EXCAVATION TECHNIQUE IS WHERE THE WHOLE AREA THAT NEEDS TO BE CLEARED IS EXCAVATED BY MANUAL DEMINERS TO A SPECIFIED DEPTH TO ENSURE THAT ALL MINES WITHIN THE AREA TO THE SPECIFIED DEPTH ARE FOUND AND REMOVED.

THE FULL AREA EXCAVATION TECHNIQUE SHOULD BE USED IN SAND, SOFT SOIL OR IN AREAS WHERE WATER IS AVAILABLE TO SOFTEN THE GROUND. A HAND TROWEL OR SCRAPING TOOL IS USED TO REMOVE THE SOIL IN FRONT OF THE DEMINER'S BASE STICK TO A MINIMUM DEPTH OF 15 CM AND TO A MINIMUM WIDTH OF 1.2 METER.

THE FRONT EDGE OF THE CLEARANCE LANE WILL BE A TRENCH (DEPTH AND WIDTH AS ABOVE) WHICH WILL MOVE SLOWLY FORWARD BY THE CONTINUAL REMOVAL OF THE FRONT LAYER OF THE SOIL. MINES WILL BE LOCATED BY BEING STRUCK GENTLY ON THEIR SIDES WITH THE DIGGING TOOL.



REMOVAL OF IDENTIFIED MINES AND UXO BY METAL DETECTOR DETECTION

BY USING METAL DETECTORS, THE WHOLE AREA UNDER CLEARANCE IS SYSTEMATICALLY SEARCHED FOR MINES/UXO. GENERALLY, THE FOLLOWING STAGES SHOULD OCCUR DURING MANUAL MINE CLEARANCE WHEN METAL DETECTORS ARE USED.

a. Visually and manually inspect the area in front of the Base Stick for tripwires, UXO, surface-laid mines, protruding fuses or suspicious objects

b. Using a tripwire feeler to search for tripwires if the mine-field is covered by vegetation.

c. Clear vegetation as required, using a small pruning tool or garden shears.

d. Carry out controlled sweeps with a metal detector over the entire width of the clearance lane and forward to a maximum of 50 cm. Ensure that the search epicenter of the detector covers the full width, but no more, of the Base Stick width. Care must be taken to ensure that the detector head is not allowed to move into any area not previously inspected in accordance with sub-paragraph a & b, above.

e. If the detector gives no signal, move the base-stick forward a maximum of 50 cm with 10 cm overlap and repeat the process from sub paragraph (a).

f. Lane marking is to be placed at a maximum every 1m, as the clearance lane progresses and is to be placed at each end of the red painted 1m spacing on the base stick and not outside the white 10cm overlap. Thereby creating a 1m wide marked cleared lane.

g. If the detector gives a signal, mark 15 cm or half of the detector's search head on the safe side of the signal with a mine-marker and use a manual prodder to locate the source of the signal. Once the object is located, a hand-trowel or similar tool is used to excavate the earth sufficiently to reveal its identity.

h. If a mine or UXO is uncovered and specified a mine marker shall be placed close the object on the safe side of the object. The deminer will stop mine clearance in this lane and notify the team leader/supervisor.

i. The team leader/supervisor shall identify the mine and/or UXO and he/she shall do one of the following:

- Task the deminer to close the lane and to start a new lane. Leaving the mine/UXO for disposal later in the day.
- Stop clearance activities on the clearance worksite, withdraw all the deminers to a safe distance and dispose of the mine/UXO.

j. All other metal objects found should be collected in the deminers' pouch/bucket and delivered to the metal collection point at the completion of the deminers' shift or as required.



