INTERNATIONAL MINE ACTION STANDARDS (IMAS)

MINUTES OF IMAS REVIEW BOARD MEETING

20 FEBRUARY 2015
09:00-13:00
GICHD, MAISON DE LA PAIX, CONFERENCE ROOM- 6TH FLOOR

Members attended

1. Armen Harutyunyan *(UNOPS)*
2. Bernard Thomas - (CNDH)
3. Chris Pearce - *(Optima Group)*
4. Dave McDonnell - *(Olive Group)*
5. Erik Tollefsen – *(ICRC)*
6. Faiz Paktian – *Secretary (GICHD)*
7. Goran Tomasevic – *(HALO Trust)*
8. Gunther Haustrate *(Military, Belgium)*
9. Guy Rhodes - *(GICHD)*
10. Ian Mansfield - *(MASG)*
11. Kerry Brinkert - *(ISU APMBC)*
12. Magnus Bengtsson - *(MSB)*
13. Mark Albe - *(NAOC)*
14. Mark Thompson - *(MAG)*
15. Mohammad Sediq Rashid - *(Afghanistan)*
16. Paul Heslop – *UNMAS (Chair)*
17. Phil Bean - *(Independent)*
18. Prum Sophamonkol - *(Cambodia)*
19. Reuben McCarthy – *(UNICEF)*
20. Richard Boulter - *(UNMAS)*
21. Robert Keeley - *(DDG)*
22. Rodney Robideau – *on behalf of Gerald L. Guilbert (USA)*
23. Tim Horner - *(Independent)*

Guest speakers/participants

24. Emanuela Elisa Cepolina - *(Snail Aid)*
25. Gianluca Maspoli – *(GICHD)*
26. Gina Menghini – *Note taker (GICHD)*
27. Melissa Windecker – *(PM/WRA)*
28. Mikael Bold - *(GICHD)*
29. Olivier Cottray – *(GICHD)*
30. Russell Gasser – *(GICHD)*

Members excused

31. Philippe Houliat - *(HI Federation)*
32. Tim Lardner – *(UNDP)*

* * * * * * * *

1. Welcome and introduction

Mr. Paul Heslop (Chair) opened the meeting by welcoming the participants. Everybody present was asked to introduce her/himself.

2. Minutes of the last meeting

Mr. Faiz Paktian (Secretary) asked if there were any comments regarding the last year's minutes. Neither comments nor objections were raised. The minutes of the last meeting were adopted without changes.

3. Composition of the Review Board

The Secretary briefly updated the RB about new members. He said that the USA's representative Mr. Dennis Hadrick was replaced by Mr. Gerald L. Guilbert, the ICRC's representative Mr. Ben Lark was replaced by Mr. Erik Tollefsen, the DDG's representative Mr. Nick Bray was replaced by Mr. Robert Keeley and Halo Trust introduced a new representative Mr. Goran Tomasevic. In addition, G4S was replaced by Optima Group in the commercial organisation category with Mr. Chris Pearce remaining its representative. The Secretary welcomed all new members to the RB.

4. Secretary's report

The Secretary presented an update on IMAS activities since the last meeting. His full report is attached to these minutes – see Annex I.

5. Discussion on residual contamination

Mr. Samuel Paunila, Ammunition Technical Operations Advisor at the GICHD, circulated a concept note on the need for guidance on "residual contamination of mines and other ERW (RC)". He said that the current IMAS series neither define nor describe how the risks from RC should be addressed. Two questions were put out to the RB for consideration; 1) what would the definition of RC entail, and 2) whether there was a need for guidance within the framework of IMAS. He stated that national authorities could use the guidance in the IMAS to refine their policies and practices with regard to ERW risk management and to plan transition from the proactive phase of mine action. Guidance would particularly be helpful in determining the requirements for institutional and human capacity as well as information management to address RC in the long term. The concept note he circulated to the RB is attached to the minutes – see Annex II.

Members of the board expressed their opinions on different aspects of the topic. Questions were raised as whether RC was a mine action issue, whether IMAS should address the RC phase, whether the focus was on explosive hazards or the population affected, and whether risk education formed part of RC. Considerable discussion was specifically had on whether or not this was a matter for the IMAS Review Board, and a number of board members held the view that it was not. Also the issue of the need to include economic perspectives in assessing RC was raised.

