

Immigration & Checkpoints Authority

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One journey, One heartbeat
COMING OF AGE, SCALING NEW HEIGHTS

Immigration & Checkpoints Authority



*One journey,
One heartbeat*



COMING OF AGE,
SCALING NEW HEIGHTS

This book is dedicated to all ICA officers;
past, present and future



Specially brought to you by the ICA Heartware Team

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Commissioner's Foreword



Mr Clarence Yeo,
Commissioner ICA

The ICA Journey began on 1 April 2003 with the merger of Singapore Immigration & Registration (SIR) and part of the Customs and Excise Department (CED). ICA has come a long way since our formation in 2003. For the past 10 years or so, ICA has worked resolutely to put in place systems and processes to ensure effective and efficient border security and identification. ICA has faced a number of challenges along the way. Right off the bat, the newly formed ICA was confronted with the invisible adversary in the shape of SARS or the Severe Acute Respiratory Syndrome. Officers rallied together as one ICA and responded swiftly to handle this national health crisis.

Another significant challenge which ICA overcame was during the escape of Mas Selamat Kastari from the Whitley Road Detention Centre on 27 February 2008. Checkpoint officers would recall the various enhanced checks we implemented with bitter sweet memories.

In ICA's continuous strive to improve our services and capabilities, we had the difficult task to implement the BioPass system and the Central Information & Registration Information System (known to most officers simply as CIRIS) in a timely manner with minimal inconvenience to our customers. Throughout these episodes, ICA displayed what we are made of – our DNA:

- (a) Drive & Determination in upholding our mission and vision;
- (b) Never letting our guard down and be vigilant at all times; and
- (c) Always remembering to work as a team within ICA and across the Home Team.

Stories offer hope and inspiration in the face of challenge and adversity. Through this collection of short stories, we hope our officers would remember the tough times and would see themselves overcoming these difficulties with a "Can-Do" mentality and a "Be-Better" attitude as part of the ICA Family and Home Team. Officers who did not experience these challenging times would better understand what your fellow colleagues had gone through and be inspired by the commitment and passion they had shown.

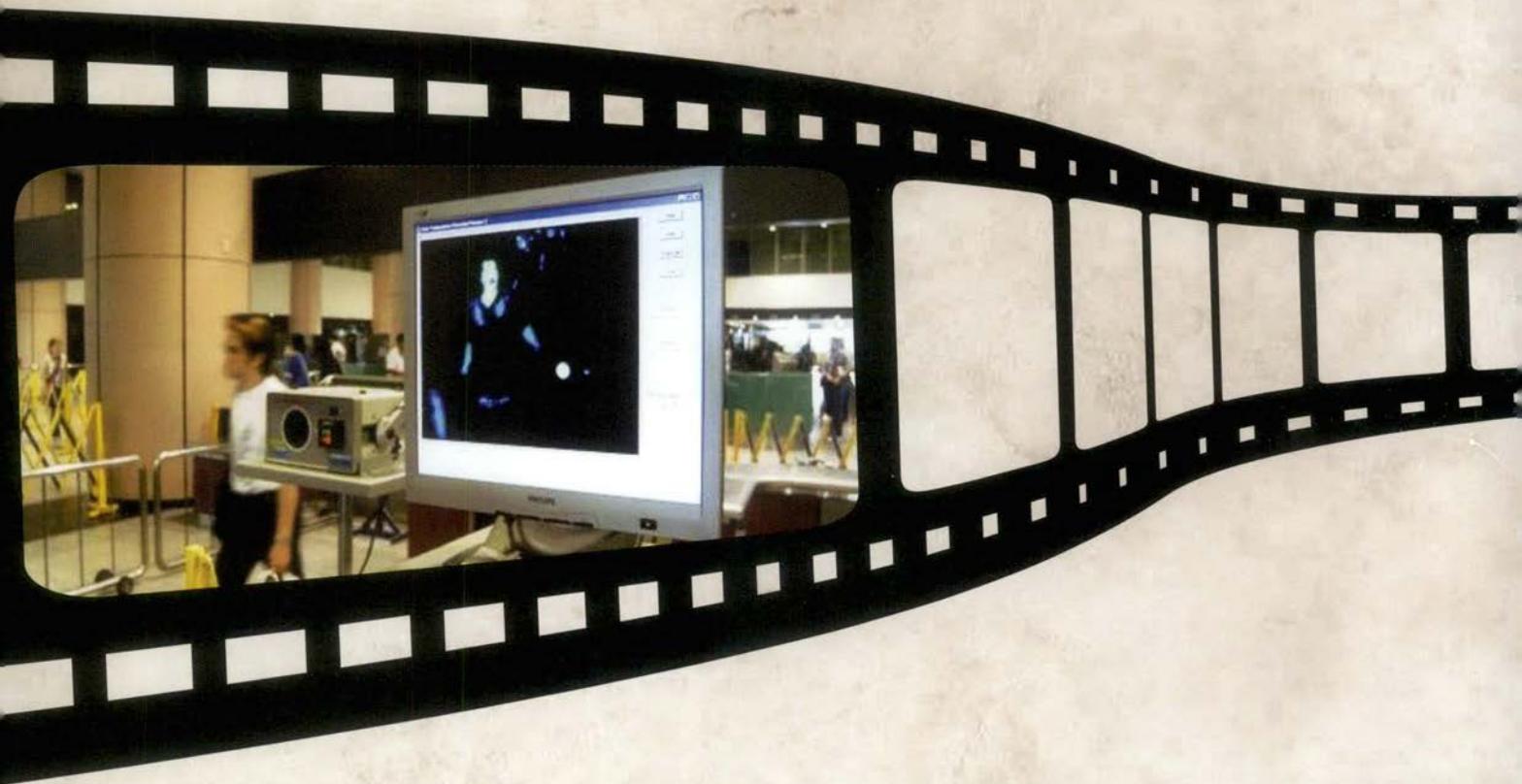
The legacy that we leave behind in our own way, individually as ICA officers or collectively as a team, work unit or an organisation, will be entrenched in the history of ICA.

As ICA continues to serve as the guardian of Singapore's gateways, there will be challenges to overcome in the future. ICA's DNA is strong and I have no doubt that we will meet these challenges head on and emerge stronger and more resilient from each experience, just like we have done so in the past. Driven by our Mission, Inspired by our Vision and Guided by our Values, I hope you will enjoy reading the stories and together we will continue to keep ICA's flag flying high as a valued member of the Home Team in keeping Singapore safe and secure.

Clarence Yeo
Commissioner, ICA

Crisis that unites

SARS



When ICA was formed on 1 April 2003, one of the biggest challenges was to ensure that its officers who came from two different organisations; the former Singapore Immigration & Registration (SIR) and the former Customs & Excise Department (CED) formed a united team, aligned to the organisational focus on border security and identification.

At the initial stages, this proved to be a hard to achieve goal as despite cross training and deployment programmes put in place, officers were still in their distinct comfort groups. This raised concerns over a weak, divided force and amidst worries on whether the newly formed ICA could rise up to the challenges of an increasingly volatile security climate, SARS suddenly turned up at its doorstep.

“ Just days after merger, the former SIR (Singapore Immigration & Registration) and CED (Customs & Excise Department) was put to its first test – test to see if two vastly different organisations could embark on ‘One journey with One Heartbeat’. Entrenched in different organisational cultures, officers from both departments had to put aside differing opinions to take on the common obstacle in SARS as ICA officers.

It was a challenging time. As a young organisation, all eyes were on us. We were in it together but with the SARS epidemic sending fear waves across the nation and the world beyond, there were many within us who questioned the department's decision not to adorn masks/gloves for front-line officers. The department stood firm; we did not want to spread more fear amongst genuine travellers, it was a contained issue. We believed in our leaders and the department and rose above the challenge and made sure we protected our borders.

SARS was a lethal infectious disease and there were various reports of the rather high mortality rate amongst the SARS patients, many of whom were indeed medical personnel who came into close contact with SARS patients. Despite all the negative reporting and the fear that officers often came into close contact with suspected SARS patients at our counters, our officers still faithfully reported to work even when it was decided that officers were not allowed to wear gloves/masks when engaging our customers.

”
SUPT Lim-Yeo Hwee Meng
Woodlands Command

The health declaration card which visitors had to fill up

Amazingly, the SARS crisis had eventually turned out to be the much needed antidote and a blessing in disguise. Officers had to put away their differences and worked with one another to combat SARS – a lethal infectious disease spreading widely within and across borders. Combatting the ordeal together gave rise to the formation of one ICA family, strong, united and ready to rise up to any kind of trials ahead.

“ They say unity is most visible during times of crisis – I still remember, it was just after merger and as a former CED officer this was something new to me. Little did I expect that as a Border Control Agent my new job scope would require me to assist with temperature screenings and other health-related matter. We quickly leveraged on one another’s knowledge and strengths to take on the unknown. Teamwork was evident as the testing times helped us forge bonds that would live through the test of time. I realised then that we were no longer CED or SIR. We are ICA.

”

SCI(2) Shahdan Bin Sulaiman
Woodlands Command

“ Usually at Terminal 1, we had to deal with large passenger volumes especially when there were bunching of flights. But during the SARS crisis, our immigration halls were practically empty most times. I remember that my friends and I would be so happy when we saw a few passengers coming down from the escalators to our arrival hall and would really welcome them to Singapore! I guess this was our way to keep our moods up when actually we were also worried whether we would be contracting SARS from any of these passengers.

”

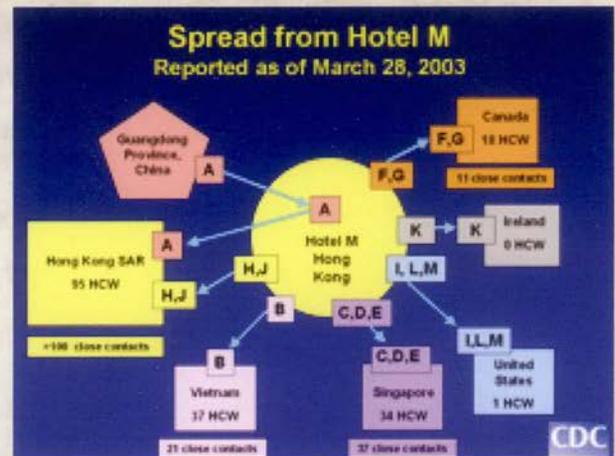
CI(1) Yap Hwai Cheng
Airport Command

SARS, The Super Spreader

SARS was first reported in the press on 15 March 2003 after World Health Organisation (WHO) issued a global health alert on 12 March 2003. This was followed by a heightened alert on 15 March 2003 with medical reports showing that SARS was highly contagious and fatal. One ‘super spreader’ who was staying at a hotel in Hong Kong had infected hundreds of other occupants and in turn infected over 8,000 people and claimed over 700 lives worldwide.

In Singapore, SARS raged on from March to May 2003 and this impacted the lives of Singaporeans greatly. Schools were closed, people were jailed for breaking their Home Quarantine Orders, shopping malls and restaurants were deserted. At the checkpoints, the number of visitors dipped steeply.

While the decline in numbers of leisure travellers mainly due to a sharp decrease in tourists had somewhat alleviated the issue of heavy human and vehicular traffic faced constantly at the checkpoints, there was a need to ensure smooth operations as the “remaining” travellers needed to travel to Singapore on time for business, work or school. These groups of travellers were no less critical to the economic survival of Singapore and, hence, notwithstanding the need for stringent temperature checks, the checkpoints could not afford measures that may cause bottle neck congestion and long delays during clearance.



Beefing up the health screening capabilities

When SARS first arrived at our doorstep, there was no effective tool to conduct mass health screening at the checkpoints. While it was ineffective and risky to rely solely on visual judgment and requiring travellers to declare their own health status, subjecting each and every traveller to manual temperature checks could have crippled the checkpoints' operations.

Within a short span of time after the announcement of the global health alert, ICA embraced the newest non-invasive technology then; the Infrared Fever Sensing System (IFSS) to conduct mass health screening of every arriving and departing traveller to effectively detect and sieve out those running a fever. Singapore was the first country in the world to adopt such a technology. The IFSS could reveal in a moment whether someone passing by the machine was running a temperature via a colour-coded thermograph with red meaning hot and green meaning not.

However, at the initial stage, there were only few IFSS machines available. Thus, a decision was made to give priority deployment to Airport Command as it was more likely to be receiving travellers from affected cities such as Hong Kong, Toronto and Guangdong in comparison to the land and sea checkpoints.

Even with IFSS, ICA was faced with another impediment – the difficulty of amassing manpower from its very lean force to operate the additional new security measures.

Besides having no additional manpower to separately handle the health screening and referral processes, the checkpoints were also not designed to handle health screening.

As IFSS could only work in cool areas, individual checkpoints were required to look for air-conditioned space for temperature screening of travellers. The designated area also had to accommodate a nurse station to check and confirm if the referred travellers were indeed having fever as well as an isolation open area to hold them while pending ambulance transfer to hospitals.

The checkpoints could only take small steps at a time in the enhancement of the temperature screening capabilities. Due to the frequent changes and updates of the working instructions, regular pre-shift briefings were conducted to inform officers of the updated instructions and measures. Checkpoints had to keep track of each officer's training records to ensure he/she received the latest instruction before deploying him/her to the ground.



IFSS deployed at Changi Airport

Otherwise, any officer who missed a briefing could have acted on an outdated instruction, which might lead to serious consequences.

Nevertheless, with great teamwork, ICA managed to overcome all the above-mentioned challenges.

Amazingly, the SARS crisis had turned out to be the much needed antidote and a blessing in disguise. Officers had to put away their differences and worked with one another to combat SARS – a lethal infectious disease spreading widely within and across borders. Combatting the ordeal together gave rise to the formation of one ICA family, strong, united and ready to rise up to any kind of challenges ahead.

Bilateral meetings to strengthen entry-exit quarantine measures

To effectively control the outspread of SARS across borders, there was an urgent need for ICA to work closely with our international counterparts in the coordination and strengthening of entry-exit quarantine measures at checkpoints. There was a meeting with the Malaysian authorities on 21 March 2003 to ensure a safe passage at the land border to facilitate the tracing of close contacts with suspected SARS patients who were detected while attempting to travel across the Singapore-Malaysia border via the land checkpoints.

