



masa

INTELLIGENCE

MASA Newsletter – Winter 2016

Welcome to the I/ITSEC edition of the MASA newsletter. As ever, I/ITSEC 2016 is sure to be a very important show both for exhibitors and delegates and on our booth #2360 we will be highlighting our new global strategy alongside new products and services.

MASA SWORD is well known around the world and today, is in service in 17 countries. As part of SWORD's continuous process of advancement, we have now released a modularised capability that is aggregated down to battalion level. Customers can now select options from a matrix of capabilities that enable them to choose the best configuration for their operational training needs.



This modular approach allows customers to select aspects as far ranging as different command levels from division to battalion; add different capabilities such as logistics and CBRN; a web administration app; and a new client that provides added flexibility through an iPad instructor station. There are also a spectrum of different customer training opportunities that can be supplied to ensure users get the most from their modular SWORD package.

In addition, our variant for the civilian emergency services market, SYNERGY, will also encompass many of these value added benefits.

We have taken this modularity a stage further by opening up new opportunities for customers to procure licenses that include both the SWORD product and services. Customers can also lease SWORD or we can supply a turnkey option whereby MASA provides SWORD, the relevant hardware and the manpower to conduct the exercise on behalf of the client. This provides a very flexible and cost-effective way of carrying out command and staff training and negates up front procurement costs.

Our concept of modularity has been carried forward to our new Artificial Intelligence (AI) offering, Direct AI (DAI). DAI forms the core of SWORD and has been developed over the past year to provide SWORD with enhanced performance and is now available as a stand-alone product for use by system integrators that can also be used for a range of experimentation and development tasks. To learn more about this, MASA is presenting a paper in the I/ITSEC conference stream.

MASA continues to expand its presence in the global market as well as its modular product and service offerings. We also continue to work with new partners to expand our global network.

I wish you a very successful show and would welcome you to visit us during the show on Booth #2360 to discuss our global strategy and view our new and innovative products.

David Chynoweth

CUSTOMER SPOTLIGHT

Interview with Ludivine Bloquel, engineer in charge of Crisis Management for the Direction of Information on Major Risks / Quality of Life Department of CODAH.

Can you provide an overview of what CODAH does and its purpose? What is the size of the organisation, its roles and capabilities?

The « Communauté de l'agglomération havraise » (CODAH) is a public institution for the inter-municipalities cooperation, a cluster of 17 municipal councils focused on a project for area structuring and many investments that reinforces its appeal.



CODAH achieves many public service missions for the daily life of the neighborhoods' inhabitants. It intervenes on several subjects, based on delegations given by the State or public collectives (such as the Regional Council, Department Council, municipal councils), including waste management, water distribution and sanitation, public transportation, information on natural and industrial risks (assisting in the risk and crisis management for town halls, alerting populations, safety procedures), hygiene and health, housing, economy, tourism and community equipment (for sport, culture and leisure). CODAH has a sustainable development approach in all its missions.

Decisions are made by the community bureau (26 members) or by the community council (55 members). The community council is made of 47 elected counsellors and 8 additionally elected counsellors. These "community counsellors" are drawn from the municipal councils of the 17 municipalities meeting within CODAH. The Community Council is the deliberative assembly of the Agglomeration Community. The elected community counsellors meet in "thematic conferences", "offices" and "community councils", to build and endorse public policies, in conjunction with the administrative and technical services of CODAH.

The internal and functional organization of CODAH's services revolves around three departments: "Quality of life", "Resource management" and "Development and attractiveness of the District", which are under the responsibility of the Director-General of services. The services of CODAH employ almost 900 territorial agents.

The agglomeration in figures:

- 20,000 hectares
- 239, 759 inhabitants (source: National Institute for Statistics and Economic Studies - INSEE - 01/01/2016)
- 727 hectares of green spaces

How did you train before using SWORD?

