Cargo and Culture: the
Customs Integrated Cargo System (A)

On Wednesday, 12 October 2005, the Australian Customs Service (Customs) switched on its new Integrated Cargo System (ICS). Although the system was more than two years late and more than eight times over budget, Customs was confident that ICS would perform well. "There's nothing to indicate the system won't be able to cope with anything thrown at it on October 12," a Customs spokesman said on 11 October.[1] ICS was intended to replace COMPILE, a 20-year old system, and was part of an overall Customs re-engineering project that had begun almost a decade earlier.

By Friday, with the new ICS system basically unusable, Australian ports were facing massive backlogs of freight. The new system was taking up to 40 minutes to carry out transactions that had taken seconds with COMPILE. The container clearance rate at Sydney's Port Botany dropped from about 2,000 containers a day to 1,200, leading to a pile-up of containers on the docks and the turning away of ships carrying medical supplies, pharmaceuticals, computers, and toys for the Christmas season.[2]

Eric Roozendaal, New South Wales Ports Minister, said that the additional handling, storage, and other fees were costing businesses in NSW around $2 million per day[3] and claimed that "the federal government is just not being realistic about the damage it's doing to the NSW economy."[4] Similar problems were encountered at ports in Brisbane, where entry-processing time dropped from one every ten minutes with COMPILE to only six per day with ICS,[5] and Melbourne, where Customs officers waived quarantine

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[1] Hayes, Simon, and Chris Jenkins, "Customs Turmoil After Cargo Chaos," *The Australian*, 8 November 2005, p 29

[2] Stapleton, John, and Simon Hayes, "Crisis Talks on Ports," *The Australian*, 21 October 2005, p 1

[3] Australian Broadcasting Corporation, "Customs at Odds with Industry Groups on Freight Hold Up," television program transcript, 25 October 2005 (Rachel Carbonell, reporter)

[4] Scott, Steven, "Backlog Choking Port Botany," *The Australian Financial Review*, 24 October 2005, p 7

[5] O'Malley, Brendan, "Containers Pile Up as Software Bug Bites," *Brisbane Courier Mail*, 27 October 2005, p 7

and security requirements in an effort to reduce the backlog, until protests from public and private organisations forced a return to normal procedures.[6]

Two weeks after ICS was switched on, a Customs insider said, "The new software has problems producing manifests[7] for agents and importers. We don't know what's causing the problem yet, so we don't know how to fix it."[8] As the crisis deepened, people both within and outside Customs suggested a return to COMPILE, at least for sea freight. But Customs Chief Executive Lionel Woodward insisted that, "There is no choice but to use the ICS. [The COMPILE system] was a patched-up one, with its genesis in the 1970s and will be redundant from next year."[9] Customs staff noted, however, that support for the old system could be extended, and Customs spokesman Simon Latimer said that industry proposals to revert to "limited COMPILE arrangements" would be considered at a round table convened by Federal Customs Minister Chris Ellison.[10] With the Leader of the Opposition and the Shadow Minister for Customs calling on the Prime Minister to "sack the incompetent Minister for Customs"[11] and containers continuing to pile up, the search for both immediate fixes and long-term answers began.

The origins of the ICS

ICS was the cornerstone of the Cargo Management Re-Engineering project, which Customs had initiated in 1996. ICS was designed to replace at least seven different systems, operating under the umbrella name COMPILE. COMPILE ran on a Univac mainframe; Univac had told Customs it would not support the software after 31 December 2005, nor the hardware after February 2006.