REMOVAL OF IDENTIFIED MINES AND UXO BY MACHINES AND EXCAVATORS

MECHANICAL APPROACHES RELY ON THE USE OF MOTORIZED MINE-CLEARERS IN WHICH THEIR DESIGN IS INFLUENCED BY MILITARY DEMINING REQUIREMENTS. THE MAJORITY OF MACHINES DEPLOYED WORLDWIDE ON MECHANICAL MINE CLEARANCE TASKS ARE NOT SPECIFICALLY DESIGNED FOR THE JOB. A NUMBER OF MECHANICAL MINE CLEARING MACHINES HAVE BEEN CONSTRUCTED OR ADAPTED FROM MILITARY VEHICLES OR ARMORED VEHICLES OF THE SAME OR SIMILAR TYPE AND WITH THE SAME OR REDUCED SIZE. ALSO, COMMERCIAL AND AGRICULTURAL MACHINES/VEHICLES HAVE BEEN MODIFIED AND ADAPTED TO SUIT MINE CLEARANCE OR BUSH CUTTING PURPOSES ARE TACKLING A MAJOR PROPORTION IN SOME AREAS OF MECHANICAL MINE CLEARANCE. THE MECHANICAL APPROACH IS FAST BUT IT CANNOT YET ACHIEVE THE HUMANITARIAN DEMINING ACCURACY AND SAFETY STANDARDS AT LEAST IN THE NEAR TERM AND IT IS ENVIRONMENTALLY NOT FRIENDLY. MECHANICAL METHODS HAVE EMERGED WITH THEIR OWN STRENGTHS AND WEAKNESSES. WITH THIS TECHNIQUE, MACHINES OFTEN DO NOT DESTROY ALL MINES IN A CONTAMINATED AREA. ANTIPERSONNEL MINES MAY BE PUSHED ON ONE SIDE OR BURIED DEEPER OR PARTLY DAMAGED MAKING THEM MORE DANGEROUS. MECHANICAL MINE CLEARANCE SYSTEMS ARE DIVIDED INTO TWO BASIC CATEGORIES: (1) REMOTELY CONTROLLED AND (2) MANNED SYSTEMS. A REMOTELY CONTROLLED SYSTEM IS CONTROLLED FROM A SAFE DISTANCE USING A HAND-HELD RADIO-FREQUENCY MODULE. A MANNED SYSTEM IS CONTROLLED FROM A PROTECTED POSITION WITHIN THE DEMINING VEHICLE.

MINE CLEARANCE MACHINES

MINE CLEARANCE MACHINES ARE THOSE MACHINES WHOSE STATED PURPOSE IS THE DETONATION, DESTRUCTION OR REMOVAL OF LANDMINES. AS A CONSEQUENCE OF THIS GROUND PROCESSING, THE NECESSITY FOR POST-MECHANICAL FOLLOW-UP CLEARANCE IS REDUCED TO THE MINIMUM POSSIBLE, OR IN CERTAIN CASES, ELIMINATED I.E. WHERE THE PERCEIVED HAZARD WAS NON-EXISTENT, WHERE THE MACHINES REMOVED THE HAZARD OR WHERE THE REMAINING HAZARD FORMS A TOLERABLE RESIDUAL RISK.



REMOVAL OF IDENTIFIED MINES AND UXO BY **MINE DETECTION DOGS (MDD)**

MDD PROCEDURES ARE A PART OF AN INTEGRATED MINE CLEARANCE APPROACH THAT AIMS TO ACHIEVE A STANDARD OF CLEARANCE IN COMPLIANCE WITH THE INTERNATIONAL STANDARDS FOR MINE ACTION (IMAS). TO ACHIEVE THIS, MDD MUST BE PURCHASED FROM AN INTERNATIONALLY RESPECTED SOURCE WITH PROVEN EXPERTISE IN THE EFFECTIVE TRAINING AND PREPARATION OF MDD.

APPROPRIATELY TRAINED MDD CAN BE USED TO CONDUCT AREA REDUCTION AND TO VERIFY THAT LAND BELIEVED TO HAVE NO KNOWN THREAT IS IN FACT FREE FROM EXPLOSIVE DEVICES. MALE MDD ARE USUALLY SELECTED BECAUSE THEY HAVE FEWER UNPRODUCTIVE DAYS IN ANY MONTH.