A research program called TARANIS was financed in the framework of the 2006 call for proposals of the CSOSG Program (Concepts Systems and Tools for Global Security) of the National Research Agency. It has also been labelled by the SYSTEM@TIC- PARIS-REGION cluster. MASA was part of this research program.

CODAH, already organizing crisis management training courses for civil protection, served as a testing laboratory for the program. The consortium agreement subsequently allowed CODAH to have access rights to use the work resulting from the project.

Within the framework of TARANIS, a software, telephone and computer platform was created and even tested during several exercises of crisis management courses organized by CODAH. This allowed the creation of communication interfaces between facilitators and trainees as well as monitoring tools for the smooth running of the exercise. One of the key elements of this program was the development of a "TimeLine" tool, allowing users to follow and comment in real time on the execution of the exercises, to integrate the telephone exchanges between the crisis cell and animation as well as the video footage on the behavior of trainees and to prepare in real time the elements needed for immediate debriefing.

When and what was it that made you look for an AI style training system?

We wanted to make our crisis training exercise evolve as part of our training to bring maximum realism and adaptability in real time to our scenario. Being able to verify the logistical feasibility of the options taken by the trainees was essential.

Why did you choose SWORD?

At the end of the research program, CODAH wished to continue its partnership with MASA group.

Today, the "TimeLine" tool integrates completely into the platform of the SWORD simulation and supervision system and corresponds exactly to the needs of CODAH.

The SWORD simulation allows us to test different elements of the exercise scenario in real time, such as the methods of supply and distribution of bottled water that trainees need to deliver in a crisis. Once the Crisis Staff have determined the quantity of water needed, the distribution points to the population and the methods of this distribution, the simulation checks the technical feasibility of the chosen device and influences crisis cell so that it can modify its technical choices if the conclusion of the simulation does not appear satisfactory.

Did using SWORD change the way you train at all?

In the first years, the practical exercise of our internship was designed on paper. The animation hand-delivered messages to trainees throughout the day without archives or registration. The development of the scenario itself required several successive actions which complicated its implementation.

Today, the design of the exercise scenario and its animation are made with the same software and new features are now offered to us. The computer and telephone platform has the ability to exchange data, record telephone conversations or even archive videos.

How do you see the future of training developing in the sphere of emergency development?

Public and private actors in crisis management have a real need for training.

At all hierarchical levels, be it the field teams for operational management or at higher levels, training is the best way to confront reality.

The exercises also allow us time to test the established internal plans and procedures as well as their articulation with the prefectural or national plans. This is even more true today, given the current context in France, with the emergence of new and strong threats that oblige actors to set up, sometimes, other forms of crisis organizations.

#

MASA offers modularity with SWORD

November 24 2016, Paris, France: Ahead of I/ITSEC 2016, MASA Group is announcing that it is growing the offering of its flagship product, SWORD. In a year where MASA both celebrates its 20th anniversary and welcomes a new CEO, the company has introduced a number of modular options to SWORD as well as significant technological improvements that provide tailored packages to address a greater range of customer requirements and budgets.

Under the direction of the new CEO, David Chouraqui, MASA has implemented a new global strategy to broaden the scope and operation of SWORD, MASA's constructive simulation for command post training. Until now, SWORD was designed for use at divisional and brigade levels, but this has now been extended so that battalion level command posts can also train using SWORDS' intuitive and cutting edge technology.

MASA works very closely with its users and system integrator partners to deliver tailored packages. MASA trains teams to use the technology for optimum training results and can personalize every feature, from the technical specification of weapons to the moral of the troops, in order to fit with a customer's organizational structure and operational requirements. MASA also organizes frequent user group meetings, to understand how customers are currently using SWORD and what else they would like SWORD to be able to do in the future. It is from this experience that the company has launched its new global strategy.

From this basis, MASA has decided to divide the functionalities within SWORD into modules. Customers can choose a variety of capabilities that include basic system configuration, levels of service support and a variety of different training packages tailored to specific customer requirements. By doing this, customers can select and pay for only what they need, making the system and services much more affordable, particularly for customers from smaller organizations. The ability to install only what modules are required will make the personalization, service support and training process much quicker and easier for the customer while at the same time, providing an upgrade path for future expansion.



