FROM CHAOS TO CONTINUITY

From the frontline to the front page: reflecting on the ICS 20-year anniversary

20 YEARS

INTEGRATED CARGO SYSTEM

Readers of this article in our industry 20 years ago will have their own story about the introduction of the Integrated Cargo System (ICS). These are my indulgent reflections.

On 12 October 2005, the Australian Customs Service replaced legacy import processing systems overnight in a high-risk change which severely disrupted Australia's import trade, delaying Christmas stock and forcing the freight logistics industry to work around the clock to keep goods moving. I was fortunate to work alongside dedicated industry colleagues, using political channels, media engagement and direct contact with government to help steer the recovery — an experience that underscored both the challenges we faced and the resilience of our sector.

CUSTOMS SYSTEMS EVOLUTION

Customs was unquestionably a global leader in systems development, introducing the Customs Online Method for Preparing Invoice Lodgeable Entries (COMPILE) in the mid-1970s for entry creation, with later enhancements including Electronic Data Interchange (EDI) transmissions and Electronic Funds Transfer (EFT) payments.

I read a Customs annual report from 1974 when John Howard was Customs Minister which mapped a vision for COMPILE to expand as a full port community system using telegraphic transfer of data. This showed incredible vision of the government and industry pioneers of the day. It is a shame this was not fully implemented.

My personal story begins, working at two Sydney-based freight forwarding and customs brokerage businesses (and completing my customs broker studies at TAFE), before I had my first career change and joined Customs in 1986, becoming a "screener" risk assessing paper manifests and air waybills.

During the 1990s, the first of these paper-based processes was replaced by an EDI application called Air Cargo Automation (ACA). While no IT expert, I developed an in-depth understanding of this system and after a secondment to the AFP, was responsible for writing intelligence generated profiles.

When Sea Cargo Automation (SCA) was implemented, I was promoted to head up the industry-facing customs help desk; not just seeing in the implementation of this system, but also supporting users of COMPILE, EDIFICE and ACA. I witnessed the difficulties of implementing these systems, particularly SCA, which introduced complex data-matching to COMPILE to generate electronic releases. The saving grace was a phased rollout.
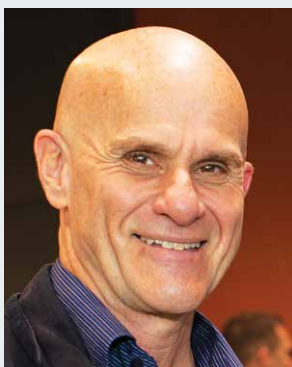
> "The final ICS design featured overly complex reconciliation and diagnostic elements.... flaws previously fixed in legacy systems were reintroduced."

Paul Zalai, director, Freight & Trade Alliance / secretariat, Australian Peak Shippers Association

Each shipping line, cargo terminal operator and freight forwarder came on board as ready, resulting in a hybrid of manual and electronic reporting allowing time for trial-and-error to refine diagnostics and reconciliation processes.

In 1998 I moved on to a border policy role based in Canberra. During this period the Cargo Management Strategy (CMS), which evolved into the Cargo Management Re-engineering (CMR) project, introduced legislative changes including strict liability offences and the Infringement Notice Scheme. From a tech perspective, planning began to replace COMPILE's dedicated lines and EDI transfers via the Tradegate network with a new phenomenon called the "Internet" underpinned by digital certificates for security and non-repudiation of messaging.

In 1999, the federal government advertised for a vacancy of the then COMPILE User Representative, which later became the ICS User Representative and I threw my hat in the ring.

THE ICS ROLLOUT AND EARLY FALLOUT

After delays in ICS implementation and three years in the contracted role, as *Lloyd's List DCN* headlined on June 16, 2005: "*Zalai takes the hot seat*," I was seconded back as the ICS User Representative to oversee the systems rollout.

Upon my return I had serious immediate concerns.

The final ICS design featured overly complex reconciliation and diagnostic elements. Corporate knowledge had been lost; flaws previously fixed in legacy systems were reintroduced. I called it a "recipe for disaster", a phrase captured by a cartoon in the April 14, 2005 edition of *Lloyd's List DCN*.

Unfortunately, those fears were realised.

When ICS went live on 12 October 2005, the impact hit the airfreight sector first, quickly spreading to wharves as data reconciliation failures plagued the system. Diagnostic tools performed poorly, and cargo stalled.

Mainstream media latched onto the crisis. I appeared on Channel 9 (interviewed by the late Peter Harvey), *ABC News*, and talkback radio (including with Alan Jones). Stories ran in *The Australian*, *AFR*, and more.