THE WAY IN WHICH MDD ARE DEPLOYED IS BASED ON FIELD EXPERIENCE AND HAS VERY LIMITED FLEXIBILITY. HOWEVER, ALL TASKS ARE DIFFERENT AND THE PROCEDURES DESCRIBED IN THESE SOPs HAVE BEEN DEVELOPED TO MAXIMIZE THE USE OF MDD IN A VARIED CONTEXT. ALL VARIATIONS TO THE ACTUAL PROCEDURES GIVEN IN THESE SOPs MUST BE APPROVED BY THE MDD COORDINATOR BEFORE IMPLEMENTATION.

THE MDD COORDINATOR AND MDD HANDLERS MUST DEMONSTRATE THE ABILITY TO ANALYSE COMPLEX SITUATIONS AND MAKE REASONED JUDGEMENTS THAT LIMIT THE USE OF MDD TO AREAS IN WHICH THERE IS COMPLETE CONFIDENCE IN THEIR ABILITY. THE MDD COORDINATOR MUST MAKE THE FINAL DECISION OVER WHETHER A TASK CAN BE CONDUCTED BY AN MDD TEAM.

THESE SOPs PRESUME AN INTEGRATED USE OF DEMINING ASSETS THAT ARE DETAILED IN A TASK RELEASE PLAN BEFORE IMPLEMENTATION. THE USE OF MDD IN THE TASK RELEASE PLAN MUST BE APPROVED BY THE MDD COORDINATOR BEFORE THE PLAN IS FINALIZED.



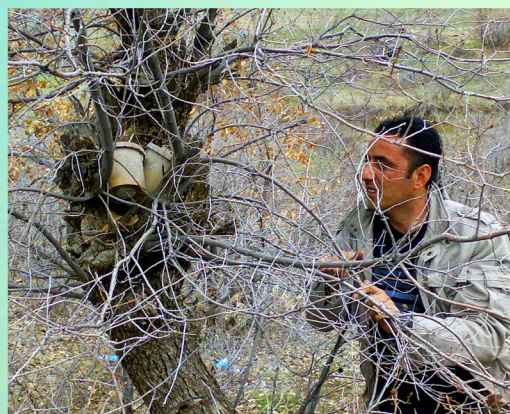
BATTLE AREA CLEARANCE

BAC IS THE SYSTEMATIC SEARCH AND CONTROLLED CLEARANCE OF HAZARDOUS AREAS WHERE THE HAZARDS ARE KNOWN NOT TO CONTAIN MINES. IT INVOLVES THE REMOVAL AND/OR DESTRUCTION OF ALL UXO AND THEIR COMPONENT PARTS WHICH WOULD OTHERWISE POSE A SIGNIFICANT THREAT TO THE LOCAL POPULATION AND PROGRESSES THROUGH THE IDENTIFICATION OF A HAZARDOUS AREA ACHIEVED BY DETAILED RECONNAISSANCE TO THE REPORTING AND REGISTRATION OF RELEVANT AUTHORITIES.

BAC MAY INVOLVE THE CLEARANCE OF BUNKERS AND AMMUNITION STOCKPILES THAT INCLUDES STOCKPILES LEFT IN ANY AMMUNITION STORAGE TYPE FACILITY WHETHER IT BE A PURPOSE BUILT OR A FIELD STORAGE FACILITY. THIS TYPE OF CLEARANCE REQUIRES A DEFINED, CONTROLLED AND SYSTEMATIC CLEARANCE AND RECOVERY PROCEDURE.

BAC PLANNING SHALL INCLUDE THE PREPARATION OF APPROPRIATE PROCEDURES FOR NEUTRALISATION AND DISARMING OF ALL TYPES OF UXO LIKELY TO BE ENCOUNTERED, THE USE OF SUITABLY TRAINED AND QUALIFIED PERSONNEL AND THE USE OF EFFECTIVE AND SAFE EQUIPMENT, STORES AND SUPPLIES.