The new modular system of SWORD

Customers can choose to buy a complete support package, or individual packages of training, support, development, or product adaptation. MASA also offers to maintain ownership of SWORD and simply organize the running of training exercises for clients – a so-called turnkey training approach. Customers can rent the hardware and software, receive operator training and exercise rehearsals before the exercise. MASA will also provide on-demand technical support and after-action reviews along with a file of the exercise replay at a set price. While some customers will prefer to conduct training in-house, customers in civil security or from smaller countries may find that this on-demand option is the best way to provide top quality simulated training within budget.

Chouraqui said of the changes, “*MASA values the relationships it has built with customers and is constantly striving to ensure it can deliver what these and new customers need. Our goal is to provide customers with the highest quality simulation software for training, and the new modular solutions of SWORD ensure that the tailored software and services is an option for all levels of customers.*”

MASA will be exhibiting the new SWORD modules at their Booth #2360 at I/ITSEC, where it will also be participating in Operation Blended Warrior (OBW), the highly successful Live, Virtual, Constructive (LVC) training exercise that is taking place for a second year running at the show. OBW is a demonstration of not just exhibitors’ capabilities and technologies but also of how LVC training can be integrated with virtual and constructed training providing key capabilities in training programs. I/ITSEC takes place from November 28 until December 1 at the Orange County Convention Center in Orlando, Florida.

MASA Launches Direct Artificial Intelligence

November 28 2016, Paris, France: Constructive simulation specialist, MASA, is now offering an Artificial Intelligence (AI) software solution known as Direct AI (DAI). DAI has been developed as an internal research & development (IR&D) project over the past 15 years and forms the backbone of MASA's highly successful SWORD automated aggregated constructive training product.

AI can be described as a flexible and rational agent that recognises its environment and responds to stimuli accordingly. DAI is an integrated development environment that provides a high-level structured AI modeling language to specify the decision process of this agent. Through DAI users can specify strong adaptive behaviours which can be combined to implement higher level behaviours. Compromised actions make agents able to reach several objectives at the same time and to face unplanned situations.

For example, an entity with a recognition objective who encounter enemies and need to self-safeguard from them will automatically find a way to reach these two objectives and respond accordingly within the simulation without direct input from the students. This means that fewer staff are required to support the exercise and costs are saved.

MASA has considerable experience in the field of AI having previously developed its MASA LIFE product. DAI marks a major iterative improvement over LIFE and as well as forming a central pillar of SWORD can also be provided separately as a stand-alone product. Typical customers include simulation system integrators, research organizations as well as defence and aerospace companies.

The availability of DAI marks a general shift in the global strategy of MASA over the past six-months. The company has recently launched a new modular concept with SWORD whereby customers may procure elements of the system separately - covering simulation from brigade down to battalion levels, CBRN and logistics components – as well as new leasing options and various types of innovative service support packages that are now available. This new approach allows users to 'build their own' SWORD and support the system in the most optimal way possible that supports the customers budgets and resources.

“We are very excited about DAI and our approach of making it available to system integrators and other relevant users,” explained Enrico Raue, Sales and Marketing Director at MASA. *“We believe that DAI excels and that it is the ideal tool for use in simulation, research, experimentation and developmental work. As with our modular approach to SWORD and our increased emphasis on service provision, we believe that DAI will provide considerable benefits and advantages to our partners around the world and reinforce our new global strategy.”*

Demonstrations of the modular SWORD concept, including the new aggregated battalion version will be shown at I/ITSEC 2016 being held 28 November – 1 December 2016 at the Orange County Convention Center, Orlando. MASA booth - #2360.



MASA Celebrates 20 Years

2016 heralded 20 years for MASA Group, and in September the company celebrated its success and reflected on the last two decades at an employee party in Paris.