A consensus was reached among the RB that the topic is timely and relevant in most countries as completion is approaching. Also, it is important to plan for and incorporate it in the strategic thinking at an earlier stage in the life of a mine action programme. However, the issue requires further discussion among relevant experts, including the ISU of the APMBC. The RB agreed that the GICHD should arrange for an expert focus group meeting to discuss the topic and provide recommendations to the board for consideration.

6. Integration of land release symbols in IMAS

Mr. Olivier Cottray, Head of the Information Management Division at the GICHD, informed the IMAS RB that the GICHD is in the process of developing a new set of map symbols that are in line with the Land Release IMAS. He stated that such standardised symbols are beneficial for promoting consistency, efficiency and safety in survey and clearance operations as well as providing clarity on mine action processes and global contamination. The proposed set consists of symbols visualizing priority attributes to represent the Land Release process on maps. It includes point and polygon symbols visualizing various hazard categories, as well as mine action activity attributes.

Mr. Cottray further informed that the symbols will be discussed with relevant stakeholders and the final set of symbology will be submitted at the end of 2015 to the IMAS RB to be considered as an annex to an IMAS or as a Technical Note. In this context, a Land Release Symbology Review Survey was sent to relevant stakeholders on 6 May 2015. The feedback enables the Information Management Division to consolidate the set of symbology. Once the finalized Land Release Symbology set has been approved by the IMAS RB, it will be made available to the mine action community.

This project was generally welcomed by the RB members. There was an observation that the symbols should not contradict with those used by the mine/ERW risk education community.

7. Update on review and revision of QM IMAS

Mr. Russell Gasser, Results Based Management Advisor at the GICHD, provided an update on the review and revision of the QM IMAS series: 07.30 accreditation of mine action organisations, 07.40 monitoring of mine action organisations and 09.20 post-clearance inspections (sampling). With regard to IMAS 07.40, he said that the GICHD hired, Mr. David Hewitson, a consultant, to revise it. The delay was due to the

unexpected workload of the revision, mainly caused by conflicting requirements in IMAS 07.40. The main objective of the revision is to clarify the focus of this IMAS and to write a set of annexes explaining the application of monitoring to MRE, survey and clearance. Furthermore, Mr. Gasser informed the RB that there was already a proposal to remove IMAS 09.20. The main reason for these suggestions is the costly method of post clearance inspection and its limited results as well as limited compliance by the mine action community. He stated that the revised 07.40 will be enough to satisfy demands for guidance on post clearance inspection. He said the new version of IMAS 07.30 and 07.40 will be circulated to the RB in June 2015.

8. Update on review and revision of the MDD IMAS

Mr. Mikael Bold, the GICHD's Animal Detection System Advisor, provided an update on the review and revision of the Mine Detection Dogs (MDD) IMAS (IMAS 09.40 - IMAS 09.44). He informed that, as previously discussed, the five chapters will be reduced to two: 1) General Requirements and 2) Testing and Accreditation of MDD. He said that these chapters should have been delivered by now but the reason for the delay was that the Animal Detection System (ADS) project executed by NPA, DIGGER and GICHD in Cambodia in 2014 was behind schedule. Participants in this project believed that its findings will contribute to the review and revision of the IMAS.

Mr. Bold then explained that the project was using free running dogs in technical survey (TS) and clearance operations. The tests conducted so far revealed great new potential for dogs, but it will require further studies to generate solid evidence for inclusion in the IMAS. In 2015, further tests will be conducted, including TS of areas with landmines, cluster munitions and ERW as well as the use of free running dogs in clearance of mines, cluster munitions and ERW. He said that these tests are very important for confidence building and the use of dogs in TS operations. It is expected, he said, that the tests will be completed in September, the findings will be integrated in the MDD IMAS and circulated to the RB in December 2015.

Some RB members showed scepticism during the discussion regarding the use of free running dogs in areas where there is suspicion of tripwires. Mr. Mikael Bold countered these concerns by stating that a field risk assessment should be conducted before using dogs in an area. Free running dogs should not be used where tripwires are suspected.