PERSONNEL WHO HAVE SUCCESSFULLY COMPLETED THE BASIC DEMINER TRAINING COURSE MAY BE USED TO MAN BAC TEAMS FOLLOWING SPECIFIC BAC AND BASIC EOD TRAINING. BAC SUPERVISORS SHOULD BE QUALIFIED TO EOD LEVEL 3 AND BAC TEAM LEADERS SHOULD BE QUALIFIED TO EOD LEVEL 2



DEMOLITION OF MINES & UNEXPLODED ORDNANCE

ALL MINES/UXOs MAY BE DESTROYED BY USING EXPLOSIVES, UNLESS THE ON-SITE CIRCUMSTANCES DICTATE REMOVAL. DEMOLITIONS ON SITE WILL BE CONDUCTED AS SOON AS POSSIBLE, AT THE END OF WORKING DAY OR AT A PRESCRIBED TIME.

COORDINATION AND CONTROL

ALL CLEARANCE TEAM LEADERS MUST HAVE AN APPROVED QUALIFICATION IN DEMOLITIONS. THE SUPERVISOR IS ULTIMATELY RESPONSIBLE FOR SAFETY, COORDINATION AND CONTROL OF ALL DEMOLITION ACTIVITIES.

THIS IS TO INCLUDE THE FOLLOWING:

- SELECTION AND CLEARANCE OF THE DEMOLITION AREA
- HANDLING OF EXPLOSIVES;
- TESTING OF SAFETY FUSE AND ELECTRICAL CABLE
- PREPARATION AND PLACEMENT OF ALL EXPLOSIVE CHARGES;
- MAINTAINING STANDARDS IN ACCORDANCE WITH SAFETY REGULATIONS (INCLUDING THE COORDINATION AND CONTROL OF SENTRIES);
- INFORMING MANDO MINE ACTION LOCAL AUTHORITIES, AASIYAH AND SURROUNDING RESIDENCES OF THE DEMOLITION;
- CONTROL OF THE FIRING;
- CLEARANCE OF THE DEMOLITION AREA AFTER DETONATION OF CHARGES;
- HANDLING MISFIRES AND MALFUNCTIONS



MANDO MINE ACTION TEAM



Dan Sandberg
(chief Executive Officer)



Kurdman Ezzat
(General Manager)



Sarmad Jafar Hosaen
(Operation Manager)



Khalid Shukri Haji
(Administration & Finance)



Muslih Ibrahim Abdullah
(Program Manager)



Reber Abduslam Taha
(Project Manager)

MANDO MINE ACTION LICENSE

Kurdistan Regional Government-IRAQ
Council of Ministries
Mine Action Agency - IRAQ
Director of General of Technical Affairs
Director of Quality management and Accreditation

No: 248
Date: 18-02-2019

KC 2718

Order

According to the authority we have been given, we hereby decided to Giving Demining accreditation to (**Mando**) company, as it has been registered by ministry of Trade and Industry/ General Directorate of Company Establishment, reference to their letter no (43) on 07-01-2019. The company will abide by all the attached guide and instructions and any other orders from the directorate which will announce for sake of protecting the public and the de-miners who work at de-mining process and developing the de-mining process

- Accreditation period : from 01-01-2019 until 31-12-2019
- Accreditation number: DGTA/OA/10/19

SIRAJ BARZANI

Office President



A copy sent to:

- De-Mining Office President- / For Information
- General Directorate of Administration And Management/ For Your Information
- General Directorate of De-Mining Process (Erbil-Sulimanya- Duhok- Garmiyān) For Information – With Regards.
- General Directorate of Company Establishment- With Regards
- Director of Quality Management And Accreditation
- Legal directorate – for information with regards
- Mando company for necessary issues with regards
- Dossier.

Address: Erbil City- Italian Village-1- 100m st.
Website: www.maa.gov.krd.