An internet-based model, replacing an electronic data interchange (EDI)-based system, ICS was seen as a world leader. Customs Chief Information Officer (CIO) Murray Harrison said, "[ICS] is the most important, and certainly most exciting, government-industry e-business development under way in Australia by miles. Literally by miles. It's real-time, online business, transacting cargo across the border, via the Internet. No one anywhere is doing that." [12]

ICS would facilitate all aspects of involvement by Customs in the import and export process. It was intended to enhance Customs' risk management assessment at the border, as well as assisting industry to track cargo movements across the world more efficiently. ICS thus spanned the two major functions of Customs: controlling the movement of goods across the border, and expediting that movement of goods. It would integrate a range of activities that could involve up to 20,000 electronic transactions per hour; it was also designed to meet the greatly increased border security

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[6] Barker, Garry, "Wharves in Disarray as New Customs IT Cargo System Fails to Deliver," *The AGE*, 21 October 2005, p 1

[7] Detailed documentation of individual cargo items and their shipping method and route.

[8] Connors, Emma, and Kean Wong, "Customs Staff Propose Return to Old System," *The Australian Financial Review*, 26 October 2005, p 3

[9] Ibid

[10] Ibid

[11] Beazley, The Hon Kim C MP, and Senator the Hon Joe Ludwig, Joint Statement, 27 October 2005

[12] Bushell, Sue, "Custom-Built, IF NOT TO Order?," *CSO Online*, 10 May 2004, www.cio.com.au/index.php?id=1287603396, visited 6 November 2005

needs introduced after the 9/11 terrorism attacks in New York. This included a "zero tolerance" for data variations.

As described later by one industry analyst, "The department commissioned scoping studies, industry stakeholders were invited to express their fears and aspirations, and Customs officials scoured the globe examining the experience of other countries. All the right intentions to build a robust, cost-effective, world-class system that would last for decades were there."

Development of the new system, tailored to Australian Customs Service needs, would be outsourced. In the analyst's words "…outsourcing was sold by those holding the reins of government as something that would deliver great efficiency, flexibility and renewal of what was perceived as a stale, slow, ineffective and stubborn public service."[13] In 1997, Customs outsourced its IT operations, and transferred its IT staff, to consultancy firm EDS.

One submission to a Senate Legal and Constitutional References Committee inquiry into ICS noted that following the outsourcing, "Direct contact on technology and system development matters was no longer available as before. The relationship became more formal and the ability to brainstorm with Customs technology experts lost. This resulted in a much reduced level of consultation over planned changes or new services, particularly at a technical level."[14] Although EDS defended itself by arguing that its only responsibility was to its customer, Customs, one observer – who, like most IT professionals who might have to work with Customs in the future, declined to be identified – called outsourcing of Custom's basic IT capabilities "a really bad idea" that had led to some of the more "egregious flaws" in the design of ICS.[15] Another observer commented, "I reckon [the problems] started back when EDS started as outsourcer and Customs staff were pushed over. Those people left with an enormous amount of knowledge. From then on it was hard for industry to convince Customs of what was needed. Customs had a strong view, and they wanted to convince industry it was wrong."[16]

Jenney Peachey, the national director of the Customs office of business systems, which was responsible for ICS, noted that IT was among the most significant drivers for the re-engineering project. "We had, in effect, over seven different systems that do what this ICS will do," Peachey said. "Some of them were built in the late 70s, and they've survived the Y2K[17] and the GST[18] changes, but only just. They were all built in different codes, they all had various levels of documentation, and in fact some of them had none. … Those systems were becoming very clunky; they were not going to last forever."[19]

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[13] Bajowski, Julian, "Analysis: Still Nothing to Declare," *CSO Online,* 18 November 2003, www.cio.com.au/index.php?id=1794286917, visited 6 November 2005

[14] Braue, David, "Details, Details," *CSO Online*, 4 February 2003, www.cio.com.au/index.php?id=1136111426, visited 6 November 2005

[15] Chinnery, Kevin, "CMR: Cause and Effect," *Lloyd's List DCN*, 8 December 2005, p 8

[16] Hayes, Simon, "Cargo Overload," *The Australian*, 5 December 2005, p 1

[17] Y2K refers to the changes that were required in many computer systems so that they could handle dates after 31 December 1999

[18] GST refers to the Australian Goods and Services Tax, the imposition of which required changes in many computer systems

[19] Bushell, 10 May

Design flaws and deadline delays

Some ICS design flaws showed up relatively soon after development work began, The COMPILE system had used a combination of "fuzzy matching" and fault tolerance to compensate for inconsistencies in import data, much of which was created in countries where English was not the native language.