9. Revision of the IMAS on "Protection of the Environment"

Mr. Gianluca Maspoli, the GICHD's Advisor for Security and Development, provided a short overview of the developments in the field of mine action and the protection of the environment. He said that the IMAS series are not strong enough when it comes to the protection of the environment. He suggested a critical review and revision of the IMAS series, in particular 10.70. The concept note he circulated to the RB is attached to the minutes – see Annex III.

Mr. Maspoli stated that the GICHD plans to conduct research on the topic in a number of programmes in 2015. He informed the RB that he will come up with specific recommendations for the IMAS to be discussed in the next RB meeting. The Secretary said that some measures have already been taken into consideration for the IMAS currently under review and revision, such as the accreditation and monitoring of mine action organisations.

The RB welcomed the proposal and emphasised that the research should be more comprehensive, including looking at practices and experiences in the oil and gas industry.

10. T&EP of machines other than machines designed to detonate hazards

Dr. Emanuela Cepolina from the Snail Aid - Technology for Development, provided an update on her proposal and justification for a new technical note on test and evaluation of machines other than machines designed to detonate hazards. She submitted the original proposal in July 2014 but it was not fully supported by the RB at that time. Some members requested additional information. Dr. Cepolina was therefore invited to the RB meeting to provide clarity on her proposal.

The presentation opened up a series of questions. As time allocated for the topic was used, the Chair asked Dr. Cepolina to allow the Chair and the Secretary to make a decision on the proposal based on feedback from the RB members. After-action: the Chair and Secretary agreed to provide a go-ahead for the technical note to be drafted in consultation with the relevant actors. The final draft, however, will be subject to approval of the RB. In addition, Dr. Cepolina was requested to provide a detailed project plan for her project to the Secretary ASAP.

11. Update on the EOD Standards

Mr. Richard Boulter updated the RB members about the new version of the IMAS 09.30 on Explosive Ordnance Disposal (EOD) and the Test and Evaluation Protocol (T&EP) 09.30/01/2014 on EOD competency standards. He said that both documents had been reviewed by Dave Macdonald, Faiz Paktian and himself and after submission to the RB the documents were approved and published in January 2015. He highlighted the main amendments to IMAS 09.30, which are:

- It clarifies EOD Level 1, 2, 3 and 3+ qualifications. Level 4 qualification is replaced by Level 3+;
- It specifies EOD Level 3+ qualification for specialist EOD operators who have been trained in areas that needed to address specific hazards –skills that are not routinely required in mine action;
- It refers to the EOD competencies listed in the newly approved "T&EP 09.30/01/2014". The new protocol provides up-to-date guidance on the competencies needed for EOD Level 1, 2, 3 and 3+;
- It requires the training organisation or certifying authority to explicitly list on the certificate the disciplines on which the individual has been trained; and
- It includes a new requirement that demining organisations shall instruct EOD operators to maintain logs of their operational experience.

12. Copyright Notes

The Secretary informed the RB that the copyright note featured in the IMAS does not reflect the purpose of the IMAS. IMAS are the framework, among others, for the development of the National Mine Action Standards (NMAS) and Standing Operating Procedures (SOPs). He said that the current copyright note states *"[t]his UN document is an International Mine Action Standard (IMAS) and is copyright protected by the UN. Neither this document, nor any extract from it, may be reproduced, stored or transmitted in any form, or by any means, for any other purpose without prior written permission from UNMAS, acting on behalf of the UN*" and does not allow for cut and paste of IMAS without prior written permission from UNMAS.

He suggested that the copyright note proposed by Mr. Reuben McCarthy (UNICEF), which has also been included in the Test and Evaluation Protocol, may be more appropriate for adoption. The proposed note says "*[t]his UN document is licensed under a Creative Commons Attribution-Non-commercial 4.0 International License. Permissions beyond the scope of this license may be requested from UNMAS.*
You are free to:

> • *Share — copy and redistribute the material in any medium or format*
> • *Adapt — remix, transform, and build upon the material*

Under the following terms:

> • *Attribution — you must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.*
>
> • *Non-commercial — you may not use the material for commercial purposes.*

• *No additional restrictions — you may not apply legal terms or technological measures that legally restrict others from doing anything the license permits*.

Mr. McCarthy informed that this license allows creators to communicate which rights they reserve, and which rights they waive for the benefit of recipients or other creators as well as to adapt to the needs of the mine action community.

