

Name of Initiative

Cybersecurity Labelling Scheme (CLS)

Agency

Cyber Security Agency of Singapore



Could you share briefly on what was the impetus that eventually led to the initiative, and how did you motivate yourself/your team to pursue it?

It was the vision, and the aspiration to make Singapore and the world a more safe and secure place. Thinking global, making ourselves relevant to the world.

It was 2016, in the early days of the advent of Internet-of-Things (IoT). With its increasing pervasiveness due to the rapid proliferation and extensive connectivity, coupled the lack of cybersecurity provisions by nature of emerging technology, there is growing cybersecurity concerns that likened a timebomb, and awaiting the perfect storm. The Mirai incident, a massive distributed denial of service (DDoS) attack that disrupted internet access in the US showed the potential consequences and knock-on effects of cybersecurity threat. Resulting from that, we mooted the idea of galvanising global community to share ideas and experiences, shape architectures and technology, and to steer standards and best practices to build a more trusted and secure global IOT ecosystem.

At the same time, we are also awakened to the opportunities with the attainment of the Certificate Authorising Nation status under Common Criteria Recognition Arrangement (CCRA) that make us among only 17 nations in the world to be able to issue Common Criteria certificate, a gold standard for IT security product, that is recognised across the world. "Cybersecurity is an enabler", as we always speak. It dons upon us the huge potential of growing a Testing-Inspection-Certification (TIC) (cyber) and certification hub in Singapore, built upon our trusted branding.

So, instead of resting on our laurels, the team took on the challenge to develop a cybersecurity labelling scheme for consumer IoT to transform our digital citizenry and raise the overall cybersecurity hygiene. Equally important is to level the playing field and enable manufacturers to differentiate their product through the label, facilitate foreign market access with mutual recognition, and grow our digital economy.

It is the vision and aspirational challenges that capture the imagination of the team that keep the team together and motivated in pursuit of a moon-shot and worthy cause.



What were the challenges that you/your team encountered, and how did you/your team overcome them?

The key challenge is that it is a road not well trodden. There was no reference model for us to follow. Right from the pre-launch stage, we were like start-up seeking for investors and partners, seeking inputs and support from our foreign counterparts and industry players. Many a times, it was rather discouraging. While we got the same answer almost every time “yes, I think this is important and interesting”, yet almost never gotten any concrete follow up. We hear the voices of our internal angel and devil so frequently. The devil would say “just give up, why work so hard? wait till someone else have done it and we just simply adopt.” While the angel that instil our can-do attitude would nudge us to go further. I am sure many of the start-up entrepreneurs could resonate with the difficulties in every steps.

Even when the scheme was launched, in the backdrop of COVID-19, we continued to go on a “virtual” world tour, spending late nights in conferences, webinars and meetings to promote the scheme, again, much like how a start-up would have their technical teams to double up as sales and marketing teams. We are glad that the perseverance got paid off, with CLS being referenced as the model internationally, be it the US Executive Order, or the World Economic Forum.

At each step of the journey, the team has taken on a Can-do and Dare-to-do attitude, and going out there to show the world, what Singapore can do. It is also a strong sense of team-spirit, and collective belief, and the conviction and commitment to the profession that see us through each hump and barriers along the way. Also, as in real world, things are dynamic. We needed fail fast, learn quick, and improve ahead of ‘competition’. So, we don’t let ‘perfection be the enemy of good’. Rather than a waterfall approach, we start with baseline, and learn and improve through quick spirals, being able to close the learning oops with real ground experiences.



What was the most memorable moment while working on this project?

Thinking back, there were many memorable moments in the journey.

The many sessions we had to convince our own management that this is a worthwhile journey. The words of our CE, David Koh, at the early stage, that this could be the most impactful scheme from CSA to date, was truly motivating and inspirational. Kudos to enlightened leadership that allow us to try out something new without being fully convinced.

It was an incredible journey that we were invited to many international fora to present this world-first 4-level labelling scheme. I think we lost count, but with each, we grow in confidence of our robust conceptualisation and responsive implementation. Importantly, we believe that it is a scheme to provide a flexible framework to harmonise and align with other nations. In the process, we networked and establish good comradeship with our counterparts in other countries. These are invaluable friendships. Having our first mutual recognition arrangement with Finland within just a year from its launch adds an important milestone to our global advocacy.

As we operationalise the scheme, it was extremely heartening to know that it is making progressive changes to the consumer. One developer/retailer interviewed mentioned that with the publicity of CLS, they received more than 30% of enquiries of their labelled smart home products. Beyond the early inertia and reservation, the team had also helped many SMEs/developers/sole distributors to understand the rationale and technical details behind the evaluation requirements. The are no lack of examples of them coming back to us to go for higher CLS levels, shows that we are making steady progress to cultivate a more proactive and self-sustaining industry, not one that is strictly based on mandatory compliance. This is really gratifying.

PEP-SBF Awards 2021

Pro-Enterprise Disruptor Award



The interest from many evaluation labs across the globe that want to join our scheme was incredible. This is transformational, and provides even greater motivation for us to grow TIC(cyber), to which Enterprise Singapore has identified as one of the 4 key growth areas in the years to come.

Last but not the least, we are truly appreciative of the recognition by the PEP panel, to award us with this distinguished Disruptor award.

<https://www.csa.gov.sg/cls>

