CATS RECRUIT

# Using technology to benefit nation

Working in the public sector allows Mr Teng to contribute to the society.
PHOTO: RAY KHOO

A varied portfolio at DSTA allows Mr Andy Teng Tat Boon to put his passion for engineering and science to good use

by hazel tan

AN AVID techonology lover, Mr Andy Teng Tat Boon joined the Defence Science and Technology Agency (DSTA) upon graduating with a Bachelor of Applied Science in Computer Engineering from Nanyang Technological University in 1997.

He is now Head Capability Development (Systems Architecture) at DSTA and he ensures that Singapore's defence systems and networks fit and operate well with one another.

He says: "At the DSTA Masterplanning and Systems Architecting Programme Centre, we apply operations analysis and Enterprise Architecture concepts to plan the development and acquisition of systems across the defence ecosystem.

"Adopting an architectural view of the different systems and platforms, we work with the Ministry of Defence (Mindef) and the Singapore Armed Forces (SAF) to develop new operating concepts and engineering master plans. Enterprise Architecture principles and processes are used extensively to design frameworks to achieve integration across operations and technology."

The work he does is similar to that of an architect who plans, designs and oversees the construction of a building. "We build a framework that would later support many key functions and activities within it," he explains.

## Multi-faceted job

Mr Teng is intrigued by the opportunity to work with state-of-the-art technologies. His multi-faceted job at DSTA allows him to "achieve a good balance of developing his passion for technology, building his career in engineering and contributing to the defence of Singapore".

His job calls for him to keep abreast of developments in capability advancement and technology enablers.

"The complexity of the entire defence ecosystem, diversity of expertise across many domains, and the need to stay close to technological advances and discoveries, mean that there is never a day where I do not learn something new. This is what I love about my job," he says.

In his work, he interacts regularly with partners in Mindef and the SAF to understand their requirements and share his knowledge and perspectives. He also engages in brainstorming sessions with his team and across different entities to come up with innovative solutions. His work also involves laboratory analysis to test engineering concepts and hypotheses.

Mr Teng says: "I am glad that I find true meaning in what I do in DSTA. I hold true to my personal belief that I should contribute to the society in whatever way I can and working in the public sector allows me to do just that."

## Different portfolios

In the last 17 years, Mr Teng has taken up positions in more than five different domains, allowing him to experience different portfolios. These include stints in systems architecting, information technology, business analysis, enterprise architecture, policy governance and best sourcing, through different positions within DSTA as well as the defence eco-system which include Mindef and the SAF.

In 2001, he was awarded the DSTA Postgraduate Scholarship to do a Masters programme in Information System Management in Carnegie Mellon University in the USA. His stay coincided with the 9/11 terrorist attacks and anthrax scare.

"Witnessing how these incidents affected daily life highlighted that we cannot take peace and order for granted. I deeply believe that the work of defence scientists and engineers is vital to safeguard our nation's defence and security," he says.

## Many opportunities

The diversity and cross-disciplinary nature of work in defence engineering has opened up many job opportunities. "We see a lot more interesting and advanced capabilities today like system-of-systems architectures, unmanned technologies, information analytics, mobility technologies, enterprise architectures, which require the knowledge and expertise of various engineering disciplines," says Mr Teng.

Innovation plays a big role in DSTA. It is important that job seekers keep "an open mind to the endless possibilities in technology to come up with solutions for the most challenging problems".

He adds: "You need to believe in yourself and recognise that your contributions to defence technology through your work are key to helping Singapore maintain peace and order. Last but not least, you need to have a passion for engineering and science as only then will you enjoy what you are doing and keep you going in the job."