GICHD

BETTER INFORMATION FOR BETTER RESULTS:
THE IMPACT OF IMSMA CORE

Every year, civilians around the world fall victim to landmines, cluster munitions and other explosive ordnance. Lives are lost or irreparably damaged, while survivors and their families struggle with the physical, psychological, social and economic consequences of the accidents.

The presence of explosive ordnance is also a major obstacle to the rapid and effective delivery of humanitarian aid, post-conflict stabilisation, recovery and reconstruction, peace and sustainable development. In a global context still characterised by serious and increasingly fluid conflicts, where the line between 'war' and 'peace' is blurred, and by large-scale humanitarian crises, information management is more important than ever.

Since GICHD's creation in 1998, information management — which provides up-to-date, secure and reliable systems that compile, store, analyse and share timely and accurate information related to mine action activities — has been a cornerstone of the Centre's support to the mine action sector. Using information management tools based on geography, the GICHD is better equipped to support its partners in mapping contamination, identifying and removing explosive ordnance. It helps them make data-driven decisions on how to prioritise work and clear landmines and other explosive ordnance, thus laying the foundations for effective and efficient humanitarian demining operations.

To ensure that these systems are used effectively, the GICHD provides national authorities and partners with expert advice, training, exchange of good practices, assessment frameworks and support to implement and effectively use the Information Management System for Mine Action (IMSMA).

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"By implementing IMSMA Core in the Libyan [Mine Action] Programme, information management becomes a shared responsibility between the Operations, Teams, and Information Managers and collaboration becomes stronger and more transparent than ever before within the Libyan Programme."

Abdullatif Abujarida
Head of Information Management Dept. at the Libyan Mine Action Centre (LibMAC)

IMSMA Core: a generational shift in information management

In 2018, the GICHD launched **IMSMA Core**, the latest version of the GICHD's flagship Information Management System for Mine Action (IMSMA) tool. IMSMA Core is built from state-of-the-art geographic information systems software provided by the market leader Esri - which is being increasingly used by the mine action sector.

IMSMA Core represents a true shift in information management and serves as the home for information on explosive ordnance and where it has been removed. It is a powerful digital platform that provides advanced analytics, workflows, image processing, and machine learning that is configured to fit the specific requirements of each national

mine action programme. They can access maps and reports in near real time on the extent of contamination on the ground and share the information widely within their programme.

Investing in a common platform using the Esri toolset, not only provides advantages in terms of data exchange and expertise exchange, but also fosters a sense of cohesiveness within the sector, promoting collaboration and creating opportunities to share knowledge and resources. The mine action sector is better equipped to constantly adapt IMSMA to the latest technology improvements to benefit the greatest number of people.

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"SMAC is grateful to have such a system of tools and processes that can be adapted to the specific requirements of mine action in Serbia. IMSMA Core allows us to use one centralised database which improves the quality, accessibility, and data-sharing within SMAC and with external stakeholders."

Slađana Košutić, Senior Advisor for Planning, International Cooperation and European Integrations, Mine Action Centre of the Republic of Serbia (SMAC)

How IMSMA Core works:

IMSMA Core allows mine action programmes to measure the size, shape and distribution of contaminated areas.

By identifying locations related to suspected hazardous areas, mine action programmes can determine the proximity to infrastructure and human activity.

When hazardous areas are identified, mine action programmes can prioritise, plan and monitor operations such as for clearance or explosive ordnance risk education.

UNMAS IMSMA Core implementation: standardising information management with partners

In 2019, the GICHD started collaborating with the United Nations Mine Action Service (UNMAS) and the United Nations Office for Project Services (UNOPS) to support the installation of IMSMA Core, combining mine action data with information on humanitarian, development, and peacebuilding efforts.

Since the start of the collaboration with UNMAS, the GICHD has continued to support the design and use of the information management system, both across 15 country programmes and at the headquarters level, focusing mainly on development and innovation, operational support and management of IMSMA Core's infrastructure.

Strengthening the collection and use of quality information during conflicts

Ukraine

Ukraine is one of the countries most affected by explosive ordnance. Contamination has increased significantly since the escalation of the conflict in 2022, threatening people's lives and livelihoods. The GICHD, which has a long history of working with Ukrainian national authorities, expanded and restructured its support for their emergency response efforts, focusing on work that can be undertaken even when large-scale humanitarian demining efforts are hindered by ongoing hostilities.

GICHD's ongoing operational support of IMSMA Core in Ukraine, which was initially used as an emergency coordination platform, has re-focused on long-term information management work. This enables Ukrainian national authorities and mine action organisations to aggregate, interpret, and coordinate the abundance of data from various partners and sources, in order to map areas where threats exist, define potential actions, establish priorities, and start mine action operations.

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"The implementation of IMSMA Core in Ukraine has provided a more coordinated approach to mine action. The system has optimised workflows, resulting in more efficient planning, resource allocation and overall management of mine action."