Led by Commissioner ICA, the Singapore delegation consisted of representatives from the health, transport and foreign affairs authorities

while the Malaysian delegation was represented by officers from the Royal Malaysian Police, Ministry of Internal Affairs, Ministry of Foreign Affairs, Ministry of Transport, Royal Malaysia Customs, Immigration Department, Keretapi Tanah Melayu (KTMB), Marine Department and the relevant government officers from the State of Johor. The Singapore-Malaysia Bilateral Meeting was held at the Puteri Pan Pacific Hotel in Johor Bahru.

With good teamwork and cooperation, Singapore and Malaysia managed to establish agreed protocol on the safe passage for travellers detected with fever at the borders.

Co-ordination with Home Front (HF) agencies

SARS was an international crisis. Being a regional hub and a responsible member of the international community, Singapore had to put in place effective measures at its borders to isolate and contain the outspread of SARS across borders. Singapore had to remain open to welcome visitors, tourists and businessmen to its shores. The given task was indeed a tall order and so it was necessary and urgent for all HF agencies to quickly work together in the battle against SARS.

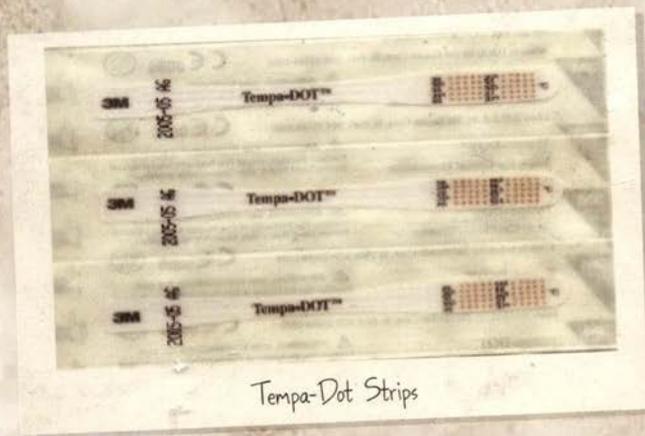
During the crisis, there were many meetings and discussions at various levels and on varied issues simultaneously. At the highest level was the Executive Group or the Ministerial Committee giving directives and policy guidance on all SARS matters. At the working level, individual agencies were assigned to lead in certain issues while at the same time being a member of different committees handling some other matters. For instance, while ICA led the Land Border Control Sub-group on issues pertaining to health screening at land borders, ICA was also a member of other committees such as the Inter-Ministry SARS Operations Committee (IMSOC) chaired by the Ministry of Health with the support of MINDEF and other HF agencies, which was responsible in coordinating the operational efforts by different agencies (e.g. develop an Operational Plan for SARS at different SARSCON states).

“*At Ops Room, we had to liaise with our Malaysian counterparts in order to make sure all suspected SARS patients were isolated and taken care of. We also worked closely with the nurses and doctors from Raffles Medical Group to move affected passengers out of checkpoint premises as quickly as possible. By working together with various stakeholders, we were able to prevent SARS from spreading further. It also enabled us to show the world that even though we were a young organisation, we had sound emergency measures in place and this prevented a pandemic situation from occurring.*”

SCI(1) Heng Wee Kiah
Woodlands Command

ICA officers were often required to attend different meetings to discuss multiple issues such as the home quarantine or dealing with travellers who show symptoms of illness. To ensure consistency in the approach against SARS, ICA officers had regular internal meetings with one another to exchange information so that everyone could make good judgment and decisions based on the updated information.

Disposable oral temperature strips at land checkpoints and the technical trial on P60



Unlike air and sea checkpoints, the land checkpoints could not adopt IFSS for mass health screening of all their travellers due to their unique operating environment. This was mainly because the IFSS could not be deployed to the vehicle zones; the motorcycles, cars and lorry clearance zones.

The only possible option then was the use of disposable oral temperature strips – “tempa.dot”. Instead of checking and measuring the travellers’ temperature at any particular clearance area, the travellers were given the “tempa.dot” at the primary area during their immigration clearance. They

were advised to place the strips under their tongues while pending immigration clearance so that by the time they reached the secondary area, the medics/officers deployed there to retrieve the strips could immediately determine if a traveller was having a fever.

In order to help communicate this process to the travellers more effectively, the Raffles Medical Group (RMG) engaged to provide health screening services at the land checkpoints, placed posters on the use of “tempa.dot” at the primary screening areas.

Despite these efforts, the use of the “tempa.dot” continued to be a task at the land checkpoints as we faced resistance from some travellers who felt uncomfortable. This caused delays in the clearance as more time and effort were needed to convince them. The numbers of complaints rose in relation to the use of “tempa.dot” at that time.

“ I recall that when I was collecting “tempa.dot” from travellers at Green Channel, Tuas Checkpoint, I noticed that some travellers instead of placing the oral temperature strips under the tongues, they stick them on their foreheads. While one might find it hilarious when travellers could not even comprehend and understand simple instruction, it also demonstrated the difficulties in communicating to travellers and the need to handle complaints daily on the ground.

”

CI(t) Sunny Bin Mohd
Tuas Command

Delay at the clearance areas was a problem that had to be endured when officers and medics were stationed to distribute the temperature strips to every traveller at the primary area and subsequently collect them at the secondary area. While such a delay was bearable during lull periods, serious bottle neck traffic congestion was pretty apparent during peak hours.

Although the cost of each "tempa.dot" was pretty insignificant, the overall cost was potentially substantial due to the sheer volume of travellers passing through the land checkpoints daily. As checkpoints were required to procure enough stock for the next three months, wastage was inevitable when the operations were scaled down.

Furthermore, the "tempa.dot" had a shelf life of only a year.

Upon realizing the many limitations of the "tempa.dot", the land checkpoints worked closely with Operations and Technology Divisions to explore and identify suitable alternatives. Many technical trials were conducted, one of which was on the use of P60 as a mass health screening tool for motorcyclists.

The P60, with some adjustments, was considered for deployment at the land checkpoints as it was able to provide an efficient, non-intrusive mass screening of motorcyclists and their pillion riders, similar in function to the IFSS. Prior to the

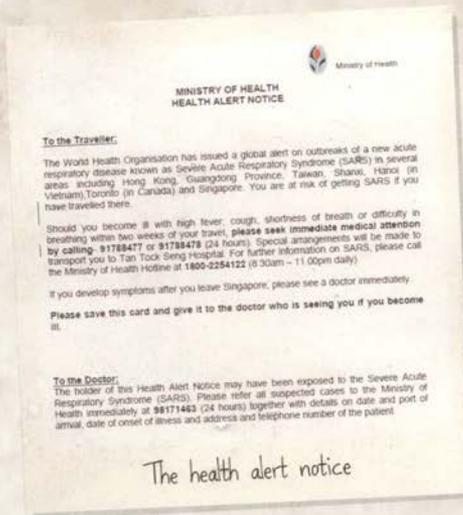
deployment of the P60, detailed planning covering all angles especially in terms of effectiveness and safety were considered. The motorcycle zones and traffic flow were studied and initiatives such as the speed humps, ensuring that the motorcycles were moving in a single file and that the riders and pillioners remove their visors when going through screening were initiated.

The close collaboration between the land checkpoints and the divisions back in ICA HQ has helped to ensure the success of ICA's mission in getting everyone passing through the land checkpoints to go through temperature screening without much disruption to their journeys and commitments.

Concerns with our own safety

While maintaining border security and keeping Singapore safe from the SARS virus were our paramount duty, officers' welfare was also equally taken into consideration. Efforts were charted out to ensure that the morale of our officers remained strong throughout the entire ordeal.

Being the first line of defence, our officers at the checkpoints and Services Centres were very susceptible to exposure to travellers who may be carrying the SARS virus. Due to the round the clock operational demands at our checkpoints, we cannot afford having our officers quarantined and more so, risk succumbing to the deadly virus, while performing their duties. Common measure undertaken at all Commands and Services Centres was the regular measurement of temperature.



SUPT Rasidah Jumahri who was then at Citizen Services Centre, candidly shared her experiences when the SARS scare hit one of her colleagues.

“ I still remember the fear officers faced then, especially when few of our own officers were quarantined at home for coming into contact with the confirmed SARS patients. Mr Er Mor Hua was one of them.

However, officers still came reporting to work and no officer had vacated office. I believed it was because by working as a team, we were able to better overcome the fear. Anyway, I thought one main reason was that given the spread of SARS over the island, it would not be safe by staying at home alone and without pay.

By the way, one thing I can recall clearly was the use of ear thermometer to help prevent the spread of SARS. There was an instruction requiring every officer to measure body temperature twice a day: once in the morning before commencement of duties and once in the evening after duties.

By right, after each scan and for hygiene purpose, we were supposed to replace the cap with a fresh one before inserting the ear thermometer into another officer's ear to measure his/her body temperature. However, we soon ran out of caps due to the heavy usage and to make things worse, there was a severe shortage of such caps in the market. Hence, in the end, we were just provided with a cloth to clean the ear thermometer before inserting it into our ears to measure our body temperature.

Come to think of it, even though there were difficult moments here and there, we managed to overcome them when we were working as a team. ”

“ Everyday, when we go through the pass holders entrance, the CICSO officers engaged by the airport would search our belongings. During the SARS period, the officers had the additional role of taking temperatures of staff entering the transit areas and they would not allow those recording high temperatures to enter the transit area. For ICA officers, we had to immediately call our supervisors to inform them that we were not allowed to report for duty so that other officers can be called on for OT to cover our duties.

CI(2) John Michael @ P Sritharan
Airport Command

“ We field officers had to ensure that the PSOs in counters were feeling well and that they could handle potential SARS affected passengers with tact and professionalism. We also worked together with our PSOs by providing them with the Tempa-Dot that was used in passenger health screenings. During fasting month, Handheld Thermal Scanners and P60s were used for Muslim travellers. The teamwork that was portrayed on the ground was vital to containing the SARS epidemic and ensuring our officers were not adversely affected.

CI(2) Ang Tong Chye
Woodlands Command ”

Even though faced with the imminent danger of contracting SARS from an infected traveller daily, ICA officers, as with other HT officers, were not allowed to don face masks while on duty. This was to uphold public confidence and not cause alarm to the public and arriving travellers.

“ The RMG staff and volunteer temperature checkers were wearing masks but uniformed officers at the airport were not allowed to. However, I understand where the directions were coming from and I was confident that ICA had our best interest at heart and would accord necessary measures to protect us from the deadly virus while we performed our duties. I considered it as our sacrifice for the nation, and it was worth it.

”

CI(1) Bajuri Bin Ahmad
Airport Command



Thermograph image

On the contrary, for Coastal Command, officers boarding vessels to conduct searches and accord immigration clearance were told to don facemasks as a measure of personal health safety due to the contained nature of the operating environment.

“ In order to mitigate the risk of any close contact with potential/suspected SARS patients, we were required to don masks when going on board vessels for clearance or searches. However, we remembered that the crew on board the vessels were more wary of our existence, bearing in mind that the epidemic was more prevalent in Singapore than other nearby countries. Indeed, they were told to put on masks upon arrival at the Singapore waters and before we went on board for the searches or clearance.

”

SCI(2) Mohd Sidek Bin Nordin and CI(2) Jasman Bin Ahmad
Coastal Command



Visiting Singapore during SARS

“ SARS was the most talked about topic between colleagues and friends during our drinking sessions on my off days. I recall there was this rumour going around that drinking could help curb SARS as the alcohol kills the germs.

”

DSP Ho Yew Huat
Coastal Command

While inadvertently concerned by the development of the spread of SARS heard through the news and talked about with family and friends, our officers tenaciously reported for work daily and kept one another's spirits up, collaboratively working as one ICA.

“ Almost everyone on the street had become very sensitive to cough or persons wearing masks. Any cough in the public would immediately raise everyone’s eyebrow and attention. This was especially true at hospitals where you could see everyone wearing mask and that each visit would be subject to many layers of checks.

During such critical time, it was important for the organisation to take care of its staff. Apart from issuing thermometer to officers and requiring them to take/record their temperature daily, the Command also issued vitamins to officers to help boost up their body resistance to illnesses. Should any officer’s temperature reach a certain threshold, the Command would advise the officer to report sick and rest at home. We believe a caring organisation with committed officers would go a long way.

MSO Kumari Yougesh and MCSO Ghani Baba
Coastal Command

The closure and reflections

After a testing and arduous battle with the SARS virus, relief was finally felt when Singapore was removed from World Health Organisation’s (WHO) list of areas with local SARS transmission on 30 May 2003. Following this, the Ministry of Health decided to stop the distribution of Health Alert Notice and SARS Information to travellers.

Looking back at the testing crisis that threatened Singapore and its population then, ICA was indeed handsomely rewarded for its tenacity as a newborn organisation to overcome such a colossal challenge. Despite starting out with no experience in handling a pandemic health crisis, ICA blazed through the fire and came out strong, united and confident with a collective experience for everyone to reflect and cherish. The success in battling the SARS crisis was indeed a springboard for ICA to take on its mission and vision to new heights, and to become a leader in border security and identification, as what it is today.

For an event that happened more than a decade ago, officers involved could still vividly recount the situations and feelings that they went through together. While technical and operational know-how of the whole event were of utmost importance then, it was the personal experiences and shared sentiments that remained etched in our officers’ memories.



Singapore finally free from SARS

Supt Koh Kim Chye and DSP Richard Lee Choon Hock described the ordeal as ICA's baptism of fire which fostered stronger cohesion and resolve to undertake its sacred task of guarding the border security of our nation.

“ *It was a trying period for all ICA officers who were faced with this unknown disease which proved to be fatal when it developed into a pandemic subsequently. Though the officers who come from two different organisations barely knew each other just after the merger, we put aside all our cultural differences to tackle and embrace this new challenge together. This was our first real test in unity despite just knowing each other as new colleagues. However, we showed courage in facing the imminent danger and strength to overcome adversities. Our frontline officers did not shirk from their responsibilities of clearing the travellers in close proximity even with the possibility of being infected by those with this deadly disease. Above their normal duties, they also helped issue health declaration cards to travellers and, if necessary, assisted travellers to complete them. They took all these in their stride as part and parcel of their job and did not for a moment flinch from doing the additional tasks.* ”

INSP Koh Woon Kiong echoed the same sentiments with his anecdotal sharing.