In ICS, if a single digit or character in an item number were misplaced, the entire transaction would be rejected and all the information had to be re-entered.

The starting date for the new system did not arrive until more than five years after the initial outsourcing contract with EDS had been signed. Between 1997 and 2002 no real development work was done on ICS; when the system failed to meet its initial deadline in 2001, "the cause was not that EDS had done a bad job in so far as it had not done anything at all."[20] EDS and Customs agreed to re-tender ICS to the market, and in February 2002 a contract was awarded to a consortium including IBM, Computer Associates, and Teradata. The cost of the system was estimated at $35 million,[21] with a delivery date of July 2003. One complication for any change in delivery date was that the new system would have to be validated by new legislation; another was that clients would be legally required to have their own software ready to interface with ICS.

By November 2003, four months after the scheduled delivery date, Customs Chief Executive Woodward admitted to a Senate Estimates hearing that the project had already spent $88 million, and had been re-budgeted to cost $145 million. ICS users, mainly customs brokers and forwarders, were likely to be asked to make up the increased cost via an additional levy on top of existing cost recovery arrangements; the costs would ultimately flow to purchasers of imported goods. Mark Bishop, then the Shadow Customs Minister, said

> "God almighty … it shows a lack of adequate preparation at the beginning, continues to demonstrate poor oversight and discloses a lack of understanding within the department of the complexity of the task. … So what have we got [for $145 million]? Delays, blowouts and potential levies and an inability to find further savings."[22]

Three months later, in February 2004, actual spending on ICS was estimated at "$135 million and counting" and the delivery date had been extended to July 2005.[23] In preliminary testing, the software took two hours to process 500 transactions; on an average day, Customs needed to process between 100 and 300 transactions per minute. The front-end Customs Connect Facility could handle only 20 concurrent users before exhibiting severe performance issues or crashing completely; thousands of users would need to use the Facility simultaneously when it went live.[24].

The ICS development team used a number of advanced technologies, including J2EE, Web services, and MQ series, which were new to them. Customs Chief Information Officer Harrison saw the project as value for money, as well as leading edge. "The US is spending more than $1.5 billion on it, [and] they're some way off it. We started from

[20] Bajowski, 18 November

[21] Bajowski, Julian, "Customs' Systems Bill Explodes to $145 million – Users Face Levy," *CSO Online,* 4 November 2003, www.cio.com.au/index.php?id=269021369, visited 6 November 2005

[22] Ibid

[23] Connors, Emma, "Customs Close to Meltdown," *The Australian Financial Review*, 10 February 2004, p 53Connors, 10 February

[24] Ibid

a fairly advanced position, but we're going even further,"[25], he said. Harrison acknowledged that there had been some problems with the early development of ICS, but believed that the worst of them were well behind the project by the time the deadline was extended again, to 12 October 2005.[26]

Ongoing human resource issues accompanied ICS's technical challenges. With the arrival of EDS, many of Customs' specialised IT staff had left government, often taking jobs with Customs clients. As one analyst noted, this meant that "Customs is now in the unenviable position of having some of its customers know more about how elements of its business process works than it or its outsourcer does."[27] Ongoing turnover meant that "almost none of the people grappling with the implementation of CMR are the ones who took the crucial decisions some years ago."[28] At the project management level, national director Peachey was responsible for Customs operations in Victoria as well as for ICS; she left Customs in May 2005 for a position with the Victoria Police. Commenting on human resource practices within Customs, the president of the Customs Officers Association said,

> "The bottom line is that the culture of this organisation under its current management is one that looks for easy solutions and they won't accept criticism. They aren't interested in hearing what is hard and necessary and what is eventually going to be the best way to do it."[29]