Ms Lidiya Lebedeva,
IM Officer, Ukraine Mine Action Centre

Yemen

Years of armed conflict and humanitarian crises have left a high level of contamination from explosive remnants of war in Yemen. Since the beginning of the truce in the autumn of 2021, the overall number of casualties from the conflict decreased sharply, while the number of casualties from landmines and unexploded ordnance has increased. These weapons can be found in fields, along roads and borders, near homes, schools, and other places where people go about their daily lives. They force millions of people to put themselves or their families in danger because there is no alternative route to school, no nearby access to medical care, and no safe land to farm on.

In 2020, the GICHD began assisting the Yemen Mine Action Coordination Centre (YMACC) and the Yemen Executive Mine Action Centre (YEMAC) with the

implementation of IMSMA Core. This enabled YMACC, YEMAC and their partners to have a centralised data storage location for their mine action activities as well as to standardise data collection and reporting. As IMSMA Core grew and more information on mine action activities were entered into the database, the system evolved into the country's most reliable source of mine action data. As a result, YMACC began to receive regular external requests for data and information to support various ongoing humanitarian and government projects involving infrastructure, housing, and water development.

Since then, the GICHD has continued to provide Yemen national authorities and its implementing partners with information management support, advice, and training on best practices. The successful implementation of IMSMA Core in Yemen demonstrates the system's adaptability to a variety of environments and processes.

Making a difference for IM professionals: modernising information management

2017-2023:
IMSMA has been used by more than **80% of national and UN mine action programmes** worldwide.

9
national mine action centres leverage IMSMA Core tools for their daily mine action operations to collect, store and report their activities.

11
countries/ territories enhance their information management capabilities throughout the process of implementing IMSMA Core.

15
UNMAS programmes integrated IMSMA Core, which increases the use of information management in mine action operations globally.

3
partners have actively adapted and implemented IMSMA Core, which illustrates the efforts in advancing information management support in mine action.

90
countries benefit from comprehensive information management training, empowering them with the skills and knowledge necessary for effective mine action.

The commitment to technical support for older versions of IMSMA NG perseveres in **36 countries**, fostering continuity and resilience in information management practices.

E-learning: making training more accessible

Through the GICHD's information management work, the Centre is continuously finding new ways to promote information sharing between peers and allowing them to stay updated on the latest trends and innovations.

After years of delivering successful in-person IM trainings and to strengthen information management qualifications within the field of mine action, the GICHD developed and launched two e-learning modules: 'Introduction to GIS (Geographic Information Systems) for Mine Action' and 'Introduction to ArcGIS Enterprise'. Through this initiative, the GICHD trained more than 460 participants. The success of the two e-learning modules confirmed the need for more accessible training on information management.

Find out more about our IM e-learning modules.

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"The IMSMA training, facilitated by the GICHD, is systematically enhancing the capacity of our staff to collect high-quality data in mine action and successfully achieve our objectives year after year".
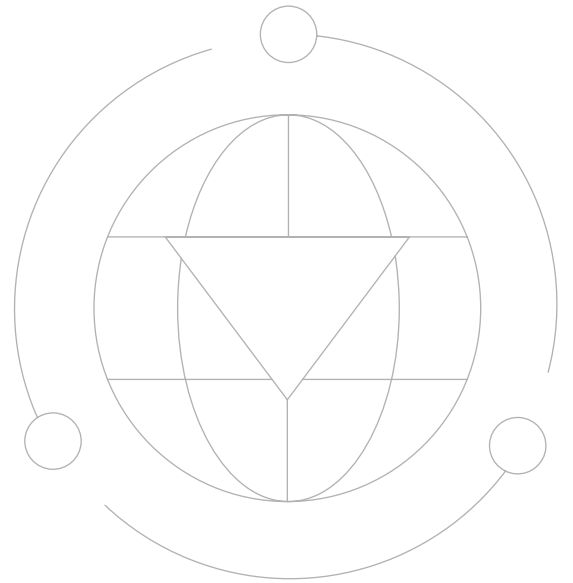
B. Sri Mallikarachchi
IM Specialist seconded to Sri Lanka's National Mine Action Authority

About the GICHD

The GICHD works towards reducing risks to communities caused by explosive ordnance, with a focus on landmines, cluster munitions, explosive remnants of war and unsafely and insecurely managed conventional ammunition.

As an internationally recognised centre of expertise and knowledge, the GICHD helps national authorities, international and regional organisations, NGOs and commercial operators in several affected countries and territories, to develop and professionalise mine action and ammunition management. Through its work, the GICHD strives for the implementation of conventions, for completion targets to be reached, communities protected from explosive harm, and land restored to communities. This work saves lives, facilitates the safe return of displaced populations, supports gender equality and inclusion, and promotes peace, and sustainable development.

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