Integration of Clearance Assets

Mark Thompson
MAG (Mines Advisory Group)

Follow this and additional works at: https://commons.lib.jmu.edu/cisr-journal

Part of the Other Public Affairs, Public Policy and Public Administration Commons, and the Peace and Conflict Studies Commons

Recommended Citation
Thompson, Mark (2011) "Integration of Clearance Assets," The Journal of ERW and Mine Action : Vol. 15 : Iss. 1 , Article 2.
Available at: https://commons.lib.jmu.edu/cisr-journal/vol15/iss1/2

This Article is brought to you for free and open access by the Center for International Stabilization and Recovery at JMU Scholarly Commons. It has been accepted for inclusion in Journal of Conventional Weapons Destruction by an authorized editor of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.
Integration of Clearance Assets

Integrating a variety of demining activities, including machines and manual support, is vital to an operation’s efficiency and success. An appropriate integration plan must include analysis of context, support requirements and limitations.

by Mark Thompson | Mines Advisory Group Iraq |

Why Does This Happen?

Historically, each asset has competed against the other in a program to support integration. An operational structure that has individual dog, machine and manual experts focused on their own assets can indeed restrict integration. Effective integration is achieved by ensuring all individuals in the organization understand each asset’s capabilities and limitations, and are thus able to benefit from integrated clearance use.

Additionally, the clearance process should be planned to emphasize the consideration of all assets and parts they can play. Of course, terrain and conditions will dictate whether an approach is suitable or not. These conditions may include metal-contamination levels, mine type, vegetation type, and presence of field defenses or uneven ground. To avoid denoting a task as manual, MDD or mechanical is good practice, as this practice serves to isolate assets and tasks. Understanding that all tasks require some form of manual support or clearance is important. As an example, MAG (Mines Advisory Group), my employer, has many programs that adopt an integrated approach to ensure that capabilities of individual methods lead clearance planning and that mechanical and/or MDD assets form part of their clearance plan.

How Do We Better Integrate?

Having the three asset types—manual support, dogs and machines—does not in itself represent an integrated approach to clearance. An operational structure that has individual dog, machine and manual experts focused on their own assets can indeed restrict integration. Effective integration is achieved by ensuring all individuals in the organization understand each asset’s capabilities and limitations, and are thus able to benefit from integrated clearance use.

What Has Worked?

Although a case study of a single task can show integrated-clearance success, using an operational sector with multiple teams and tasks as a measure of success is a better approach. For example, if we compare two sectors within the MAG Iraq program that have a similar number of manual assets and access to the same MDD and mechanical teams, we have a significant difference in the number of tasks completed and access to the same MDD and mechanical teams. In the second sector, we utilized on 71 percent of tasks completely in the first sector, whereas in the second sector, 55.5 percent of completed tasks used only manual assets. Although the different topographical, contamination and size characteristics of each sector’s tasks contributed to the disproportionate completion numbers, other factors suggest the primary reason for the difference is under-utilization of integrated clearance in the second sector.

The sector completing the most tasks used all three assets the most frequently. However, they integrated different assets by applying the appropriate clearance methodology as the site conditions evolved. Mechanized and MDD assets were used less, and only 25 percent of each task used the additional assets. The sector with the least tasks completed used all three assets on 80 percent of each task, indicating that it did not adapt methodology and maintained the same clearance tactic without assessing evolving site conditions.

Addressing the balance in terms of the number of teams and equipment should also be considered. Although most people would agree that you cannot have too many manual assets, you can almost certainly have too many machines and dogs, purely because of their operational limitations and the support they require to function. Having too many of one asset will only create less efficient and effective clearance methodologies.

Building an infrastructure with an aim to provide a balanced range of tools within a program to support integration is also essential. Experience has shown that both mechanical tools and dogs are very high maintenance and, due to insufficient investment, poor preparatory supply and lack of sustainability, can doom programs before they even begin.

In the MAG Iraq program, the infrastructure has been established and expanded in line with the growth. MAG Iraq currently has three operational sectors, each with its own distinctive conditions that affect individual assets, and therefore integration. Mountainous terrain has the greatest effect due to machine and MDD limitations in those areas. A recent factor in determining a fourth-sector closure was that MAG could not use an integrated approach because the majority of duties were high-ground tasks.

Conclusion

In conclusion, funding sources and equipment provision can pull operational structure in different directions. Ensuring the development and design of operational capacity to deal with clearance obstacles is important to maintain efficiency rather than changing effective planning and prioritization mechanisms to suit specific assets or achieve artificial clearance outputs.

Mark Thompson is Technical Operations Manager for MAG. He has more than 20 years of field experience in mine action, including in Cambodia, Cypriot, Iraq, Kosovo, Laos PDR, Rwanda, Sudan and Vietnam. Since July 2008, Thompson has been working with MAG in Iraq. Prior to joining MAG in 1993, he served 12 years in the Corps of Royal Engineers in the British Army.

Mark Thompson is Technical Operations Manager for MAG. He has more than 20 years of field experience in mine action, including in Cambodia, Cypriot, Iraq, Kosovo, Laos PDR, Rwanda, Sudan and Vietnam. Since July 2008, Thompson has been working with MAG in Iraq. Prior to joining MAG in 1993, he served 12 years in the Corps of Royal Engineers in the British Army. 

Mark Thompson is Technical Operations Manager for MAG. He has more than 20 years of field experience in mine action, including in Cambodia, Cypriot, Iraq, Kosovo, Laos PDR, Rwanda, Sudan and Vietnam. Since July 2008, Thompson has been working with MAG in Iraq. Prior to joining MAG in 1993, he served 12 years in the Corps of Royal Engineers in the British Army.

Mark Thompson is Technical Operations Manager for MAG. He has more than 20 years of field experience in mine action, including in Cambodia, Cypriot, Iraq, Kosovo, Laos PDR, Rwanda, Sudan and Vietnam. Since July 2008, Thompson has been working with MAG in Iraq. Prior to joining MAG in 1993, he served 12 years in the Corps of Royal Engineers in the British Army. 

Mark Thompson is Technical Operations Manager for MAG. He has more than 20 years of field experience in mine action, including in Cambodia, Cypriot, Iraq, Kosovo, Laos PDR, Rwanda, Sudan and Vietnam. Since July 2008, Thompson has been working with MAG in Iraq. Prior to joining MAG in 1993, he served 12 years in the Corps of Royal Engineers in the British Army.