“ *All of us felt apprehensive as increasing news reports of mortality figures surfaced but we understood that we were the first line of defence. We knew that by working together, we could minimise the spread of SARS into Singapore. Officers of all levels worked hand in hand to ensure that the checkpoint was clear of the disease. We ensured necessary precautions such as hourly temperature screenings using our personal issued thermometers and also advised our peers to do it together. Hence, we were able to overcome SARS and it was indeed our baptism of fire.* ”



Visitor arrivals via train checkpoint

CONTACT TRACING FOR SARS

Dear Sir/Madam,

In addition to our training for SARS, we seek your co-operation to follow up your contact details on the contact list ready, please.

Thank you.

IMMIGRATION & CHECKPOINTS AUTHORITY

Date of Issue _____

Type of Visit _____

Your Name _____

NRIC/IN Passport Number _____

IN Number _____

Number of Family Members accompanying you on the visit

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

(11) _____

(12) _____

(13) _____

(14) _____

(15) _____

(16) _____

(17) _____

(18) _____

(19) _____

(20) _____

Contact tracing form distributed to visitors at ICA Building.

Dear Visitors,

We seek your kind cooperation to see a doctor immediately before entering our premises if you have:

- A fever of more than 37.5 degrees Celsius *and*
- One or more respiratory symptoms including cough, shortness of breath, difficulty breathing *and*
- Come in close contact with a person who has been diagnosed with SARS or
- Travelled to an area with reported cases of SARS in the last two weeks

Together we can stop the spread of SARS

Health advisory signage placed at ICA Building



APOs helping out with traveller temperature screening

DSP Monica Koh had admiration for the selfless virtue of some of her officers who put others above self although they themselves were no less afraid of the uncertainty in contracting such a deadly virus. She believes that ICA would not have been able to win the battle against SARS without the sacrifice of these heroes.

“ To this day, I can still remember the events that transpired just 10 days after the formation of the ICA on the 10th of April 2003. I recall receiving instructions to put up posters at prominent locations in the vicinity of Woodlands Command. These posters advised travellers to seek medical attention should they be suffering from fever, cough, shortness of breath or difficulties in breathing within two weeks of travelling to or from SARS-affected countries (including Singapore). Primary screening officers were also instructed to advise as well as issue Health Advisory Notes to travellers who appeared to be unwell.

Nursing stations at various locations were also set up alongside with the temperature checks. One of my strongest memories of the period was when we detected our first traveller with SARS-like symptoms having a high body temperature. The ICA was required to deploy an officer to a nursing station in line with operational requirements. While hesitating over who we should send, a male officer volunteered to be deployed there. “Wow, what a brave man” was the first thing that I thought. Yet,

during lunch break, I saw the same male officer sitting alone in a corner, and the first thing he said to me was “I really hope I can shower with sanitizer now.” It was then that I realized that he was just as afraid as the rest of us. I asked why had he volunteered and his answer touched my heart.

“You know lah, my partner has young children and a sick mother to take care of. If she contract SARS, then her family will be badly affected. At least my children are older.”

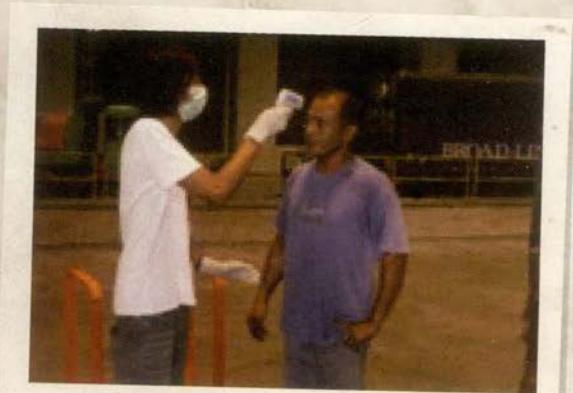
I also knew of a female officer whose husband was under home quarantine as he came in contact with a patient suspected with SARS. Instead of taking leave, she wholeheartedly juggled between work and taking care of her children as she understood that with increased checks due to the SARS pandemic, the checkpoint would require more resources to operate these additional functions. After her husband was released from quarantine, she even volunteered to work on her off day.

”

SUPT Chan Tuck Wah recounts the importance of meticulous planning and cooperation for all parties in order to build a strong 'fort' in the fight against SARS.

“ During the SARS crisis, whether at staff units in HQ or at line units such as Checkpoints and Services Centres, everyone was being rushed for the action plans. For instance, the staff response plan, the communication plan, the business continuity plan and so on. This was exactly when good teamwork was required because none of these plans could work in isolation. For each plan to work, both staff units and line units had to work closely with one another to confirm every detail of the plan and make necessary adjustments along the way. For instance, while HQ could give general guidance such as putting up posters to advise travellers on the need to consult doctors if they were sick, the details on how a health declaration card could be effectively and efficiently distributed to each of the travellers would have to come from the individual checkpoint.

At times, one needed to go beyond his normal duties in order to secure a success of the mission. For example, there was an urgent need for ICA to procure “tempa.dot”, a temporary temperature strip thermometer, for deployment at the land checkpoints to help detect feverish travellers arriving by cars, motorcycles and lorries. As we could not afford to waste any second, instead of approaching and relying on the land checkpoints or Admin & Logs Branch (ALB) for the procurement, Wee Leong who was then in Ops Planning helped put up the required procurement paper after seeking the assistance of ALB for the procurement processes and coordinating with land checkpoints for the demands. He and the other officers involved worked very long hours to prepare the relevant papers and ensured a smooth delivery of the “tempa.dot”. Eventually, we managed to obtain the required “tempa.dot” in time for deployment at the land checkpoints. Hence, I would like to take this opportunity to thank him and the officers involved.



Temperature screening at the cargo zone

SARS SCREENING DECLARATION

Dear Traveller:

To prevent the spread of SARS in our community and reduce the risk of exposure to our staff and visitors, we request all visitors to Immigration & Checkpoints Authority to fill in this simple screening declaration. Your participation is important to help us take precautionary measures to protect you and everyone in this office. Thank you for your co-operation.

1. Do you have any of the following symptoms?

- Fever
- Cough
- Breathing difficulty or shortness of breath?

2. Have you taken any (or more than one) long prescription, aspirin, etc. in the last 4 hours?

3. Have you or your family members had close contact* with any person who has been diagnosed with Severe Acute Respiratory Syndrome (SARS)?

* Close contact means having contact for a long time with, or being directly contact with respiratory secretions or body fluids of a person with SARS.

4. Have you travelled to any of the following area in the last 10 days?

- China
- Hong Kong
- Taiwan
- Canada

I, the undersigned, declare all the above to be true and correct. I understand that nothing is provided as well as providing false information is an offence under the Infectious Diseases Act and the Penal Code of Singapore respectively. I am aware that I am subject to medical examination.

Your Name: _____ Signature: _____ Date: _____

ICAO/Passport Number: _____ Valid to: _____

If you declare to "yes" on any of the Questions 1-4, an officer would discuss with you how the symptoms of your condition be dealt with appropriately. May we request that you continue carrying out your transaction only after the interview or discuss as possible.

IMMIGRATION & CHECKPOINTS AUTHORITY

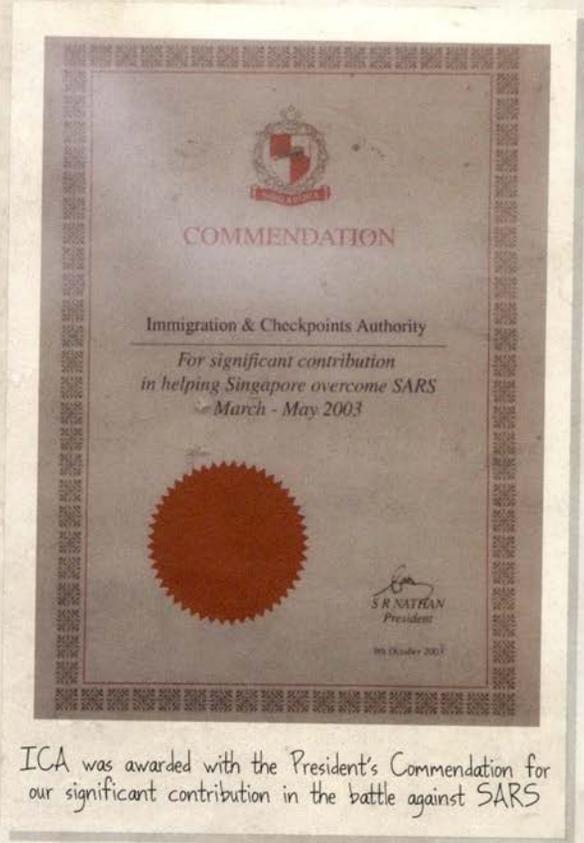
Date: _____

Health declaration forms to be filled up by customers to the Services Centres at ICA Building

Though it may seem that the frontliners at the checkpoints were facing the 'war' upfront, the fight wouldn't have been as easily surmountable without the unyielding support from the units at ICA HQ. SUPT Thomas Peh, then Deputy Head of Finance described the challenges he went through in securing funds for the purchase of medical equipment and supplies within short notice. Nevertheless, the whole experience was valuable for him and all other ICA officers who were together in the fight against SARS.

“SARS happened very abruptly and worsened very quickly. At the initial phase, not much was known about SARS. ICA, being the first line of defence, needed to react quickly to combat the importation of SARS into Singapore. During the SARS outbreak, ICA played a very crucial role in implementing effective health screening operations at the borders. At the same time, we also needed to prevent the spread of the virus among our officers. I was ICA's Deputy Head of Finance (Resource Management) during that period. The team from ICA Finance Branch needed to quickly obtain funding for the purchase of equipment and supplies, such as infra-Red Fever Screening System and hand-held thermal scanners and services from medical suppliers, to combat the importation of SARS virus into Singapore. There was also a need to ensure that contracts could be finalised quickly as well as in accordance with Government's prevailing procurement procedures. Our team was actively involved in assisting the Ops Manager in this aspect.

The SARS incident had been a valuable experience. It was heart-warming to see all ICA officers working together and doing our best to cope with the incident. For the Finance team, we needed to ensure that adequate equipments and supplies could be delivered to the frontline officers quickly. It had been a great experience working closely with all stakeholders. It felt like we were in a battle, all ICA officers, be it those working in the frontline or support staff, played important roles in ensuring that the entire department worked closely together in our fight against SARS.



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Implementing the
*Biometric
Passport*



It is a known fact, that the Singapore Passport is an important travel document which is issued to our fellow citizens for travel internationally. The Citizen Services Centre (CSC) of the Immigration & Checkpoints Authority (ICA) is one of the busiest public service centres in Singapore, handling more than 2,000 passport applications as well as issuance of the same number of passports per day. Even so, there is an unyielding zest to bring the Singapore passport to greater heights, as with the introduction of the Singapore

Biometric Passport (termed "BioPass" in ICA). It is probably a given that the little red passport allows entry into a boundless world of exciting cultures, sights and sounds. How many have actually wondered about what took ICA to introduce Singapore's first BioPass? Amaze yourself at how the team toiled to introduce the little book that serves as proof of your identity and nationality to open your horizons to new destinations.

The Start Line

“*Yes, we agree and fully support the US initiative for the use of biometric-enabled passports to improve the identification of travellers. But at the same time, the hard deadline imposed by the US was painfully daunting.*”

Mr Tan Kok Guan
Director Citizen Services Centre

ICA, with 40 years of combined history and experience formed through its merger between the then-Singapore Immigration & Registration and the operational arm of the then-Singapore Customs & Excise Department, is definitely no stranger in revolutionizing the Singapore Passport. The test struck in May 2003 where 27 countries on the United States (US) Visa Waiver Programme (VWP) were faced with

a tight timeline to roll out the new biometric passport before 26 October 2004 to meet new international security requirements laid down by the US.

To the ICA team, with no clear standards mandated by ICAO for e-Passport issuance yet, it seemed impossible for the team to meet this deadline for Singapore to remain on the US VWP. There was no leeway at all

– if the congressionally imposed deadline was not met, ICA would not be able to account to its fellow citizens who would lose the 90-day visa free travel in the US.

This became the start line for Singapore's BioPass. This was where ICA launched into a series of intensive preparations to forge into the unknown. And this was where we witnessed the commitment and resolve of ICA officers.

Deadline Delays

At a 15 June 2004 US congressional hearing, even the Assistant Secretary of State for Consular Affairs, Maura Harty admitted that there existed hard issues relating to technological and operational concerns which needed time to resolve. VWP (Visa Waiver Programme) countries had 17 months from that decision date (in May 2003) to bring a biometric passport from design to production – a process that normally takes years. She contended that it would

appear that “few”, “if any” of the affected nations would be ready with a new passport design by October 2004. A congressional bill was then signed on 9 August 2004 to delay the deadline for adoption of more secure passport standards by a year to 26 October 2005. The next sigh of relief came when the deadline was later extended again by another year, to 26 October 2006.

The Sprint Begins

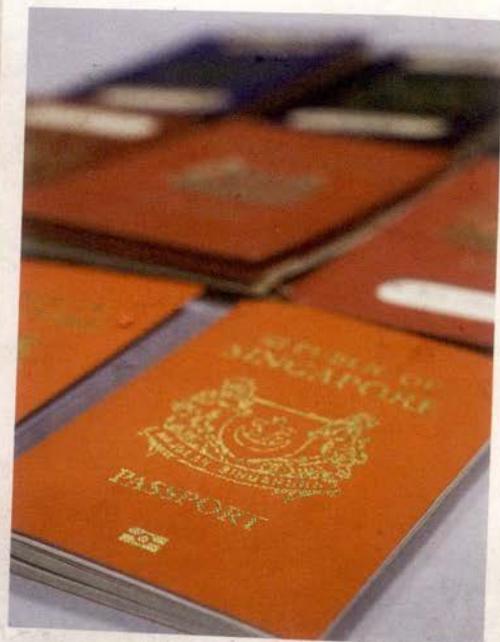
“At ICA, we believe in preparing ourselves fully before launching into action, we like to see it as making the unknown known. For us to live up to our vision of “Inspiring Confidence In All”, we stop at nothing but the best for our customers. It proved no different for the Singapore Passport.”