Industry was scrambling, and Customs officers were working around the clock to deploy "workarounds" to maintain minimal cargo flow.

GOVERNMENT INTERVENTION

On the evening of 17 October 2005, I received a somewhat intimidating call at home from the Office of the Prime Minister and Cabinet with a gentleman saying, "I understand that you are an ex-Customs officer, and a troublemaker", to which I responded, "you are half right, I am an ex-Customs officer". The conversation then took a more constructive tone with questions asked about what was needed to get the crisis out of the media spotlight.

I flew to Canberra the next day for meetings that led to then Customs Minister Chris Ellison forming the Industry Action Group (IAG). I was appointed co-chair alongside Phil Burns of Customs. Phil and I did not particularly like each other, but we put our differences aside and step-by-step guided the recovery.

Lloyd's List DCN captured the mood with the headline: "No rapid relief for CMR headache – Zalai" (November 10, 2005). By then, industry impacts were mounting. *LLDCN* reported "Australia's largest single importer, Coles Myer, has had around 4000 containers delayed on the wharves." Compensation talk was in the air.

On 8 December 2005, *LLDCN* quoted my list of outstanding enhancements and referenced the critical decision on when to switch off COMPILE to allow some
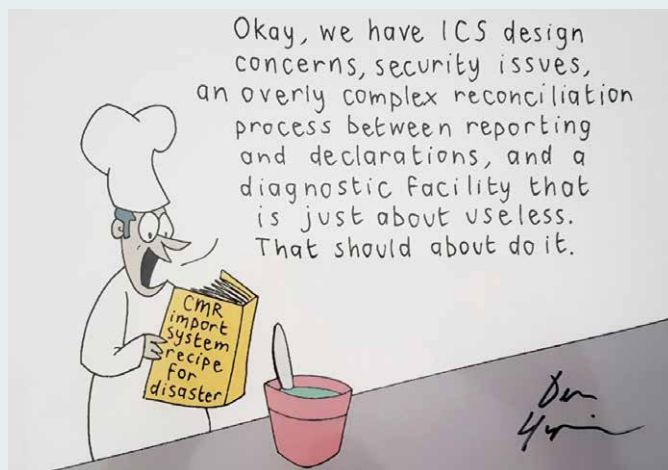
continuity for third-party software to catch up. Customs was under pressure to resolve issues before the Tradegate COMPILE network contract expired on 3 February 2006.

RECOVERY AND REFORM

The IAG was effective and my secondment ended by March 2006, but I continued as IAG co-chair. Minister Ellison reported that Customs had received $525,000 in compensation claims from 171 parties, mostly for storage and detention fees, a small tip of a large iceberg. By June 2006, new Customs CEO Michael Carmody supported two major freight industry-backed reforms: **US-style 24-hour cargo reporting and EU-style "Authorised Economic Operator" accreditation which** could lead to Australia again having world-leading Customs systems.

WHAT FOLLOWED

The ICS debacle left deep scars. The Carmody era became one of consolidation. Enhancements stalled. The 24-hour pre-load model was explored in detail during 2007 but did not proceed. My personal belief is that Customs at the time, simply did not have an appetite for further systems changes.

In 2012 Caroline and I founded Freight & Trade Alliance (FTA) with a determined vision on how we could best support industry into the future. This timing coincided with Michael Pezzullo taking over the reins from Carmody which introduced true innovation, including the Trusted Trader Programme, echoing the AEO concept from 2006.

After a period of stability, the next big supply chain disruption arrived as the global pandemic. Michael Outram at the Customs helm had the unenviable task of closing, and re-opening, Australia's borders. Michael was a true leader, who ensured close engagement with industry.

THE FUTURE

At Commissioner Outram's valedictory address on 16 October 2024, he said the ICS, mainframe system was based on an 'ancient' code that very few now understand, and handles around 1.2 billion transactions a year. It needs urgent investment before we face unscheduled ICS technical failures.

Customs is again considering the eventual replacement for the ICS. This must go beyond simply replicating current functions to harness modern technologies, including artificial intelligence, machine learning and advanced data analytics to manage the rapidly increasing volume of e-commerce and also anticipate threats, secure supply chains and streamline compliance processes in real time.

It will require genuine collaboration between government and industry, bold innovation and a commitment to remember the lessons of the past so we avoid repeating costly mistakes. ■

Paul Zalai is a director at the Freight & Trade Alliance and secretariat at the Australian Peak Shippers Association