This idea was generally welcomed by the RB members. The only concern raised was that the RB has to make sure that this copyright does not result in people changing and misinterpreting the standards. The Chair informed the RB that such a modification would require approval of the legal affairs department of the UN.

13. IED related terminologies

The Secretary said that the new IED definitions suggested by UNMAS are now included in IMAS 04.10 – see Annex IV. However, there are suggestions that IMAS should expand the IED definitions as the ones included in the IMAS are not inclusive enough. He said that questions are also being asked about the position of the IMAS with regard to clearance of IEDs.

During the discussion, the RB raised some scepticism particularly with regard to the IEDs' issues and their definitions. As a way forward, the Chair noted that an IED lexicon is being developed by the UN and that may address some of the issues with regard to definitions. He said that he will circulate the lexicon to the RB as soon as it is available.

In addition, there was a suggestion that an expert meeting should be convened to clarify the IMAS position with regard to survey and clearance of IEDs.

14. Any other business

14.1. Risk Based Battle Area Clearance

Mr. Tim Horner explained to the Board that a system of Risk Based Battle Area Clearance had been developed on the Rumaila Oilfield in Southern Iraq to facilitate safe and cost-effective Land Release for oil and gas operations. The system builds on a heat map embedded into the oil company's GIS which recorded in great detail location and type of every UXO, AXO and mine that was found during initial seismic surveys and subsequent BAC operations over a period of several years. The heat map shows a colour based representation of a buffered zone around each item with the red footprints getting darker and larger depending on level of hazard and concentration of items. Although this is not comprehensive, it assists the decision making process that allows a risk-based approach to Land Release.

A polygon for a Wellpad or flowline would be searched 100% visually and 100% sub-surface if it was in a High Risk area and only 100% visually and 10% sub-surface if in a Low Risk area before being released. The heat map is being updated on a daily basis. New finds and analysis being carried out to see how may "change of risk category" need to be issued due to an item being found in a LR BAC area.

The reason for tabling this process at the IMAS RB was that RB BAC does not appear in the IMAS glossary. This can be a problem for some stakeholders, especially lawyers, when signing off on a SoW in a bid process. The subject was discussed bilaterally with several Board members who suggested a possible technical note to explain a systematic risk-based approach that is not a one-size-fits-all solution.

Further discussion on the topic will be greatly appreciated.

14.2. Date and Time for Next Meeting

Time and date of the next RB meeting was discussed. It was suggested to shift the RB meeting to the beginning of the Annual International Meeting of Mine Action National Programme Directors and UN Advisors or alternatively to hold it on one of the days during the meeting. The Chair said that UNMAS and GICHD will consider this when preparing for the next meeting.

14.3. Gender and the Review Board

The Chair said that there is a need to improve gender representation on the RB. He encouraged member organisations to consider introducing female representatives in the future. It was suggested to invite the Director of the Gender and Mine Action Programme (GMAP), Ms. Arianna Calza Bini, to join the RB. After action: Ms. Calza Bini was invited and she has accepted the RB invitation.

14.4. The RB was asked to complete an anonymous feedback form in order to improve the IMAS RB's meetings and secretarial services. Completed forms indicate that overall the RB members were satisfied with the services. Improvements were suggested in the area of allocating more time to the different agenda points and circulating background notes ahead of the meeting.

The Chair and the Secretary thanked all members for their active participation.

Faiz Paktian
Geneva, 17/07/2015

Annex I

To: Members of the IMAS Review Board

IMAS NEWS 2015

The following is an update on some IMAS activities in 2014 for information. It also includes the IMAS review plan for 2015.

1. IMAS Review Board Meeting

The next IMAS Review Board (RB) meeting is scheduled to be held at the GICHD on 20th of February 2015 from 09:00 to 13:00 following the annual International Meeting of National Directors and UN Advisors, taking place from 16 to 19 February 2015.

2. IMAS Steering Group Meeting

No IMAS Steering Group (SG) meeting is scheduled in 2015. The last SG meeting was held in March 2012.

3. Review Board Membership

There are 30 IMAS RB members - 25 full members and five observers.