Mr Tan Kok Guan
Director Citizen Services Centre

Designing the Look and Feel

This being the first BioPass for Singapore, the ICA team sat through the design process with the appointed designer. They also looked through the security features of other countries' passports for benchmarking. Through debates and deliberation, it was finally decided that the background design should be the Singapore skyline, against a pinkish hue to align with the Singapore National Registration Identity Card (NRIC). If you have a BioPass in hand, scrutinise the visa pages to see if you can spot the Singapore Pledge printed on the Esplanade. That was the level of detail that the team drilled down to.

Ms Tina Tan, then-Senior Customer Services Executive of Passports Unit, shared the other considerations that the team had to explore, such as, where to embed the chip (so that the chip would not damage easily), type of chip (contact or contactless chip to be used), how to protect the data in the passport chip, technology to use for the production of the passports, etc. It was through the close-knit and tireless collaboration of the team that led to the eventual sound decisions made.



Generations of the Singapore passport to the BioPass it is today

Stress Testing

Next was the material of the passport data page. In order to qualify as a biometric passport to meet US requirements, the Biopass must have a chip which contains unique biometric identifiers (including fingerprint data, facial image and passport details). The chip would then be read electronically by immigration or border authorities to

confirm the identity of the passport's holder. Having been used in our identity cards since 1991, polycarbonate material had been proven to be secure and tamper resistant. The durability element was essential to embed and protect the passport chip to prevent failure in its functionality.

On his sharing of the stress tests conducted on the BioPass, Director Citizen Services Centre, Mr Tan Kok Guan underscored, “The bottom line was that there was no room for glitches or surprises. Either we make it, or we break it.” And so they did; the team tried every possible way to break the passport. They stamped hard on the passport data

pages with immigration endorsement stamps, they stretched the passport booklets to test the threading strength of the book spine, and they even put booklets into the washing machine just to prove that the chip and polycarbonate page were resilient to damage. These were not all.

“ *We even went to the extent of getting ladies on stiletto heels to walk on the booklets, you know those killer heels? We also sought out a colleague who had a motorcycle helmet with her in the office. We then threw the helmet down onto the booklets from a height. And no, the owner of the helmet was not worried about her helmet; she was more amused than anything.* ”

DSP Elicia Sin
Manpower Division

With about all these and more, ICA had complete confidence in the tamper resistance factor of the BioPass.

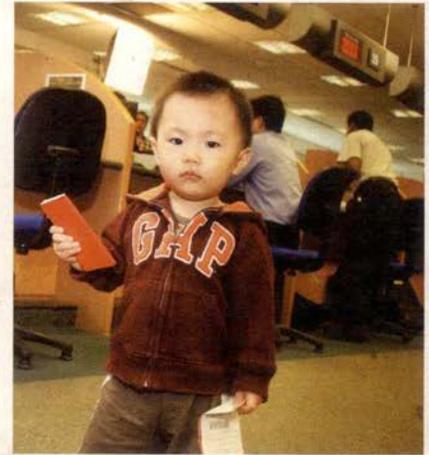
A Battle of Numbers

When it was first reported internally that the BioPass number would henceforth take on the passport control book number, the news was met with many negative voices. Many felt that the then-passport number, which was also the NRIC number of a citizen, was easier to remember.

For the team, the position was clear – the International Civil Aviation Organisation (ICAO)¹’s requirement was that the passport number should be a unique number, and Singapore should not deviate if an internationally-recognized travel document was what we wanted. The point was brought home that the current passport

number, which was also the NRIC number, would only be unique if it was read together with the date of issue of the passport. This posed a problem for foreign immigration or border authorities to track Singapore’s lost passports as the passport holder would be issued with a new passport with the same passport number.

Being one of the key decision makers for the project, Deputy Project Director of the BioPass project, AC Siew Chui Lin, who was then also Deputy Senior Manager of CSC overseeing the Passports Unit, had to fend off a lot of these arguments.



BioPass - secure, tough, durable

“ *By all accounts, concerns about the impact of this change were voiced. We just had to convince them that this was for the betterment of the Singapore travel document. When you keep drilling the point that security precedes convenience, they will eventually be on your side. However, this does not end. Even till today, we are still educating citizens who demand to know why we do not revert to the old system of using NRIC numbers.* ”

AC Siew Chui Lin
Commander Air Cargo

¹ ICAO: A specialized agency of the United Nations, of which the Council is responsible for adopting standards and recommended practices concerning facilitation of border-crossing procedures for international civil aviation, amongst other matters.

Paradigm Shift – Towards a New Generation of Passports

A public announcement was made on 24 March 2005 to inform that from 1 April 2005, the validity period of Singapore passports issued were reduced from 10 years to 5 years. Director Mr Tan Kok Guan explained that this was to prepare Singapore citizens' acceptance of the BioPass, which would be valid for five years. "We wanted our fellow citizens to be able to accept the new passport readily, and kickstarted the paradigm shift with this (move)."

Another key reason for this change was that the BioPass was going to be rolled out soon, and this would hasten the conversion from non-biometric passports to biometric passports.

“*Also, we want to be able to maximise new technologies quickly. We need to ensure that the turnaround period of each passport generation is not locked in by a passport with a longer period of validity. And then there was the other underlying reason for the need to reduce the passport validity period – the technology of issuing passports embedded with an integrated circuit chip was still at infantile stage at that time. Internationally, passport-issuing authorities had only ventured to issue their first ever electronic travel documents in the early-to mid-2000's. Who is to know for sure whether the chip would last all of 10 years? It was a risk we were unwilling, and one that we knew we could not afford to take.*

Mr Tan Kok Guan
Director Citizen Services Centre

Owing to the knowledge of our customers, ICA anticipated that many citizens would jump onto the bandwagon to submit their applications for a 10-year passport. Decisions were made on handling the influx of applications, and a particular interesting decision was the cut-off times for the acceptance of 10-year passport applications. After much debate, it was eventually settled on 11.59pm of 31 March 2005 for Internet applications, and non-Internet applications would close at 5.00pm, justified by the closing time of ICA's daily counter operations.

KIASU-ism, with Extended Access Control

Singapore actively participates in global efforts to enhance the security of our passports. In fact, Singapore's BioPass is already compliant to all of ICAO's recommended standards, including the "write-once policy". As a matter of fact, whilst Singapore was pursuing the vision of the BioPass in 2003-2005, these ICAO standards for an enhanced machine readable passport with the globally interoperable system of biometric identification using a contactless integrated chip were yet unpublished. Meaning that Singapore would have had to grapple with the unknown to align our BioPass with the international standards of an emerging technology, if not for the decision made to place ourselves amongst the front runners of the ICAO decision-makers as early as 2003.

The then-BioPass Project Manager Ms Shirley Chow could still recall ICA's participation nostalgically,

“*ICAO meetings were always very memorable especially during the initial stage when ePassport standards were yet to be worked out. Singapore was then inconspicuous and commonly mistaken as one who lagged behind the bigger nations like USA. These initial meetings were very tough as the members had already formed their inner circle and those were the places where 'REAL' information got around. Having understood the importance of ensuring Singapore remains a US visa waiver country, both AC Ong Choon Beng (then-Head of Passports Unit) and I had to be very thick-skinned and self-invite ourselves into conversations and discussions with strategic partners who could help us open up doors to these inner circles.*

Ms Shirley Chow
then-Biopass Project Manager

Despite the odds, Singapore had taken the informed approach to implement the Extended Access Control (EAC), a protection protocol for additional biometrics (fingerprint) to be included in the BioPass, over and beyond the ICAO standards. Director Mr Tan Kok Guan declared proudly,

“*Singapore is the first country to implement an enhanced EAC for secondary biometrics in a biometric passport. In other words, we are the first in the world to have fingerprint image, apart from facial image in our e-passport, which is protected by an encryption regime.*”

Mr Tan Kok Guan
Director Citizen Services Centre

Singapore's proposal of the enhanced EAC became one of two endorsed standards (the other being from Germany) that were suitable for international use.

Laying the Track for International Live Test

Making the Singapore BioPass globally interoperable for verification at the foreign immigration borders was the pre-requisite move when ICA was planning to introduce BioPass. While the general technical standard for chip was then discussed, there was no agreed specification and standard for the reader, i.e. the medium to read the electronic information in the chip.

The thought that was on everyone's minds: "We cannot afford a single failure in the roll-out of the BioPass." With that awareness, ICA then made the call to embark on a full three-month International Live Test (ILT) of the BioPass to give Singapore the opportunity to assess the operational impact of reading other countries' biometric passports using our readers and vice versa. And this was no mean feat.

“*It was not easy securing the concurrence of the US authorities for Singapore and ICA to participate in the live interoperability testing for the BioPass. It certainly did not bode well when other countries like the United Kingdom (UK), Australia, New Zealand, etc had started negotiations much earlier on the interoperability test and Singapore had to play catch up.*”

AC Ong Choon Beng
Commander Woodlands

Needless to say, the ICA team had to work doubly hard to persuade the US authorities and AC Ong had to fly in to Los Angeles to convince the US Assistant Secretary of State that ICA was ready to start issuing BioPasses before their deadline. "As support of this claim, Singapore's national carrier, Singapore Airlines, was on standby to have their aircrew test the new BioPass on the US passport readers when they arrived at the US airports."

Ms Chow, who had flown to the US with AC Ong, added, "As we knew the importance to seize the opportunity to test and ensure that our BioPass solution could be accepted at the US border, we self-invited ourselves (again) into a meeting on a multi-party ePassport trial. I could remember us spending the whole morning waiting anxiously to join the meeting. Before we could speak and share our progress for BioPass, two ePassport prototypes were thrown to us – yes, it was literally thrown to us with a few shocked looks across the room. We could only hold our breath and pride, holding on to the objective of our trip. The tides turned the moment we started to share on the progress of our BioPass and they were surprised to know how much we had progressed in such a short time."

ICA's unyielding efforts finally paid off. Put aptly by Ms Shirley Chow, "Having won the majority to our sides, the rest was history." After that meeting, the US formally agreed to Singapore's participation in the interoperability testing, making us one of the few countries in the world to be given the opportunity to test and ensure the efficacy of the BioPass.

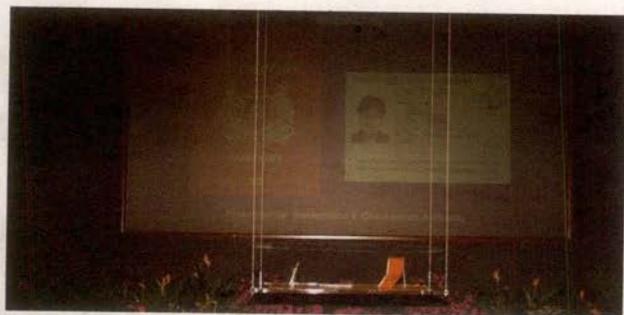
The BioPass trial was then set to be conducted from 15 January to 15 April 2006, at the San Francisco and Sydney airports. In collaboration with the United States, Australia and New Zealand, the ILT meeting was hosted in Singapore at ICA Building to discuss the methodology and arrangements to test interoperability of the BioPass with the readers and our Singapore clearance systems. For timely updates of the tests and due to the 12-hour difference in time zones, the ICA team had to hold weekly tele-conferencing sessions as early as 5.00am. AC Siew Chui Lin said "I can still recall the dark, pre-dawn skies that greeted me when I made my way to office."



Introducing ICA staff to the Biopass



Leaders sharing developments on the Biopass



The launch of the anticipated Biopass

Setting the Interoperable e-Passport Standard

Securing the US' concurrence for Singapore to conduct the trial was only the beginning of the race. The next major step was to garner participants for the trial. For the ILT, a logical move was made to target frequent travellers to use trial BioPass at Singapore and overseas airports. ICA decided to zone in on official and diplomatic passports holders, as well as 2,000 Singapore-citizen SIA crew. Indeed, who could be more suitable to try out the new BioPass than these frequent travellers for work purposes? Specifically, the SIA crew members were engaged and issued with trial BioPass for testing at designated points of entry of foreign countries – at US' San Francisco Airport and Australia's Sydney Airport. The engagement of the aircrew was not without hurdles. ICA had to convince them over the convenience factor, as the flight staff was expected to hold on to two passports; one trial BioPass and one original Singapore passport. It was not just that - ICA also had to ensure that the SIA crew knew how to use the BioPass. For the ICA team, they were thankful that most of the crew members were very nice and obliging.

“ In preparation for the implementation, the trial with these strategic partners was critical to ensure that the BioPass could be detected and cleared seamlessly at the local and foreign checkpoints.

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SUPT Chua Tuan Meng
then Dy Commander Airport Command

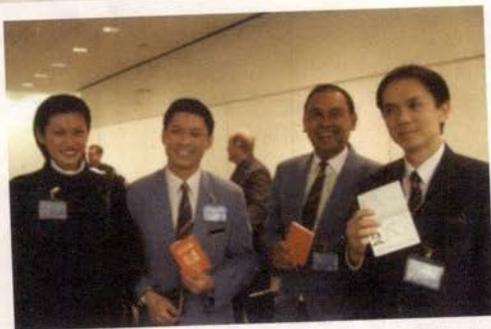
Passports Unit Operations Supervisor, Mdm Poh Siew Hiong, who was then deployed at Airport Command to engage the SIA crew, was appreciative to have been involved, “For me, it was really a once-in-a-lifetime experience, and I enjoyed acquainting with the crew who was very friendly.”

Apart from the ILT, a decision was also made to conduct internal tests with officers based in ICA Building. SUPT Rasidah Binte Jumahri was roped in to coordinate this exercise.

“ It was a mammoth task – emails had to be sent to request all ICA officers based in ICA Building and at Changi Airport to have their photographs taken, fingerprints captured for the purpose of preparing the trial BioPass booklets. At the end of the day, getting all ICA HQ and checkpoint officers involved just showed how much effort we put in to make sure that the passport chips were interoperable.

SUPT Rasidah Jumahri
ICA Training School

Ms Tina Tan also lent a hand in the internal testing as she recalled the lighter moments, “We even conducted lucky draw at the end of the trial period for the staff who had actively participated in the test-reading of their BioPass.”



Singaporean SQ crew on board the BioPass trial



BioPass test lanes at airport for SQ crew

“ I remember going to Level 6 with my colleagues to have our fingerprints enrolled for the trial passport, and we were all very excited to be playing a part in the trial of Singapore's first BioPass. If you think about it, how many people will have such an opportunity?