When MASA first launched in 1996 as Mathématiques Appliquées SA, it was focusing on the development of artificial intelligence. The sophistication of the AI technology was so high that in 2001 MASA won its first customer, the French Army, who contracted MASA to develop a simulation training system for them based on Direct IA. In 2007 MASA introduced MASA SWORD a solution based on this project and started to provide this solution to other armies worldwide.

Three years later, MASA won its first international army customer as MASA Group in Peru, where there was interest in MASA SWORD. This led to greater awareness in South America of MASA and over the following few years MASA won a contract with Ecuador, to provide its simulation software for the Ecuadorian Army to train with. The company's SWORD product was also selected by the Brazilian Army, who was keen to use the training tool at a variety of sites. In Colombia, MASA worked with a private oil company on its first emergency management exercise. Since then the Colombian Army has also adopted use of MASA's SWORD to train its troops.

In 2012 MASA was awarded its first contract with a North African country. Then in 2014, the company also became a National Champion at the European Business Awards, and was the only company out of the 17,000 candidates at the awards to specialize in AI. The company was continuing to grow and receive recognition. The same year of the award, MASA also completed Exercise Suman Warrior on the other side of the world in New Zealand, and a year later, MASA SWORD was selected by the Bangladesh Army, making MASA a truly global company.

This growth and globalization inspired the company to organise its first user group meeting, which took place at I/ITSEC 2015. The meeting provided customers with a forum to hear how others used MASA's products and discuss how the software worked for them and where they would want to see developments. The meeting provided MASA with a better understanding of how its products could be further developed to enhance users' experience of the software.

MASA's 20th year has proved no less exciting. MASA's oldest customer, the French Army, acquired a global license for SWORD. In addition, NATO acquired a SWORD license for its Center of Excellence in Bulgaria.

MASA's growth from a small lab set-up to a global market leader in AI simulation technology over the last 20 years was worth celebrating.

MASA's 20th Anniversary party in the city where it all started



MASA profile: Yann Prudent Chief Technology Officer

What is your current role at MASA?

My job as the Chief Technical Officer is quite wide-ranging. Internally, I have responsibility over all aspects of all the products MASA develops, from research and development to quality. I also manage the scientific and technological issues within our organization. Externally my role is to define the technological aspects of any partnerships we enter into with other companies.



What's your favorite aspect of the job?

I love problem solving, so tackling complex issues is probably the best bit of my job. It's really great when I can get my teeth into a technical challenge that needs to be overcome in order to make products work.

How did you first learn about MASA and how has it changed since you've been here?

I was hired by MASA in 2011 as the head of the Quality department, back when MASA was aspiring to become a software editing company. Now it is, and it's great to have been part of the team to help it achieve this ambition.

What do you think are the key developments to date in simulation and training?

I think the modularity, interoperability, and the personalization capabilities that make it possible for customers to build their 'own' simulation system is a brilliant development, and at MASA we work hard to ensure our products are as close to reality as possible.

We are now also seeing modeling & simulation offered as a service, which seems to be a very promising approach for realizing next generation of simulation systems.

You're based in Paris at MASA's HQ, what do you enjoy doing in the city when you aren't at work?

Outside of work I'm actually an avid table tennis player. I spend a lot of my time competing, but I also want to share my love for the sport. I coach a children's team and hope that some of them will love the sport as much as me.

What's your greatest achievement? (In or out of work)

My biggest pride is my daughter.

At work though, achievements have to be considered as team achievements, and in this case I'm incredibly proud of how we have developed SWORD, what it has become over the years and the reputation it now has as market-leading simulation software.

What makes MASA unique?

Its employees, of course. Everyone involved in the company has one shared goal: to help the customer – and I believe we do this incredibly well. We listen to our customers, we provide support for when our customers need it and we are always looking to improve our products to fit with our customers' latest needs.

I think this is very true for MASA's employees:

Smart people doing smart things for good reasons cannot be wrong.