In 2014, the USA's representative Mr. Dennis Hadrick was replaced by Mr. Gerald L. Guilbert, ICRC's representative Mr. Ben Lark was replaced by Mr. Erik Tollefsen and DDG's representative Mr. Nick Bray was replaced by Mr. Robert Keeley. We are waiting for Colombia to introduce a replacement for Mr Pablo Parra who had left PAICMA.

In addition, G4S was replaced by Optima Group in the commercial organisations category. Mr Chris Pearce who previously represented G4S will now represent Optima Group.

4. Overview of IMAS

There are 43 IMAS (42 endorsed and one in *Draft Edition)* published. The *Draft* IMAS 09.60 'Underwater Survey and Clearance of Explosive Ordnance' was developed and approved in 2014 and now awaits SG endorsement.

In addition, IMAS 09.30 EOD was reviewed and amended in 2014 to re-define EOD competencies and IMAS 04.10 was amended to include new definitions in relation to IEDs.

The review and revision of QM and ADS IMAS (eight) will continue in 2015. Further updates will be provided at the RB meeting.

5. Overview of Technical Notes

There are 15 Technical Notes (TN) published. A draft 3rd version of TN 09.30/02 'Clearance of Depleted Uranium' was circulated in June 2014. A revised version will be re-circulated in 2015.

TIRAMISU had submitted a proposal for a new TN on 'Test and Evaluation of Machines Other Than Machines Designed to Detonate Hazards'. The RB did not support the proposal and asked the author for further clarification. The author will re-present the proposal at the next RB meeting.

6. Overview of CWA

There are seven CEN Workshop Agreements (CWA) in relation to humanitarian mine action published. In 2014/2015, the RB approved the T&EP 09.30/01/2014 EOD competency standards with the inclusion of EOD level 3+ specifications.

As previously agreed, the remaining five CWA (excluding the ones in the following paragraph) will follow suit, subject to approval of the RB, and the webpage "CWA" will be re-labelled *T&EP* in 2015. The original CWA will be archived on the IMAS website.

The following two CWA however, will be reviewed, amended and re-labelled as TN's in 2015/16, subject to approval by the RB:

- 15832:2008 Follow-on after Use of Demining Machines
- 15833:2008 Quality Management for Mechanical Demining

TIRAMISU indicated in the last RB meeting that it would review and update the withdrawn *CWA 15756:2007 T&E Personal Protective Equipment*. However, it has not yet communicated a full plan and timeframe for this project.

7. Proposals for new/amendment of IMAS/TN

In 2014, the RB has received only one proposal for a new TN which is discussed in section 5 above.

8. Review Plan 2015

a) IMAS

- Revision of the quality management IMAS will continue into 2015. These include:
  - 07.30 Accreditation of demining organisations
  - 08.40 Monitoring of demining organisations
  - 09.20 Post-clearance inspections

- Revision of the MDD IMAS will continue into 2015. These include:
  - 09.40 Guide for the use of MDD
  - 09.41 Operational procedures for MDD
  - 09.42 Operational testing of MDD and handlers
  - 09.43 Remote Explosive Scent Tracing (REST)
  - 09.44 Health and general MDD care

- In addition, it is planned to review and update the following IMAS:
  - 10.70 protection of the environment
  - 04.10 terms and definitions

Upon completion and approval of the amendments to the QM and MDD series of IMAS, a complete review of the entire IMAS series will be conducted to look at the impact of these IMAS on others.

b) Technical Notes

Now that the T&EP for EOD competency standards Level 1 to 3+ is approved, the following new TN will also be submitted for acceptance to the RB in 2015:

- TN 09.30/- Guided Missiles
- TN 09.30/- IEDD
- TN 09.30/- Chemical EOD
- TN 09.30/- Alternative demolition techniques

The following TN will be reviewed and updated to ensure conformity with the new EOD competency standards:

- TN 09.30/01 Clearance of ARVs
- TN 09.30/02 Clearance of DU Hazards
- TN 09.30/03 Guidance on liquid propellant fuel systems
- TN 09.30/04 Fuel air explosive systems

c) CWA/T&EP

Please refer to section 6 above for the review and revision of the CWA/T&EP.