Mrs Yip-Kong Wai Fun
Corporate Communications Division

To this day, Mrs Yip-Kong Wai Fun still keeps her trial BioPass, where she proudly shows it off to her colleagues who joined ICA after BioPass' introduction and did not have the chance to participate in the trial.

At the end of the three months, the ILT was announced a success. Not only had Singapore been assured that the reader and BioPass were interoperable through the ILT, the three countries had also benefitted from the test that they could apply to standards of e-passport and readers in their e-passport projects. Summing it up, SUPT Chua Tuan Meng said, “ICA received very positive validation from the trial and in the process, I believed that ICA earned high regards from our counterparts on our professionalism.”

The positive results of the ILT, as well as the BioPass' performance charted through an earlier local trial and subsequently a soft launch from 29 April 2006, gave ICA confidence that Singapore's first biometric passport fully met the high standards set by the ICAO. This left no doubt about the BioPass's interoperability and thus set the platform for its public launch on 15 August 2006.



Engaging media on the news of BioPass

Nonetheless, DSP Elicia Sin shared that the team was unfettered, "It was truly tasting the fruits of our labour. The crowd was horrendous as we were just getting acquainted with capturing prints and personalization in the beginning, but spirits were high even when officers reported at 7 am on Saturdays knowing full well we would be spending at least 9 hrs, without any proper breaks except for the few minutes when we needed (really needed!) to dash to the toilet to answer nature's call, or the few minutes to run behind the counters to swallow some water or stuff some food just to fuel our bodies." More often than not, the team had to make light of the situation to endure the stress.

“Another very exciting moment for me was the cutover from the NPS passport to BioPass. It was a monumental moment for the BioPass project, as any problems from the cutover or even any subsequent problems with the new BioPass system would have meant that we might not be able to meet the US deadline of issuing biometric passports. Fortunately, the cutover was smooth.

”

AC Ong Choon Beng
Commander Woodlands



Capturing thumbprints for Biopass applicants

D-Day

It was little surprise that when the office opened 3 days later, all the officers reported to work early as they waited in 'anticipation' for the first customer to come down to collect his or her BioPass. SUPT Rasidah painted the image of Day One of the launch vividly,

“If you could just imagine it, our counters were fully manned and all the Supervisors and Senior Customers Executives were all stationed nearby, ready to greet the first customer and attend to any teething problems. There were certainly teething problems (which new system does not have teething problems, right?) but overall, we overcame them as quickly as we were well-prepared to resolve them. What probably made our day was to see the satisfaction on the applicant's face as he or she laid eyes on his or her brand new BioPass. The icing on the cake - many even complimented us for the nice design.

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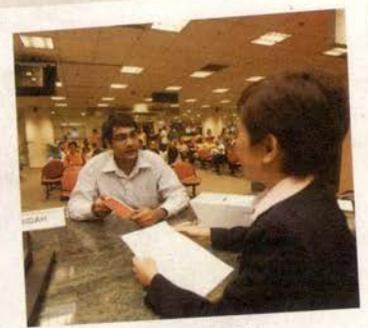
A proud moment in history

Singapore's very first biometric passport was officially launched on 15 August 2006. The BioPass is a passport containing unique biometric identifiers (including fingerprint data, facial image and passport details) on a contactless chip. With the personal particulars digitally stored in the chip embedded in the passport data-page, the BioPass complies with the standards set by ICAO.

The year 2006 marked the birth of the BioPass, after tireless preparation and significant efforts invested. In fact, Singapore had been more than thorough in the implementation of its first-ever biometric passport, even venturing beyond our boundaries to ensure global interoperability.



A proud moment in history:
Singapore's first-ever
biometric passport



Issuing the Biopass to Singaporeans

The Biopass report card

If Singapore were to be rated for its first biometric passport, we would probably be able to judge its international acclamation from the doubled number of foreign study visits to ICA to learn about our planning, design and execution of the Singapore biometric travel document. Some of these foreign counterparts who had embarked on these visits include first-world countries like New Zealand, Hong Kong and Australia.

Many countries face similar challenges of passport syndicates trying to forge and undermine the integrity of their passports. Particularly for the Singapore passport, it is a popular target for counterfeits, due largely to the relatively liberal visa requirements accorded to Singaporean travellers. Notwithstanding so, Mr Tan affirmed that "To date, we have not seen successful attempts to forge the BioPass."

Key success factors

A Collective Effort

For Director of Citizen Services Mr Tan Kok Guan, he gave full marks to the way the ICA team worked collectively towards the implementation of the BioPass.

“ *We were not constrained by the reality of the pressing deadline because our Dare-To-Dream mentality and Can-Do attitude took over. Time might not be on our side, but when all of us had the common goal. We had a solid team of officers, vendors and the management was with us all the way.* ”

Mr Tan Kok Guan
Director Citizen Services Centre

With the single-mindedness, ICA was capable of an all-out effort to deliver the first BioPass for Singapore. And such, was the emblem of ICA.

Clear, Honest Communication

Since mid-2003, ICA had started engaging its parent ministry, Ministry of Home Affairs (MHA), for clearance on the many aspects of the BioPass, including the design, chip capacity, etc. Transparent communication was a priority for the team.

To Director Mr Tan Kok Guan, "It was very critical at that point to lay that bedrock of trust between MHA and ICA, for a long-lasting working relationship. Like every

project, we went through a storming stage where friction brewed and broke. It was however quickly quelled with the open, honest and frequent communication."

Mr Chen Tze Penn was the Director of the Technology & Infrastructure Division in the Ministry, and his role in the project was to facilitate ICA to speedily implement the new biometric passport. Even he had to concur that "ICA faced a very tight timeline



Proud faces of the Biopass committee

to roll out the new biometric passport because of new international security requirements. However, internally, we had to assure ourselves that the security of the new passport was up to scratch. The discussions among ICA and security experts that were coordinated by my Division on the biometric passport were thorough, intense and frank. Because of this, we resolved the security issues in time for the biometric passport to be delivered to the public on schedule. This was most satisfying to me."

Treading Through the Unknown

From the onset, ICA was fully conscious that the BioPass had to be “up to scratch” with international standards. However, these ‘international standards’ were yet to be defined. Adding further to the pressure was the impending US VWP deadline that Singapore faced. Nevertheless, ICA did not allow the unknown to falter its spirit and detract its efforts. Far from allowing others to dictate our ePassport standards, ICA threw its hat in the ring and lent its voice in the deliberations through ICAO forums. Such was the team’s determination to succeed.

Forward Planning

Forward planning and tried-and-tested were also undeniable key success factors for Singapore’s first biometric passport. Five years on, Singapore is still issuing its first version of BioPass, whereas other leading countries like the United Kingdom, New Zealand, Australia and the Netherlands are working on second or third generations of their e-passports. It is very clear that the rigorous and calibrated approach (to introduce the BioPass) had ensured a robust e-Passport system for Singapore.

Resilience and Commitment

The next factor for success was the unsung sacrifices of the ICA staff. As the Head of the Unit running the show, AC Ong was touched by the persevering spirit of everyone,

“Beyond the moments where we were having endless discussions, I think what I will always remember would be the effort that everyone in the Passports Team put in to quickly pick up using the new systems, the many hours of overtime we all put in to test and operate the new laser engravers and frontend processing, particularly the fingerprint enrolment segment and most nostalgically, the many meals of Hajjah Maimunah Nasi Padang we ate over the many weekends and late nights we “burnt” in the office during the course of the BioPass project.



Explaining the security features and process of production of the Biopass

SUPT Rasidah agreed wholeheartedly and pointed out how the senior and junior staff stood shoulder to shoulder in the race against time,

“What made it most memorable was that in Passports Unit, we closed ranks as even the Senior Customer Executives sat, side by side, with our CSOs (junior staff) to either process the applications or produce the passports. Basically, we rolled up our sleeves and disregard our seniority or positions for the brief moment in time.

With mental resilience and quiet commitment, these people made the difference.

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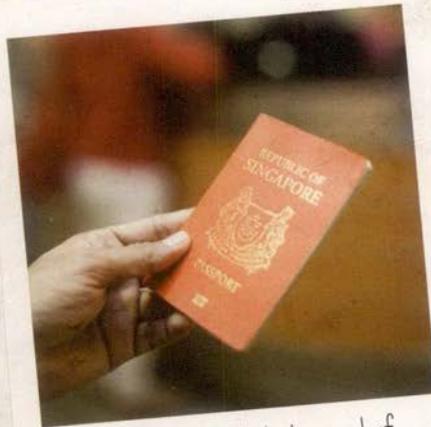
Then DPM Wong Kan Seng officially launched the Biopass

“ The success of the BioPass project was not due to the labour of any one person, but conceived through the collective and tireless efforts of the many officers in the CSC Passports Office who made many personal sacrifices and put national and organisational priorities above their own. This is the ICA spirit in action – Nation before Self. ”

AC Ong Choon Beng
Commander Woodlands

Celebrating the success of Singapore's little red book

Since the advent of the BioPass, Singapore has enjoyed greater global prestige with our passport held high as a highly-secure travel document. To say the least, numerous top-notch countries were in Singapore to pick up some of the key features of Singapore's BioPass for their reference in enhancing their passport design as well as electronic passport (e-passport) systems. ICA has indeed played a big part in flying the Singapore flag high in the international arena. From a 32-page booklet with little security features to rave about to a 64-page biometric passport, the little red book has indeed come a long way in four decades. And even as you read, the story of the Singapore passport continues to unfold.



The little red book to be proud of.



The Singapore Biopass - a window to the world

Significant markers

2003	May	Announcement by US for countries under the US WWP to introduce biometric-enabled passports before 26 October 2004
2005	1 Apr	Validity of the Singapore International Passport was reduced from 10 years to 5 years
2006	15 Jan	International Live Test (ILT) with foreign counterparts like the US, Australia and New Zealand, was conducted. The ILT ended on 15 th Apr 2006.
	31 Mar	Minister of Home Affairs, Mr Wong Kan Seng unveiled the BioPass design to the public
	29 Apr	BioPass Phrase 1 was launched to selected group of individuals
	15 Aug	Full public launch of Singapore's first Biometric Passport
2007	15 Jun	Announcement on cessation of photo updates for non-biometric passports
	1 Sep	Cessation of Photo Updating Services for Non Biometrics passports

Migration of National Database (NID/PEM)

A Success Story of

CIRIS





Pre-CIRIS launch crowd

The National Database known as the National Identification Databank/Passport and Employment System (NID/PEM) was developed in 1985. It was since the main system used by all Service Centres and Enforcement Division. While NID/PEM had served the organisation well over twenty years, the database resided on the mainframe and it had become increasingly costly to maintain and

difficult to adapt quickly to policy and operational changes.

ICA, thus embarked on the journey of CIRIS, Central Information & Registration Information System, with the vision "To enable ICA to become a responsive, accessible and vigilant service provider that would be highly efficient in data collection and effective in people identification". The vision guided the development of CIRIS along the objectives of improved public service, better responsive operations, and reduced technology obsolescence.

CIRIS is a web-based IT system, designed to support the immigration and registration functions and all related transactions, such as the issuing of identification and travel documents as well as the various immigration passes. It is essentially a central record repository, holding millions of records of all Singapore Citizens, Permanent Residents and foreigners.

The transformational journey started with a consultancy study in 2003. After more than two years of development, the time had come for ICA to embark on the implementation journey for CIRIS, which took about 3 years and 8 months.

“*CIRIS is the most complex project that I have handled thus far. From the initial conceptualisation to the date when the curtain was raised, it took more than 7 years.*

CIRIS had likened itself to be the backbone of all ICA IT and operational systems and some would suggest it as the highway for our eco ICA city. Since it had to support all in-house data servers and the multiple layers of operational needs, it was a mission the project team could not fail. It required not only macro-planning to ensure that all ICA operations and IT systems were well connected, it was also absolutely important to ensure that the prevailing operational processes and IT systems were reviewed, tidied/cleaned up, and brought up to be in sync with the new CIRIS system. CIRIS' motto was to maximise efficiency and bring new vibrancy to ICA operations. In fact, we were not building a super highway but we were re-designing the whole city.

It was a tall and tough order. The journey was long; there were storms and blizzards along the way. We tripped, we got up, we cried, we cheered, at times disheartened and disappointed, but we did not give up and eventually we prevailed!

For those of us who were involved in CIRIS, we know it was no ordinary project. From seeing it to fruition it had been a great learning assignment. It tested our patience and endurance, stretched our limits, built on our interpersonal skills and was indeed one steep learning curve. Thank goodness, it was over. We are all better thereafter, are we not?

”
Mrs Lee-Ho Sow Heng
Director PAIA (then CIRIS Programme Director)

Challenges

Complex and Massive

The implementation of CIRIS was a complex and massive project. It was not just purely an IT system upgrade but also entailed major re-engineering of business processes. As the databases were tightly intertwined, the only option was to implement CIRIS in one “big bang”, thus increasing the difficulty level and risks by a few notches. The ‘big bang’ data migration involved 2675 gigabyte of data, in which all systems in NID/PEM and subsumed systems were cutover to CIRIS in its entirety. It required detailed documentation of current and future states of 84 business processes with 50 interfaces across 20 external agencies, such as the hospitals, police and Ministry of Manpower.



Public applications affected by CIRIS migration



CIRIS makes services more seamless

Constant Alignment of Requirements with Frequent Changes in Policy Framework and Workflows

Due to the frequent changes in policy framework and workflows, some of the re-designed processes were outdated due to time lapse and required fine-tuning and reworking. It was especially challenging due to the project's complexity and the need to adhere to the implementation deadline.

Project Vendor Management to Ensure Consistency and Competency

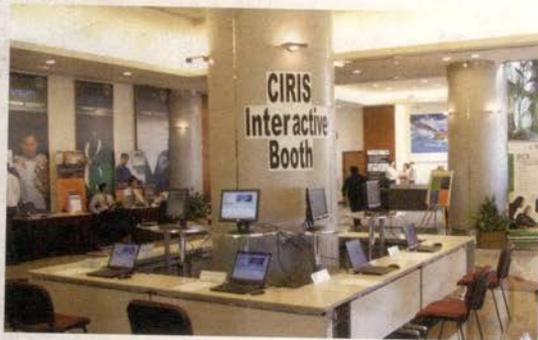
Project vendor management was an uphill task for the fact that a total of 19 vendors were involved throughout the project implementation, coupled with the change in the composition of the senior management of the main vendor, Singapore Computer Systems (SCS)¹ and several resignations of core team leaders. Much effort was required to re-teach the new members to bring them on par with the progress. Most importantly, the greatest challenge was ICA, being the custodian of the National Database, there was simply no room for any error!