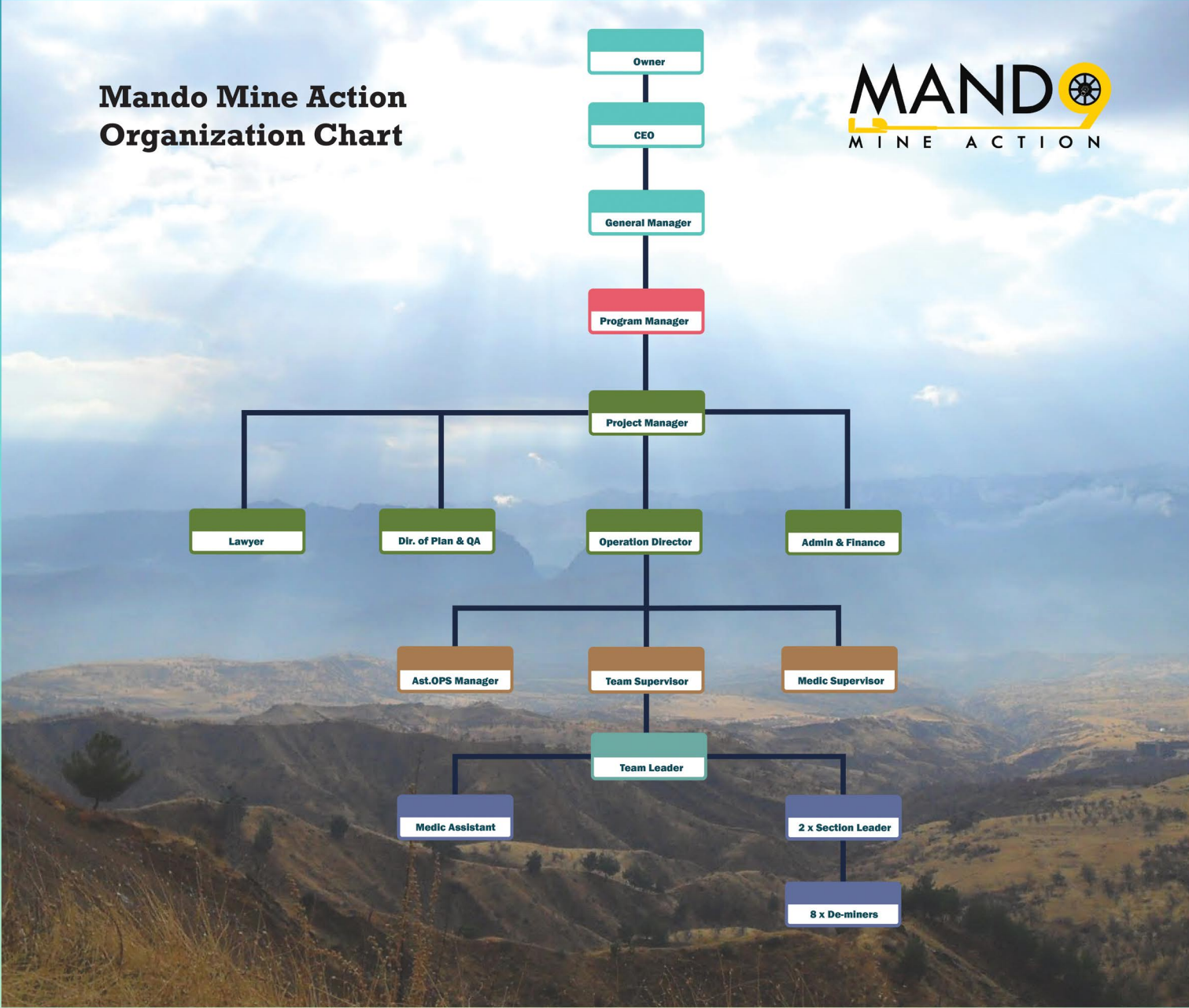
phone: 07517380205
Official page FB: [facebook.com/kurdistanMAA](https://www.facebook.com/kurdistanMAA)

ERBIL NOTARY PUBLIC OFFICE

Gen No:

Mr. Sangar, Sworn Translator at the ministry of justice- Erbil/ Iraq, has presented himself before this office. Under legal oath, he testified that the **English** text attached hereto, is the identical, exact and literal translation of the **Kurdish** text of the said document. In testimony whereof, I have hereto set my name and official seal on this date:

ORGANIZATION CHART



CONTACT

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