9. IMAS Outreach

- A workshop was conducted in Lebanon in February 2014 to discuss and agree on the IMAS terms and definitions in Arabic. As a result, an agreed set of mine action terminologies in Arabic was established and several IMAS have been translated.
- An IMAS International Course was conducted in Geneva from 18 to 20 November 2014.
- IMAS outreach missions were carried out in Bosnia-Herzegovina, Kazakhstan, Iran, Mozambique and Tajikistan. In addition, IMAS presentations were provided as part of trainings/workshops held at the GICHD in Geneva or elsewhere.

10. National Standards

In 2014, the GICHD supported a number of national mine action programmes, either in the development and/or revision of their national mine action standards (NMAS). Countries supported include: Bosnia-Herzegovina, DRC (on-going), Cambodia, Colombia, and Mozambique. Also, support was provided to the Egyptian Military in the development of IMAS compliant SOPs.

Up-to-date versions of NMAS of 15 countries, including Afghanistan, Azerbaijan, Bosnia-Herzegovina, Croatia, Colombia, Jordan, Lao PDR, Mauritania, Mozambique, Palestine, Sir Lanka, Sudan, Senegal, Turkey and Vietnam are published on the IMAS website.

11. IMAS website

The IMAS website (www.mineactionstandards.org) has undergone major changes and restructuring in 2014. The 11 menu items on the homepage were reduced to three. Each menu item has a dropdown list which leads to the sub-pages, making navigation and access to the required documents faster and easier. This served the purpose to provide the mine action community with easy access to mine action standards and their translations. A significant improvement is that visitors can now access and download the standards and their translations in Word format through a login account. Since October 2014, standards in Word version have been downloaded 448 times with IMAS 01.10 being the most often downloaded one. Remarks received from visitors testify that IMAS are being downloaded for training and research, writing and updating NMAS and SOPs, preparing reports, contracts and presentations.

In addition, the website is maintained and updated on a regular basis. Amended and translated IMAS, TN as well as other relevant documents were published when they became available throughout 2014. E-mail updates of "what's new" were sent regularly to all registered individuals. IMAS-related questions and queries were responded to within one business day. Information about the IMAS RB, such as the IMAS framework, membership list, meeting minutes, work plans and other relevant documents, were made available.

The table below provides a brief overview of the number of visits to www.mineactionstandards.org. More details on statistics are available and can be provided on request.

Visits	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2014	1657	1580	1710	1433	1485	1657	1315	1374	1426	1774	1499	1496	18406
2013	1712	1490	1764	1729	1594	1394	1545	1514	1467	1740	1663	1455	19067
2012	1691	1815	2016	1708	1722	1909	1761	1552	1614	1973	1730	1366	20857

Note: The three most visited pages are: list of IMAS in English, glossary and NMAS. The most popular IMAS downloaded in 2014 has been IMAS 01.10.

12. Translation of IMAS

Efforts continued to translate the IMAS into other languages and make them available for the mine action community. In 2014, five IMAS were translated into Spanish, four IMAS into French, one each into Ukrainian and Farsi and 10 IMAS translated into Arabic.

In total, there are 43 IMAS in English, 17 in Arabic, 37 in Armenian, two in Chinese, 42 in French, 28 in Russian, 23 in Spanish, 9 in Ukrainian and one in Persian published on the IMAS website.

13. IMAS publications

In 2014, IMAS USB cards have been produced instead of IMAS CDs. They were progressively updated with new/amended IMAS, their translations and IATG. Over 500 cards have been distributed to mine action practitioners. Whether an up-to-date, electronic version, of the Guide to IMAS should be made available is to be discussed at the RB meeting.

14. RAPID

The database of demining accidents, (Reporting, Analysis and Prevention of Incidents in Demining (RAPID) has been maintained and upgraded throughout the year 2014. RAPID is integrated into IMSMA V6 and linked to the Mine Action Intelligence Tool (MINT). In 2014, collective and individual follow-up emails were sent to national focal points of 57 countries on a quarterly basis. Data for 16 accidents and 19 victims were received from only a few countries. The database includes 1465 accident records with 1842 victims involved. Collecting demining accident data from national programmes remains a challenge. Another challenge is incomplete data as some programmes do not collect certain standard data concerning accidents. These programmes are encouraged to upgrade their SOPs and data collection forms in accordance with IMAS 10.60. Moreover, the GICHD has contacted major demining organisations for data and information. NPA has provided its data so far while data from others is expected in the near future.