“ Thanks to CIRIS, ICA was able to roll out so many eServices. Our jobs are now more effective and efficient. Without CIRIS, we would not be where we are now. ”

DSP Ivan Sim
Corporate Communications Division

¹ SCS was fully acquired by the National Computer Systems Pte Ltd (NCS) in December 2008.

Inspiring Confidence in All



Setting up interactive kiosks for the roadshow

Early Set-up of Dedicated Team of 8 Officers

The core CIRIS team members involved in the consultancy study were deployed on a full-time basis a few months before the award of the tender. It ensured continuity and commitment to the project.



CIRIS Roadshows

The Success Anchor: Strong Support from Senior and Middle Management

Strong support from the senior and middle management was the one thing that was needed and manifested crystal clear during the entire project duration. As a result, all worked together for the success of the project.

The supportive and good leadership from senior and middle management with well, clear and proper directive/instructions, made the ground officers feel secure and confident of the project.



Officers getting familiar with CIRIS



Key CIRIS personnel

Strong Team Resilience and Win-win Partnership

For most officers involved, the CIRIS journey was a mixture of fear, appreciation and contentment. It was significant as the ground officers involved were the key players and frontline 'soldiers' of the operations, making it all the more meaningful as they played a part together in creating a future system that would be able to live up to expectations.

A "can do" mentality and "be better" attitude sailed officers through frequent late night meetings. Mental draining with intense stress, officers were juggling daily operations, envisaging streamlined processes, preparing detailed documentation and cleansing data. Tough and challenging yet there was a strong sense of responsibility by all to ensure a successful CIRIS.

Strong teamwork and cooperation among peers and colleagues, including the vendors, was the key to ensuring the team's resilience. There was thorough user acceptance test



Dedicated ICA Officers at User Acceptance Testing

(UAT) by ground users. The initial testing system was slow in the response time and also not very stable. Some requirements were not correctly reflected, resulting in much re-work and re-testing by the end users. However, everyone pressed on.

Despite the initial misalignment of expectations and standards from the vendors, they were quick to put up measures to ensure quality project delivery and a robust team to follow through the entire project.

Not forgetting our strategic partners, a focus group discussion with key stakeholders such as the hospitals and police was conducted with the key objectives of understanding their views of the changes to be introduced with CIRIS; gathering their thoughts and suggestions to address concerns and determining transition needs that would ease the deployment. The effort proved to be worthwhile with a smooth deployment of CIRIS observed at the stakeholders' sites.

Relationship was further strengthened as the core team and the vendor were housed together in the then ICA Training School at Jerojis Road in November 2006 for a period of 8 months. It facilitated discussion and bonding beyond work. It was also conducive for UAT where much coordination and discussion were required.

Jerojis was a place of fond memories because of the serenity of the environment. As the building was in a remote area with



CIRIS terrapins

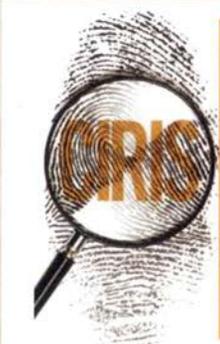
surrounding trees, grass patches and deep drains, we had exciting encounters beyond work. Snakes, monitor lizards, squirrels and turtles accompanied us. There was once while we were all engrossed in our work when loud screams were heard from the direction of the grass patch just in front of the building. What did we see? A dog was barking at a cobra which was on alert to attack any time and a lady, not daring to go near, was frantically calling the dog. We were also shouting "move away" loudly in the office. The nerve wrecking episode took a minute or so and ended with the dog retreating to its owner unharmed. Was it the environment that caused us to buy a pair of red-eared terrapins on impulse? We are not sure but for certain they are still alive and into their 8 years!

Intensive Transition and Communication Programme: Bringing CIRIS to Our Officers

With CIRIS introducing transformational changes in ICA's processes, fears and doubts from officers were natural. An intensive transition and communication plan was set in place ranging from CIRIS Roadshows, CIRIS Snippets, CIRIS Hub @ ICA intranet and dedicated CIRIS email address. The aim was to facilitate two-way communication, creating awareness of CIRIS and at the same time, addressing any concerns the officers might have.

Nearing the implementation of the system, four roadshow sessions were conducted on 14 and 15 June 2007. Event plans and materials development were carefully organised and scrutinised. Logistics preparations and event coordination were painstakingly designed and rehearsed. The goal was to have an engaging road show for ICA officers to gain useful insights into the new system and its key benefits.

In an effort to provide greater interactivity for the participants, four hands-on workstations were set up along with a number of screen-cam demos. Technology partners were also invited to showcase various technologies used in CIRIS.



WELCOME MESSAGE
 Kim Ho edir
 Dear Colleagues,
 Welcome to the first of the two-part CIRIS supplement or CIRIS SNIPPETS as we would like to call it.
 The CIRIS SNIPPETS aims to provide you with concise information on CIRIS. It comprises 3 main sections - CIRIS Overview, CIRIS & You and The CIRIS Journey - which share with you background information about CIRIS and answer the important question - how will CIRIS benefit me?
 ICA has embarked on a journey to replace the existing National Identification Database (NID) and Employment (IND/PEM) system with the Central Identification and Registration Information System (CIRIS). Just picture CIRIS as a fully integrated database, containing up-to-date information about application records for Foreigner, Permanent Resident or Singapore Citizen. You can learn more about the capabilities of CIRIS in the CIRIS Overview and CIRIS & You sections.
 In the last section, The CIRIS Journey, we provide you with some tips when using CIRIS and how you can make use of CIRIS more effectively.
 Finally, we would like to invite you to try out the quiz contained in this issue to increase your awareness of CIRIS. Have fun and enjoy the read!
 Edir
 CIRIS Transition Management Team

To learn more about CIRIS, officers could go to the CIRIS Hub (<http://intranet.ica/SiteDirectory/Committees/CIRIS>) in ICA Intranet. On top of having comprehensive information on the system features, it also provided details of the project and many downloadable presentation materials, workshop notes and fact sheets.



The CIRIS SNIPPETS aimed to provide officers with concise information on CIRIS, with 3 main sections - CIRIS Overview, CIRIS & You and The CIRIS Journey

CIRIS Transition and Communication Tools

The CIRIS exhibits attracted many of the participants as they had a chance to personally experience CIRIS for the first time. Attendees also received a CIRIS utility keychain as a token of appreciation. The CIRIS keychain offered four useful functions as a keychain,

compass, mini torchlight and whistle. This was synonymous with CIRIS, which was a secure system (keychain) with ease of navigation (compass), menu-driven user-friendly interface (mini torchlight) and system alerts in place for erroneous entries (whistle).

“ On hindsight, many officers felt that working out the processes in minute details actually helped to reaffirm our understanding on the work processes and guidelines. It certainly serves as a good reference point for newly posted officers as the documentation provides a clear 'snapshot' of what we do and why we do them. ”

SUPT Rasidah Jumahri
ICA Training School



ICA CIRIS Project Director Ms Ho Sow Heng, welcomed the attendees during the opening of the first session.



Roadshow attendees and CIRIS demo display that gave attendees the chance to personally experience CIRIS for the first time.



CIRIS Key Chain

“ We were so used to using NID/PEM which was very code based. It was difficult initially for us to step out of the comfort zone to accept another new system which integrated many systems into one. Everyone at that time felt that it was a really big step for ICA to embark on such a mega project.

”

DSP Rosanna Tan
Coastal Command

First time ever for ICA - Closure for 4 days

During the final phases of the project, there were much understanding and empathy for one another, just like a family. With the UAT completed, it was nearing the closure of ICA for 4 days in order to facilitate the big-bang approach of data migration and also new system implementation.

The decision for a 4-day closure was not an easy call for the Senior Management. After all, ICA had never closed and suspended its services before. However, the closure was necessary in order to manage public sentiment and expectations. The temporary closure might result in some inconvenience but was with a good cause to provide better ICA services for public benefit.

Effective Communication Campaigns

Over a period of 4 weeks before the upgrade exercise, CCD rolled out several communication campaigns to inform the public about the major system upgrade.

Key messages to the public include:

- Suspension of ICA services and e-services
- Resumption of services
- Information on ICA Hotline

These messages were delivered through all major newspapers and radio channels to ensure wide coverage.

24/7 Round-the-clock Deployment Team

With all communications and preparations done, deployment commenced at 1600hrs on 21 July 2007. The ICA e-Services were suspended at 1800hrs on the same day.

The Operations Cell and the Technical Cell, made up of ICA's personnel led the CIRIS deployment, operating round-the-clock throughout the deployment period to ensure smooth progress and coordination across the entire ICA.

Prior to the deployment, the deployment teams went through scenario exercises such as the Inject-based exercise (IBX) which primarily focused on the work processes within and between the Ops and Tech cells. It allowed the Ops/Tech cell staffers to practise their incident management workflow as well as to operate Crisis Management System in a simulated environment to manage incidents. A total of 38 injects of varying issues were played to test the various components of the Ops/Tech Cell.

The second exercise was the Table Top Exercise (TTX), which ran through scenarios which would have a significant impact on CIRIS deployment. It allowed for key issues to be tabled for the participants to walk through the processes, develop procedures and decide on the policies to adopt for the various scenarios.

One crucial deployment activity was the migration of the National Database from NID/PEM system to CIRIS. The Data Migration Team worked round the clock from day one of the deployment to ensure a successful cutover without compromising on data integrity, accuracy and completeness.

Due to the earlier completion of the preceding deployment activities, user verification was brought forward by nearly 24 hours. Guided by vendor support team, the users were allocated their respective sub-systems for testing and verification.

Supervisors and ground officers were also busy preparing back-up plans for counter officers. Everyone was fully prepared for the worst and hoped for the best. We were all ready for CIRIS to go live! As a large crowd was anticipated, briefings to ground officers were conducted to instil confidence. Although there was a lot of uncertainty, the confidence level was built up slowly as everyone was doing their best to make things work.



ICA UPGRADES TO NEW IT SYSTEM
Various public services will be temporarily suspended

The Immigration & Checkpoints Authority (ICA) will be carrying out an upgrade of its entire national database, which currently holds millions of records of all Singapore Citizens, Permanent Residents and foreigners, to a new IT system. The upgrade is necessary to meet ICA's current and future operational needs.

Temporary suspension of services
E-services will not be available from 6pm, 21 July 2007 (Saturday) and counter services will be closed from 23 July 2007 (Monday).

Some of the key services and facilities that will be affected include citizenship and PR applications, birth registration, collections for passports, entry visas, and various foreign visitor passes such as student's pass, long-term social visit pass and professional visit pass. The full list of affected services will be available at ICA's website at <http://www.ica.gov.sg>.

The Public is advised to submit applications early
The public is advised to submit any applications for immigration or registration facilities early, well before 20 July 2007 (Friday) to avoid the last-minute rush. For members of the public who need to contact ICA urgently during the period of suspension, they may call us at 6391 6100.

All counter services and e-services will resume on Friday, 27 July 2007, at 8am.

Notice to the public on ICA system upgrade

“ We were honoured to be part of the UAT team to test out a new system that was revolutionary in the processing of applications. While some officers had to spend some time trying to get used to the system, most of us were very happy with the change. The system has very detailed information of a person, user friendly, powerful and convenient as it links many pieces of work together. Finally we get to see 'coloured' screens, no more 'black and white' TV!

DSP Seet Lee Seong
Coastal Command



The ICA Operations (Ops) Cell, supported by ground officers, synchronised and tracked the efforts of all ICA personnel on the ground.



The ICA Technical (Tech) Cell, supported by officers from Technology Unit, managed and coordinated all technology-related activities during the deployment.

Hi, CIRIS was declared "live" yesterday. This would not have been possible without the hard work, dedication and team work from all of you and your officers who are involved in the CIRIS project either directly or indirectly. The operations, corporate services and corporate communications (including customer relations) support was equally important. Congratulations and well done. Thank you for your tremendous support and cooperation. We have the most critical milestone to prepare for when we open our doors to the public on Friday morning. I am confident that after all the detailed preparation and hard work that we have put in, we will be able to handle the situation and address any challenges that may come our way. Let us gear up for the most challenging part of our journey. Cheers.

**An encouraging email from Mr Clarence Yeo,
Commissioner ICA (then DC Ops)**



Public waiting patiently despite the long queues



Public streaming into ICA Building on the first day of its re-opening



Our officers at the services centres trying out the CIRIS system together

CIRIS LIVE! Opening Day to Public on 27 July 2007

With CIRIS in operation, ICA launched into the beginning of a new chapter in history. Seemingly eager to be part of the historical day, a crowd started to gather in the designated waiting area as early as 7am. Preparations were made to control the expected voluminous human traffic at the ICA HQ. The "snaky" queue extended all the way to the bridge near the coffee shop.

At 8am, ICA personnel welcomed their first CIRIS customers. On this opening day, the main vendor, SCS, also made arrangements to mark the special day. SCS support team, in their CIRIS polo-tees, was deployed around service floors to provide assistance to the counter personnel when required. Director PRSC Mr Kng Eng Kiat, the Operations Manager of CIRIS, recalled the day of the re-opening, "the system was initially slow, the crowd started to build up. However, all ground officers had been very professional in delivering their services to public. Despite having to work for long hours and heavy workload, ground staff were all blazing through the trail with high morale and spirit. Hence, even though there were long queues, when we resumed our counter services on 27 July 2007, there had been no adverse reports on the media."

Ground staff recalled all the late nights that they stayed back to clear the work. However, they were appreciative when they saw that senior management, such as Commissioner (then Deputy Commissioner Ops), Director Policy, Directors and Deputy Directors from the Services Centres were also around during the wee hours to talk to ground staff and to encourage everyone. Ground staff were very appreciative of the much needed moral support given by the senior management. The strong leadership had given the ground staff much confidence. The welfare of staff was also well taken care of, for example, food was provided by the department.

Teamwork was the key as staff from backroom units were redeployed to frontline to assist in managing the crowd. Every staff felt the sense of unity as everyone stayed back very late to help out, wanting to make things work.

