

Bangladesh Army's New SWORD

French-based artificial intelligence-based, modelling and simulation provider, MASA Group has delivered a completely customised version of its wargame with automated forces, SWORD, to the Bangladesh Army Training and Doctrine Command (ARTDOC), in order to equip its Computerised War-Game Centre (CWGC). The simulation has been adapted to reflect specific requirements including the Army's doctrine, equipment and supplies as well as its operational terrain.

The ARTDOC has chosen to employ SWORD for command post training from the battalion to the division level. The software enables the Army to immerse its training audience in different types of military and civil emergency scenarios. SWORD can simulate and control tens of thousands of soldiers and units.

The customisation programme was delivered in just over a year after the contract award, much faster than the industry standard for a fully personalised simulation system. The timely delivery of such a detailed and technical programme, including training Bangladesh Army

personnel to use the system, has been enabled by a strong working relationship between the ARTDOC personnel and MASA's engineers as well as by a shared belief in long-term partnership between the Bangladesh Army and the company. The delivery was expedited by the ongoing availability of key Army officers during the preparation and test exercises, as well as by the Bangladesh Army's deep knowledge of simulation tools and their high level of professionalism.

Test Exercises

Before the final programme delivery, the ARTDOC and MASA has conducted three test exercises, one at the start of the contract before any modifications to SWORD had been made, one midway through its customisation process, and finally one after the software had been fully tailored for the Bangladesh Army. SWORD was chosen not just for its capabilities to enhance training exercises but also for its features that can enable the use of simulation for analysis use cases, such as planning and decision-support.

In February 2016 some 80 senior

military personnel and a range of subject matter experts, were involved in the final, week-long test exercise conducted by the ARTDOC and supported by MASA. A reflection of the Army's commitment, all 80 personnel were also involved in a week of training for the exercise before the test week itself. The exercise allowed for a final validation of the system, enabling Bangladesh Army personnel to use SWORD autonomously.

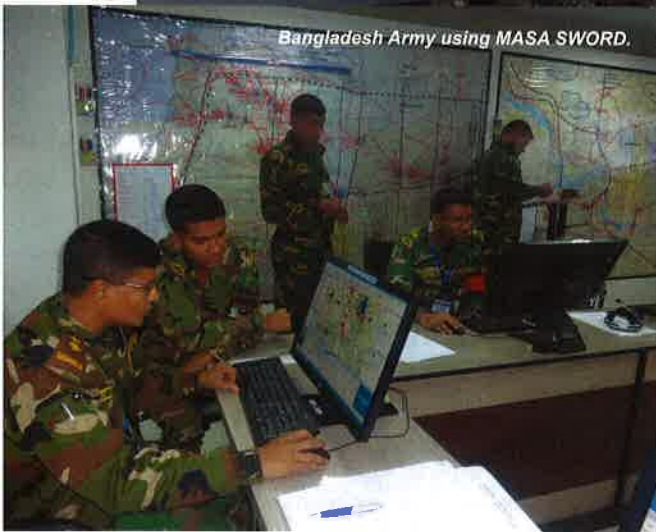
Colonel Minhaz, Director of the CWGC at the Bangladesh ARTDOC commented that "MASA and the Bangladesh Army have been able to build an incredibly positive relationship. MASA's commitment far exceeds what is written in the contract; their flexibility and ability to adapt to the Army's needs beyond the contract has really helped us to achieve programme completion in such good time. We anticipate an on-going strong relationship with MASA as the Army's demands for further SWORD features evolve with our use of the software".

Computerised War-Game Centre

The CWGC is the latest addition to the



Participants from the FPDA nations during Exercise SUMAN Warrior in New Zealand.



Bangladesh Army using MASA SWORD.

adopt SWORD. The ARTDOC understood extremely well the full pedagogical potential of SWORD as a simulation tool, which has led the Army to a solid commitment to train, educate and maintain wargame-specialised personnel, and helped in the smooth setup of the fully customised software. MASA's ability to respond to the Bangladesh Army's specific requirements demonstrates its potential to do the same for other Asian and Commonwealth countries in the future".

Maj Chivers continued "the real plus for this school has been the ability to take SWORD and integrate it into the developmental C2 suite currently being used by the Army – this process has been relatively simple but effective due to the standards-based approach of SWORD and the C2 system. The support provided by MASA has been exceptional and has gone a long way to having the product valued by the staff and users alike".

SWORD in FPDA Exercise

SWORD was used in the Suman Warrior exercise under the ambit of the Five Power Defence Arrangements (FPDA) IN October 2014. The exercise, which was held at New Zealand's North Island, saw military officers from each FPDA nation forming a battle group headquarters to respond to a fictitious security situation, and is designed to test and improve the way FPDA nations operate with each other while confronting such threats.

Over 180 military personnel from the FPDA nations took part in the brigade-level exercise, using a combination of SWORD and Systematic's SitaWare C2 technology. Considered to be a great success, the exercise included 100 virtual units as well as insurgents embedded within a 200 km² field - demonstrating the advanced artificial intelligence capabilities offered by SWORD. Additional benefits for the FPDA of using the new combination of SWORD and Sitaware provides CPX users with an increasingly realistic and streamlined 'train as you fight' environment. It also enables system animators to dynamically update and modify the scenarios.

Army's ARTDOC and was inaugurated in November 2015 by President Abdul Hamid. Located in the Dhaka cantonment, the CWGC has been set up to help the army work towards the Forces Goal 2030, ensuring the modernisation and technological advancement of all of Bangladesh's armed forces. As well as ensuring national security, the Army has a proud history of supporting the United Nations and providing aid to the civil authorities in the wake of natural disasters, and has topped the league for the leading troop contributor, providing around 120,000 troops over 28 years. The customised version of SWORD has been designed to train the command staff to retain these core responsibilities and skills.

"We are extremely proud to have been selected by the Bangladesh Army last year after such a thorough tendering process," said David Chouraqui, MASA's Chairman and CEO. "Bangladesh was the third country in the region to

SWORD: The Choice of A-PAC Armies

Besides Bangladesh, MASA SWORD is also the choice for the New Zealand and Singapore land forces. In New Zealand, the system has been used to train the New Zealand Army's Mission Command Training School (MCTS). In less than a year in using the system, MCTS has adapted the technology to perform a variety of internal and international activities. Major Michael Chivers, Chief Instructor of MCTS praised its ease of use: "Using the SWORD simulation system we have made part-time personnel savings of about 50% and significant savings in the amount of computer hardware need to support this activity. The simplicity of constructing scenarios, its ability to integrate the GIS information and its rich graphical interface make it a very easy tool to work with, ensuring that the manpower and computer power required are kept to a minimum".