15. Review Board Feedback Form

Feedback forms completed at the end of the last Review Board meeting indicated that the majority of the members were satisfied with the meeting and that it was a good investment of their time. The recommendations will be discussed in the next meeting.

Best regards,

Faiz Paktian
Secretary, IMAS Review Board

Annex II

Background Note

What is Residual Explosive Contamination?

This year's National Directors' Meeting plenary session two was titled *Beyond Minefields – Addressing ERW and Cluster Munitions*. The needs were discussed for adjusted programming, and measures to gaining clarity beyond the remit of traditional mine action. Residual contamination, it was mentioned, invites a reform of the sector to more comprehensively address the challenges posed by explosive hazards to wider human security. Why the topic of residual explosive contamination is important?

- Assists in defining the stage of completion and help donors, international organisations and NGOs in planning exit strategies
- Helps national authorities in shifting emphasis from proactive to reactive ERW response strategies
- Guides in transition from emergency and humanitarian phases to recovery and development in ERW response

Residual Explosive Contamination (REC) is a term applicable to several contexts, and should seek to be as encompassing as possible while retaining a policy-relevant meaning. Not all countries working to clear mines and unexploded ordnance (UXO) are parties to the conventions, which have served to guide clearance efforts. These legal instruments nonetheless influence actions. REC could derive its definition from the existing text of the APMBC, but this interpretation misses some of the broader challenges facing mine action today.

REC can be related in the definition of Residual Risk, appearing in IMAS 04.10 (Glossary) and 07.11 (Land Release). There is, however, no IMAS definition for residual contamination. Further, while the application of IMAS remains in force after completing Article 5 (APMBC) and Article 4 (CCM), there is no guidance on the subject in the current IMAS. Noting ISU/APMBC Director Brinkert's paper on the topic, the following defines what REC is and subsequently is not:

> *'Residual [Explosive] Contamination amounts to the sites or areas where mines and/or unexploded ordnance are discovered after all confirmed or suspected hazardous areas have been processed and considered fit for normal human use (at least with respect to the surface and immediate subsurface of these areas)'.*
>
> *'Residual [Explosive] Contamination does not amount to locations or areas, which, on the basis of evidence gathered through non-technical and/or technical survey and the analysis of any existing data relevant to the associated site/area, are known by national authorities to be either confirmed or suspected hazardous areas'.*

Beyond this definition are other aspects that may contribute to the term. 'All reasonable effort' should be nationally defined in standards and/or operating procedures, which drive clearance operations to a certain extent and depth. UXO located beyond this extent and below this depth would likely remain undiscovered during standard operations, and could therefore be considered residual.
Additionally, the passage of time may have a defining impact. In Oranienburg, Germany, for example, it is estimated that 3000 large bombs still remain buried deep below the surface. Reaching ordnance depths of up to 10 meters, it is not feasible to clear the entire area to this depth, especially since the city has since recovered and been rebuilt. Such operation would be highly disruptive and extracting

bombs could be more dangerous to people and infrastructure than leaving them undisturbed. Hence clearance activities are primarily conducted reactively and according to a specific need. City planners assess the probability of a UXO discovery and rough impact of a possible detonation by consulting bomb damage assessment photographs, maps and war reports, as well as examining the intended land use and level of UXO degradation. The results of such risk assessments influence decisions on priority and resource allocation.

IMAS explicitly mention UXO, and should therefore address the issue of Residual Explosive Contamination with greater clarity.

Residual risk is defined in the IMAS 04.10 Glossary as:

> *'The risk remaining following the application of all reasonable effort to identify, define, and remove all presence and suspicion of mines/ERW through non-technical survey, technical survey and/or clearance'.*

In the case of UXO/AXO the residual risk might be further classified as tolerable, or acceptable, where its humanitarian, socio-economic, environmental, financial etc. implications are not perceived significant enough by the responsible authority to warrant proactive survey and clearance operation; and intolerable, or unacceptable, where the residual risk is present but awaits action that has not materialised yet due to reasons related to e.g. lack of assigned priority, access or resource allocation for the responders.

How should IMAS address the issue of REC? Would defining the term be sufficient? Should there be a chapter on e.g. risk management? Should there be explicit guidance in IMAS or its supporting documents for policy and practice in managing the REC?