Mrs Ranjeet Singh (CSC, Registry of Births and Deaths) recalled that when the system was rolled out, CSC had to test a real online

birth registration. Mrs Michele Tan-Lim (then Manager Registry of Births and Deaths) had just delivered and allowed CSC to register her baby's birth using the system to test the online birth registration process. The vendor was able to use the live test case to prepare and align all the frontline counters before live implementation.

The CIRIS team was constantly monitoring and ensuring that the data committed into CIRIS were synchronized back to NID/PEM to keep them up to date. It was with full satisfaction that CIRIS was working well that NID/PEM was finally decommissioned 6 months after CIRIS commissioning.

Director (Technology), Ms Tan Sor Hoon, also the Project Manager of CIRIS, convinced herself that an innovative department like ICA often considered the new capabilities ICT could provide upfront, when setting the business strategies. ICT was not just a mere facilitator of an already-decided business strategy nor a cost burden, but rather, ICT was a significant source of competitive advantage for the future, an enabler and a means to the business end that was measured in operating results. She added, "The successful launch of CIRIS was a testament to the strategy adopted, the hard work and efforts of all ICA officers and the strong support and guidance from ICA senior management. It was not easy to implement. It required radical thinking, challenging the tried and tested ways of doing things and finally getting used to the new ways of processing. It would not have been possible if we had not taken that bold first step forward."

She also recounted that at the Birth Registration Centres at the hospitals, the officers could print the birth certificate but could not close the case due to some on-site technical problem, leading to MFS (MCYS) not being able to receive the transmission of birth record for baby bonus. "It was very stressful in the beginning as the birth records had to be individually checked at ICA whether it was completed or pending in the system. The CIRIS Team and the vendor helped to look into this problem by introducing the batch update of pending cases into the system. This was a great help to the hospitals and to RBD, as it helped to cut down on the checking and calling up on hospitals to re-update the birth information into CIRIS." Working in the background, the CIRIS team worked hard to re-establish the data interfaces with all ICA internal systems and more than 20 external government agencies, as ICA is one of the key data sources. Part of the contingency plan was to have a parallel run of NID/PEM alongside CIRIS for the first 2 weeks after cutover.



Michele Tan-Lim's baby girl

“When we first heard about the news, most of us were concerned and uncertain of how the system would affect our daily work. There was anticipation of a new system hoping that the new system would be able to help us to be more efficient and provide more streamlined processes.”

DSP Juliana Saruwan
Corporate Communications Division

The CIRIS project had come a long way. The journey that started in 2003 had not been an easy ride. The staff and management of ICA, together with our technology partners, had to overcome many obstacles to transform our legacy IT systems, best known to us as the NID/PEM systems, to a fully integrated CIRIS system.

With every officer's support and strong management leadership, a successful CIRIS roll-out was ensured. With this good sense of inspiring confidence in all, ICA had leapfrogged to the next stage of technology adoption where many future service enhancement possibilities awaited.

“ *I have gained a deeper understanding and learnt that no matter how difficult a battle is, it can be won through team work.* ”

DSP Hu Lih Tyng
Air Cargo Command

OUR HOPE -

The CIRIS Spirit

Through the CIRIS story, we hope that ICA officers will
continue to work

Collectively as ONE,

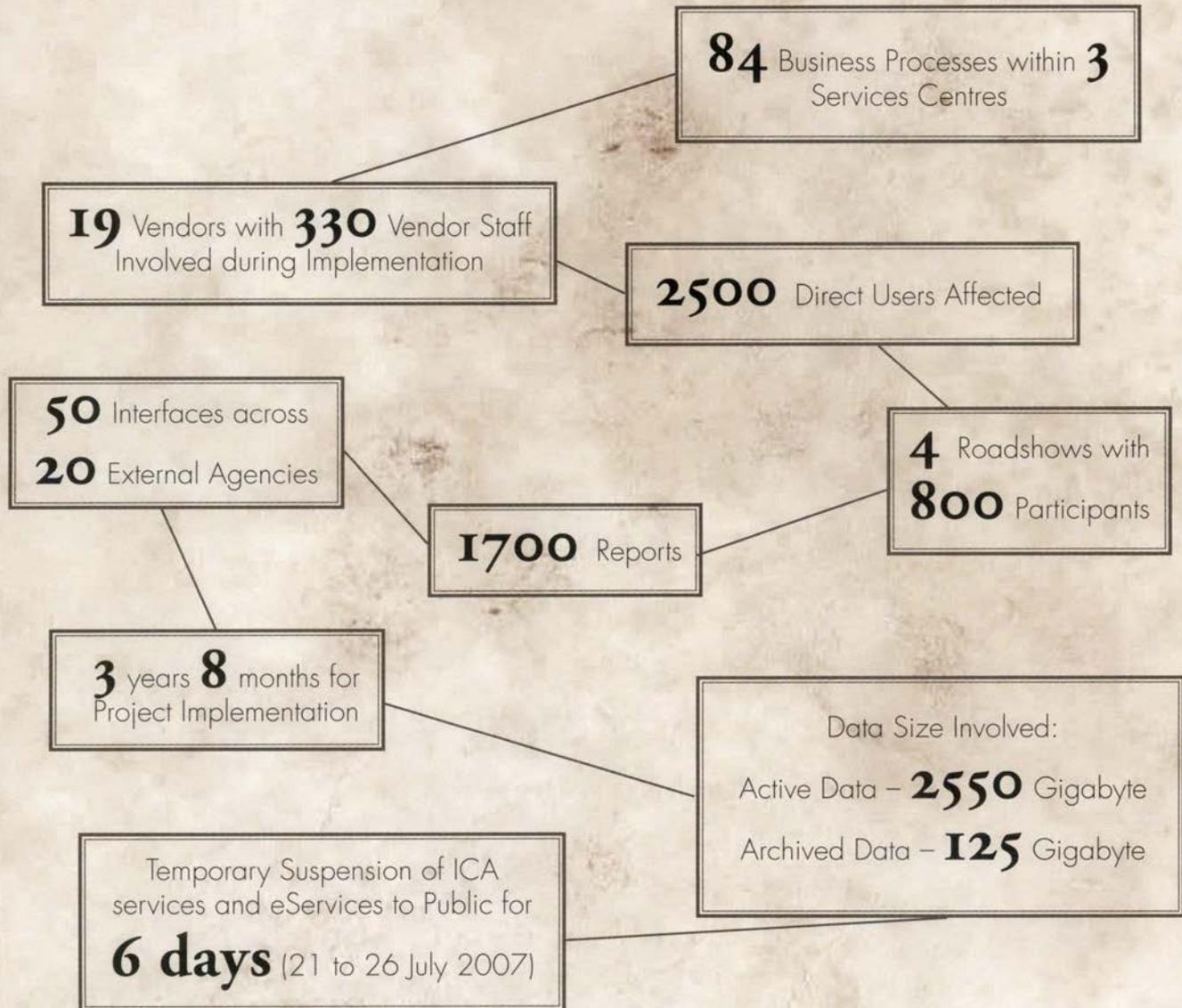
to bring about **I**nnovation in the way we work,

through **R**esilience and

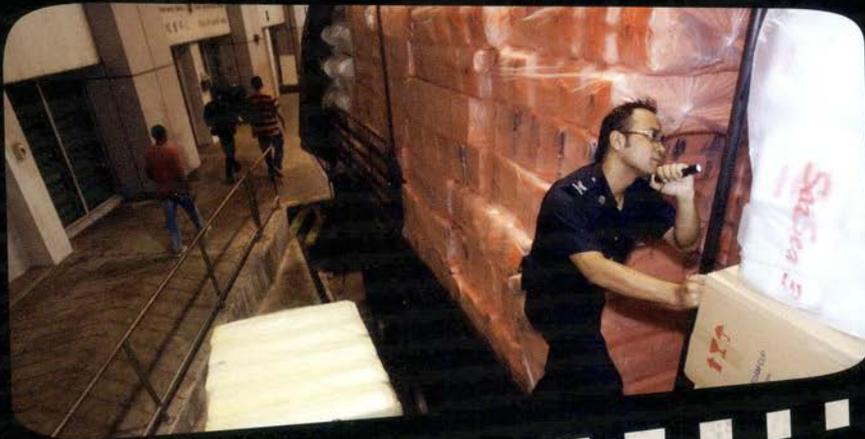
Inspirations,

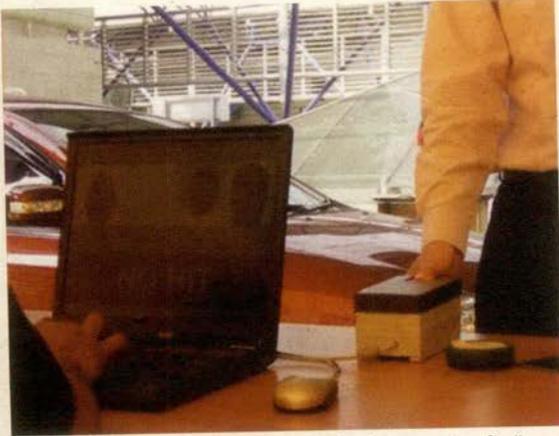
Soaring ICA to new heights!

Interesting Facts about CIRIS!



ICA's story on
*Mas Selamat Kastari's
Escape*





Operations carried out to verify fingerprints of all departing and arriving passengers

“ The entire Leaders Group was having a meeting at ICA Building. It was around 5pm when then-Commissioner, Mr Eric Tan had to leave the meeting room to attend to an urgent call. A few minutes later, Commissioner informed the meeting that MSK had escaped from the Whitley Road Detention Centre. Whilst waiting for more information on the escape, we activated the ops plan to ramp up departure checks to ensure that MSK had no chance of leaving through our checkpoints. For someone to be detained in the detention centre, it means that the fugitive should be a terrorist or someone of grave concern to the national security of Singapore. The immediate next few hours were spent coordinating the checkpoint operations and coping with the evening peak traffic at both arrival and departure as ICA intensified the security checks.

SAC Bhopinder Singh
Director Operations Division

On 27 February 2008, Mas Selamat Kastari (MSK) escaped from the Whitley Road Detention Centre, sparking a massive island-wide manhunt. Upon receiving the information, ICA immediately sprung into action to ensure that MSK would not leave Singapore through ICA's checkpoints. While exercises had been conducted to prepare officers from the Home Team Departments (HTDs) deployed at the checkpoints on stepped-up security checks at departure for such incidents, the MSK escape was the first time the ops plan was activated.



Ramped-up checks of all outgoing cargo vehicles

Innovation & Team Work

Our Strategy & Response

From the onset, ICA had identified two objectives to define its mission in contributing to the larger island-wide man hunt for MSK. First, it was to ensure that MSK did not leave through illegal means via the checkpoints, and second, to ensure that any person granted departure clearance was not MSK. In addition to the redeployment of manpower to step up security checks at departure, ICA also quickly modified the existing capabilities and leveraged on available technology as a force multiplier to complement the departure checks. Amongst the many measures taken were the recalibration of mobile devices, fingerprint scanners and their software to implement negative validation for biometric verification for all departing travellers at the checkpoints. At the land checkpoints, the departure flow for conveyances was also adjusted to facilitate biometric screening of travellers in vehicles.

While the action was most visible at the checkpoints, ICA HQ was also in full swing to provide all necessary support to implement the enhanced security measures. For instance, the Services Centres and Technology Division pooled together their IT resources such as laptops and fingerprint scanners for quick redeployment to checkpoints by the next day while awaiting additional units required to be procured. On the other hand, Manpower Division worked out the manpower resources to ensure sustainability, and conducted morale sensing with the respective Checkpoint Commands. Corporate Services Division was also doing their bit to expedite the procurements required by the checkpoints to support the special operations.



Motorists going through negative fingerprint validation



Mobile fingerprint verification



Stepped up checks conducted at Tuas Checkpoint

One of the key challenges faced by officers at the land checkpoints were the security checks on departing cargo vehicles. As these conveyances are mostly huge (typically between 20 to 40 feet in length), there are plenty of compartments for concealment of persons and contrabands. It takes quite some time and manpower to conduct proper checks on each and every vehicle. To expedite the process without compromising security, the Z-Backscatter vans (ZBV) and mobile VACIS were quickly redeployed from sea cargoes checkpoints to the land checkpoints to beef up the operating capacity and efficiency at the latter.



X-ray on large conveyances



Nobody, young or old, was exempted from checks

“ Perhaps the most memorable incident that I can remember about the period actually demonstrates how innovative our officers are at solving problems, even in very trying times when everyone is very tired. The ZBV backscatter van was activated to scan all departing lorries. The constant use of the backscatter van consumed a lot of diesel. As the fuel runs low, our officers actually had to go out with jerry cans to buy diesel to top up the backscatter van. Unfortunately, with the atmosphere at the point of time, the petrol station refused to sell us jerry cans of diesel. In order to quickly overcome the challenge and ensure sustainability, we tweaked the operations to require the backscatter van to remain stationary and the lorries to drive pass the van slowly (for scanning). This buys time for us to run a long electrical wire from the main building to the van to support the scanning operations, as we couldn't be buying diesel indefinitely. ”

AC Angie Wong
Director Corporate Communications
(then Deputy Commander Tuas)

The MSK episode also best demonstrated the HT spirit and our close collaboration with the Singapore Armed Forces (SAF). To augment the manpower intensive operations at the land checkpoints, officers from the Singapore Civil Defence Force (SCDF), the Central Narcotics Bureau (CNB) and the SAF were deployed to assist ICA in conducting checks on departing conveyances.



Vessels were thoroughly searched



Scrutinising x-ray images

“ The MSK period was a challenging episode for ICA because there was no precedent. ICA had never faced such a prolonged and extensive security operation before. When the ops was activated, we knew that the situation ahead would be fraught with many uncertainties and challenges that we would need to bravely confront head-on. A lot of hard work was put into coordination, both internally and getting support from various Home Team agencies and beyond, to step-up security checks as well as sustaining ICA operations at the checkpoints. ”

SUPT Chua Sze How
Deputy Commander Tuas
(then Head Operations Planning)



Lorries scanned through VACIS

DID YOU KNOW?

As part of the stepped-up checks at departure, ICA officers also checked all coffins containing bodies of the deceased before allowing the undertakers to proceed with the journey. This was a very trying aspect of our operations as officers had to literally conduct face-to-face check of the corpses and inspect the coffins to ensure that Mas Selamat would not sneak out through this means.

Managing Public Expectations

Inspiring Confidence in All

ICA operations have been and always will be in a highly visible position to the general public and the media. This is because ICA operations have a direct impact on public, businesses and everyday lives. There were quite a few media reports on the traffic situation at Woodlands Checkpoint, the impact to the surrounding Woodlands neighborhood and reports on how businesses and cross border trade were affected. As these reports undermined public confidence in the security operations, it was imperative for ICA to present a fuller and balanced view of what actually happened on the ground so as to promptly debunk some of the negative and misleading reports.

SUPT Lim Peck Khoon, Kelly then-Head (Public and Internal Communications), was able to recall vividly the fateful day and the challenging times ICA had managing public expectations during the MSK period.



Our officers working tirelessly day and night

“We were still on standby for the Committee of Supply (COS) debate in the evening when we started to receive news that something was ‘brewing’. We weren’t quite sure what had happened and only heard that someone had escaped from custody. We later received further information about the road blocks and manhunts, and even when the instructions to stand down from the COS were received, we were hesitant to head home, uncertain about how things would unfold and how we would be affected. As the events unfold, the biggest challenge we faced then was how to put in place a comprehensive communications plan to address checkpoint users as they would be subjected to more thorough security checks at departure, which is ‘new’ and of course, the additional travelling time which they would have to cater as we tightened the border security.”

The enhanced checks affected both the workers who commuted across the land checkpoints to work on a daily basis and the school children who resided in Malaysia but attended schools in Singapore. In addition, the lorry drivers who shuttled across the Causeway to deliver poultry and vegetables were equally affected. Tempers were flaring in some quarters as some lorry drivers claimed that they waited in the queues for hours without any sanitary facilities, food and water. The late delivery of the produce and livestock also affected the businesses in Singapore. The residents of Woodlands around the checkpoint were upset with the traffic snarl at their estate, while the business community there complained that they were losing income as people avoided the area due to the traffic situation there.

Given this backdrop, it was inevitable that there would be some negative reporting in the papers and online media on how the enhanced checks had affected the daily routine of the checkpoint users. Pictures of long queues at the land checkpoints were published in the papers and online. As we could not allow such negative reports to discredit our officers’ efforts and undermine the public confidence, ICA promptly engaged the key stakeholders to hear them out, clarified some of the misconceptions and worked with them to explore ways on how to achieve win-win outcomes that were sustainable as we mentally braced ourselves for a long drawn battle.

Through the engagements with the media and grassroots organisations, partnership and trust were renewed as these stakeholders witnessed first-hand the hard work put in by our officers and the collective measures undertaken by the agencies to address the ground concerns. These measures included the provision of portable toilets along the roads leading to both land checkpoints for the travellers to use, working with LTA and grassroots organisations to smoothen the traffic flow in the vicinity of Woodlands Checkpoint, and bringing journalists to interview the lorry drivers. Staff from ICA’s Corporate Communications Division also brought the journalists to station at the road junctions to wait for the evening school buses to come by and offered a first-hand illustration on how these school buses would be directed to the checkpoint without being caught in the congestion.

The effort undertaken by ICA eventually won the support and acknowledgement from the key stakeholders. The occasional compliments from the travellers, be it a simple word of “Thank you” or the thumbs-up gesture, to our officers were most heartwarming and a reaffirmation that ICA is “Inspiring Confidence in All”.

More lorry lanes opened to cut delay at Woodlands



Woodlands Checkpoint, which has been closed since the start of the Singaporean New Year holidays, will be reopened on Monday, Jan 11, with more lorry lanes opened to cut delay at the checkpoint.

ICA said that the reopening of the checkpoint will allow lorry drivers to pass through the checkpoint more quickly, reducing the time spent in queues. The checkpoint will be open from 6am to 6pm, with lorry lanes opened from 6am to 8am.

ICA also said that it will be providing additional staff at the checkpoint to assist lorry drivers and to manage the queues. The checkpoint will also be providing additional facilities for lorry drivers, including portable toilets and food and water.

ICA said that it will be working with the Land Transport Authority (LTA) and grassroots organisations to smoothen the traffic flow in the vicinity of Woodlands Checkpoint. ICA also said that it will be bringing journalists to interview the lorry drivers.



CIGARETTES HIDDEN UNDER TONNES OF...

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Crisis Management

- People Centric, Operations Focus & Perseverance

“*The enhanced checks posed a challenge to the checkpoint and its strategic partners in managing the cross-border traffic at Woodlands Checkpoint, especially during peak periods. Our officers worked endlessly and vigilantly and at the same time, we sought travellers' patience and understanding that the enhanced checks were necessary due to security reasons. To further tackle the manpower and traffic concerns, we deployed mobile vehicular scanners at the cargo complex and opened Old Woodlands Checkpoint (OWC) to clear more vehicles. Looking back, it was never an easy task as we had to work on a very tight time line to come up with the clearance flow and to put in place the necessary systems before we could commence operations at OWC.*”

AC Nam Liang Chia
Senior Deputy Director Operations
(then Commander Woodlands)

“*During the In-Service-Training (IST), I personally told my officers of a pledge stating that 'MSK will not pass through my hand. MSK will not pass through my team. MSK will not pass through my checkpoint.' The take home message of MSK incident is this - Emergency Preparedness, and the biggest learning point from this event is that the officers must be aware of contingency plans and have sufficient practice in implementing them so that they are prepared when the time comes. Officers must also be constantly motivated and inspired to perform their duties to the best of their abilities.*”

AC Wong Kong Wa
Senior Deputy Director Intel
(then Commander Tuas)

“*When I was posted to Coastal, it was my first command posting. At that time, then-Commissioner, Eric Tan told me a very important thing. He told me the first thing I should do when I go to the ground was to win the hearts and trust of the officers. Officers have to know that you are there with them. That has always been my guiding principle. I must admit that I was blessed at Coastal as I had a very strong team of Deputy Commanders. One such example was when we had to distribute the bullet proof vests to the deployed officers at the various far flung coastal checkpoints in the night. Fortunately, everyone, including the Deputy Commanders and Senior Assistant Commanders assisted in collecting and distributing the vests to the various checkpoints. We had to walk the ground a lot to update the officers on what was happening and to check if they had any issues in order to keep up the morale. I could not have covered the entire terrain myself. The good relationship we had with the terminal operator, the Singapore Cruise Centre (SCC) Private Limited also helped greatly.*”

AC Julia Sng
Commander Airport
(then Commander Coastal)

“The well-being of our officers remained one of top concerns as I was mindful of the immense level of stress that each and every individual officer was facing during this period. Our officers understood the gravity of the problem, the need for the heightened checks and most importantly, they were all committed to the cause. Airport Command also worked closely with our strategic partners, the Civil Aviation Authority of Singapore (CAAS) and Changi Airport Group (CAG), to ensure that security was tightened whilst maintaining world class levels of service. We were certainly glad that CAAS and CAG were supportive of our security initiatives and acceded to our requests readily. The publicity and awareness created over MSK escape had also helped to sensitise travellers on the ongoing security operations. While some travellers might have experienced some inconveniences, we were glad that the general feedback was that they understood and appreciated what we were doing.”

AC Tan Poh Kee
Director Enforcement (retired)
(then Commander Airport)

From the Practitioners

- Commitment, Mindset and Teamwork

“I was a freshly minted Sergeant deployed at Singapore Cruise Centre for less than a year when one day, whilst performing my usual counter clearance duties at the arrival side of the checkpoint, my Senior Assistant Commander instructed me to close my counter and proceed to the departure hall for an urgent briefing. We were given an official brief on the situation and were reminded to be extra vigilant when carrying out our duties. Mas Selamat's photo was shown to officers and we were tasked to do negative fingerprint validation for all travellers. The system proved to be a very effective and useful equipment for identity verification.”

SSGT Aidi Abdullah
Coastal Command

“Due to the heightened security checks, traffic build-up at Tuas Checkpoint was inevitable. We were fighting fire at all zones. Officers were trained to multi-task so as to provide one-stop service. Besides vehicular inspection, I also had to perform finger-print screenings on all departing travellers. I must say that then-Commander Mr Wong Kong Wa was an excellent leader who motivated us and kept us going. ICA officers work 24/7 at the front line of Singapore's borders, while we are assigned with different tasks; we have one clear mission, which is to keep our borders safe and secure. Though our contributions in ensuring the safety and security of the State may not be measured in terms of dollars and cents, we can certainly be proud of ourselves, as ICA officers. To sum up the MSK episode using one word, I would say it is “Unity”. We did it together.”

CI(1) Herwan Pani
Tuas Command



Train cabins searched thoroughly



Additional stations erected for fingerprint screening at Tuas Checkpoint

“ In my opinion, there was little need for any special motivation for ICA officers during this trying period – the sense of camaraderie was very strong despite the difficulties we encountered. I would like to advise all officers, especially new officers joining the ICA family, to discharge your responsibilities to the best of your abilities. We did not do anything exceptional or special in an attempt to prevent MSK from departing illegally through the checkpoints. Rather, we simply did our usual duties with exceptional focus and diligence. This focus and diligence should be ever present whenever we are on duty.

”
 SClI Wang Khai Wah
 Woodlands Command

“ During this difficult period, our officers frequently had to make sacrifice to ensure proper checks and the traffic continue to flow. To lead by example, I would forgo my meal breaks and rest times so that my cargo officers could go for theirs without compromising the efficiency and effectiveness of our security checks. This small price paid off as I noticed that my officers carried out their duties conscientiously even when the going gets more challenging. One of the key learning points which ICA officers should take away is the importance of mindset when carrying out our duties. When we check a vehicle, we should assume that the vehicle could be hiding some contrabands and approach it as such. Such a mindset will keep us alert, which is critical when the going gets tough such as the MSK saga.

”
 ClI Sasitaran S/O Manikam
 Woodlands Command

“ We approached all our searches with an intensity and focus based on the assumption that every vessel had something concealed within it. Every compartment of the vessels were opened and searched. While the work was tough, the determination and persevering spirit of my team paid off. We worked very closely with the Police Coast Guard (PCG) to share information, improving the efficiency and effectiveness of our operations manifold. Often times, our officers had to work additional hours due to the stepped-up checks. Our then-Commander, Ms Julia Sng, often came down personally to talk to us. During her visits, she regularly brought along refreshments, which we really appreciated.

”
 INSP Mukhtar Musha Balwan
 Coastal Command

In Closing ...

With the arrest of MSK by the Malaysian authorities on 1 April 2009, the stepped-up security checks at the border checkpoints finally came to an end. Though it was an incident that we wish had not happened, there were valuable lessons that we could learn from it. From the onset, it was an episode that was changing rapidly with many uncertainties as the event unfolded. This called for decisions to be made quickly as time was of the essence in responding to security incidents of such a nature. As the days passed, it became apparent that it was a long-drawn battle and the sustainability of our operations became one of the key considerations. More permanent solutions such as the re-opening of OWC were implemented to address the travellers' concerns without comprising security. Ample focus was also placed on the morale and well-being of our staff to ensure that they could cope with the increased demands of their jobs. As the months went by, we continued to keep a close tab on the ground morale and situation, and recalibrated the operations appropriately, with no let-up in our mission to ensure that MSK did not leave the border checkpoints. We held this line till the day MSK was officially announced to have been re-arrested.

“Different people respond to stress differently. I do not think there is a “one size fits all” solution to manage it. My advice to officers who might face similar situations in the future would be to focus on what makes you feel calm and in control, and not get into a situation where you feel overwhelmed. Reframe the issues faced and try to view stressful situations from a more positive outlook. Keep things in perspective and learn to adjust standards in accordance to the situation at hand.”

SUPT Chua Sze How
Deputy Commander Tuas



“The MSK incident showed that teamwork can surmount all challenges. During any crisis, it is important for the team to stay focused and clearheaded. There will, unavoidably, be a lot of noises from the external environment that could distract and derail the team's efforts. Therefore, it is important for the team to stay committed to their efforts and press on till the goal is reached. Do not underestimate the power of a team.”

SUPT Kelly Lim
Deputy Director PAIA

“The incident proves that our offices are really resilient. We could really feel the ICA-centric mindset that MSK should not leave through our checkpoints. We sprang into action really quickly, we modified our processes to suit the situation and had a never-say-die attitude throughout. This was in the face of extreme stress, fatigue and difficult members of the public. The key thing to remember in challenging times like these is to gather the officers together and allow the officers an avenue through which they can relieve their stress. The officers must know that they are not in it alone and that everybody is working towards a common goal.”

”

AC Angie Wong
Director Corporate Communications



ICA pressed on as the first and last line of defence

“The MSK incident proved to be a very challenging period. ICA had to ensure that MSK did not leave Singapore through the checkpoints. This meant that every traveller, irrespective of gender, had to be closely scrutinised. All conveyances leaving Singapore had to be searched in case MSK was hiding in one of them. I am proud to say that all ICA officers rallied to the cause and gave their 100% support. As the days went on, some agencies stood down their operations but ICA pressed on as we are both the first and last line of defence. Eventually ICA's MSK operations lasted for nearly one and half years. I am glad to say that we stood the test of time and the ICA officers were ever vigilant and continued to give their best despite the prolonged length of the operations.”

”

SAC Bhopinder Singh
Director Operations

Learning Points

ICA officers performed extremely well despite the tremendous pressure and we could attribute this success primarily to three qualities that we value as an organisation. First, **Crisis Leadership** – as we can see from the actions taken, and gather from the interviews made, crisis leadership is a quality that is not limited to a selected few or members of the top echelon in the organisation. Instead, it is a quality that can be present at the different levels of the management team or supervisors. It is one of the positive traits that keeps an organisation agile, resilient and robust in the event of a crisis. Second, **Emergency Preparedness** – the MSK incident underscores the importance of contingency planning and exercises during peacetime so that the organisation is able to respond decisively and

quickly, in a coordinated manner. This is a strength that has to be imbued in each and every officer as we never know when a crisis will happen and when it will end. Third, **Teamwork** – every officer is a valuable member of the organisation and collectively, we form a team as we know we can do a lot more than the sum of individuals' contributions. It is the thread that brings the people together for the singular purpose of achieving a larger good for the organisation. The MSK incident has uncovered the potential of what ICA officers are capable of and has made us grow stronger, both at the individual and organisation level. We did it, as one team – ICA.

Special thanks to the following officers for making this publication possible

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and all officers who generously shared their memories with us