In search for a suitable definition, possible building blocks have been attempted such as:

> *'Unknown mine/ERW contamination following completion'*
>
> *'Remaining contamination after all reasonable survey and clearance efforts'*
>
> *'Remaining contamination after all reasonable efforts to comply with the requirements of applicable international and national law and to reduce risk to an ALARP level'*
>
> *'Explosive remnants that pose a tolerable risk to local population'*
>
> *'The sites or areas where mines and other ERW are discovered after all confirmed or suspected hazardous areas have been processed and considered fit for normal human use (at least with respect to the surface and immediate subsurface of these areas)'*

Feedback on IMAS improvement in response to above questions is requested from the Members of the IMAS Review Board by 31 March, including but not limited to proposals for a definition of Residual Explosive Contamination.

Further Reading:

Brinkert, K., (2014), *The Relationship Between Residual Contamination and a State's Obligations Under the Anti-Personnel Mine Ban Convention*, ISU/APMBC Director's Message, unpublished

Paunila, S., (2014), *Managing Residual ERW: Learning from Europe's Past*, Journal of ERW and Mine Action 18, No. 1, pp. 22-25.

Annex III

Revision of IMAS "Protection of the Environment

IMAS 10.70 provides solid guidance for the protection of the environment in mine action. It establishes that national authorities and mine action organisations have the responsibility to minimise the environmental impact of mine action operations. IMAS 10.70 gives practical guidance on a number of components of mine action programmes, for instance on mechanical operations, EOD operations, and disposal of toxic and hazardous waste.

Through its regular contact with mine action actors, e.g. the environmental workshop in Kuwait in 2013, the GICHD has recognised, on the one hand, increased concerns on the environmental impact of contamination and mine action operations, on the other hand, the need for strengthening guidance on environment protection, in particular, through the IMAS.

Therefore, the GICHD intends to undertake a research aiming to identify, in a systematic manner, good practice in protecting the environment in order to propose amendments to IMAS 10.70. In line with recommendations of the Kuwait workshop and other events on the subject, we believe useful amendments can be made in the IMAS 10.70 on the following topics:

- Environmental impact assessment;
- Guidance on environmental requirements for demining organisations to be included in accreditation and planning;
- Monitoring;
- Training.

This list is not exhaustive, but it provides a clear indication of amendments that can be done in order to support national mine action authorities and mine action organisations in their efforts to protect the environment.

Last but not least, the interest of reviewing IMAS 10.70 is based not only on the internal needs of the mine action sector, but also on the relevance given to the environment in related fields. In particular, the environment is going to be an important topic in international debates during the next decade, since it is expected to feature prominently in the Post-2015 Sustainable Development Agenda, which is going to be finalised in a Summit in September this year. This process can inform the review of the IMAS 10.70 and provide further inputs for amendments.

Annex IV

IED Terminology
Added to IMAS 04.10

Victim Operated IED (VOIED) - type of switch that is activated by the actions of an unsuspecting individual, these devices rely on the target for the device carrying out some form of action that will cause the device to function.

Time Activated IED – A type of IED containing a switch that functions after a set time. Used widely against infrastructure targets.

Command Activated IED – a type of IED containing a switch that is activated by the attacker in which the attacker controls the device.

Radio Controlled IED (RCIED) - An IED initiated electronically in a wireless method consisting of a transmitter and receiver (i.e. personal mobile radio (PMR), cell phone, cordless phone, pager, etc).

Vehicle Borne IED (VBIED) - An IED delivered by any small ground-based vehicle (e.g., passenger vehicle, motorcycle, moped, bicycle, etc.) and/or serves as the concealment means for explosives, with an initiating device.

Pressure Plate IED (PPIED) – An IED utilising a triggering device that occurs when an object is used to complete a circuit when pressure is applied or removed in a predetermined direction. Many pressure initiated IEDs explode when pressure plates are compressed under the weight of passing vehicles or foot soldiers.

Home Made Explosive - A combination of commercially available ingredients combined to create an explosive substance.

Counter IED - The collective efforts at all levels to defeat the IED System in order to reduce or eliminate the effects of all forms of IEDs used against friendly forces and non-combatants according to the mission.

IED Disposal (IEDD) - The location, identification, rendering safe and final disposal of IEDs.