Compulsory compliance

Freight industry users relied on commercial software suppliers to create the interfaces between their internal systems and ICS. Customs legally compelled its clients to interface with ICS, and threatened severe legal punishments for IT vendors if they were unable to interface when ICS was ready. Each time the "go live" date was changed, Customs had to move to amend legislation to extend the deadline for compliance. In order to create and test interfaces, software developers needed to have access to the ICS software, but were frustrated when they received "tranches of ICS code so immature and incomplete they were not even worthy of alpha test status."[30]

Describing his firm's experience working with the ICS software, one developer said,

> "We don't know whether the problem is ours or theirs half the time, because the ground upon which we're building our platform is itself both unstable and changing. So you get an error, and you say, 'Well, I think this is their error, but maybe it's mine, and I don't really know'. And I don't have any way of talking about it, because I can't speak to a developer. None of the people that are managing the project know about the technical aspects of things. So critically, the real cost of development is an order of magnitude higher than it ought to be because you have to test everything many times, for every single version of the Customs system, because it's changing, it's unstable, and the whole nature of the thing is still under development while you're trying to build to it."[31]

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[25] Bushell, 10 May
[26] Ibid
[27] Bajowski, 18 November
[28] Chinnery, 8 December
[29] Bushell, 10 May
[30] Bajowski, Julian, "Customs Cargo System Delayed Again," *CSO Online,* 20 October 2003, www.cio.com.au/index.php?id=269021369, visited 6 November 2005
[31] Bushell, 10 May

Customs CIO Harrison defended the Service's development approach, saying,

> "What we actually thought we were doing was providing [the commercial developers with] a system that was still to be tested by us, as well as by them [the commercial developers] during that period. So the expectation was higher than what we had intended to do. The reaction was: 'Hang on, what is this? This doesn't work.' Well we knew it didn't work, but we were trying to respond to the need to give it to them anyway, as opposed to waiting longer to correct some of those things we knew were already wrong."

The director of one software firm, which had endured a series of "half baked" releases of ICS software, said,

> "You can't deliver software for user acceptance tests when you haven't got it working yourself. … [Developing ICS] will never be nice, because it's one of those horrible change processes and it's hard for people to cope with because people have been working with a stable system for 25 years. Business process re-engineering around [Cargo Management Re-engineering] is dramatically large."[32]

Throughout the development process, Customs met regularly with the commercial developers as a group. To some, these meetings did not appear designed to encourage frank exchanges of views. "No developer wanted to be the first to stick his hand up in front of his competitors to say he could not be ready," one participant noted. "One-on-one meetings could have been much more revealing of problems, at a far earlier stage."[33]

In the months leading up to the October 2005 deadline, brokers, shippers, forwarders, and other ICS users had told Customs that, if they did not receive software from the commercial developers well beforehand, their companies would not have time to make the transition to using the new software. When Customs stuck to the 12 October date, some users suggested a parallel approach, with both old and new systems available simultaneously; Customs persisted with the "big bang" approach, insisting that it was not technically feasible to operate COMPILE and ICS at the same time.[34]

As 12 October approached, many commercial software developers became more and more concerned about the condition of ICS. Although the final version of the software had been promised for July, major changes were made to the system as late as 6 October, meaning that the commercial developers could not begin final testing until then. In turn, delivery of software to freight industry users was delayed until just before, and in some cases after, the cutover date. Even after the last-minute work, ICS was delivered still incomplete in many areas.[35]

The rollout

Problems with ICS were reported within days of its installation, as users got over their unfamiliarity with the software and began to recognise its performance and design problems. The ICS help desk recorded almost 24,000 calls and emails in the 19 days beginning 12 October; average waiting time on hold for these calls was 22 minutes. One airfreight forwarder that normally processed 300 imports a day was able to do only

[32] Bajowski, 20 October
[33] Chinnery, 8 December
[34] Ibid
[35] Chinnery, Kevin, "Work Starts on ICS Fixes as Customs Admits Its Errors," *Lloyd's List DCN*, 3 November 2005, p 3

100 with the new system; the remainder were piling up in the company's warehouse. The executive director of the Customs Brokers and Forwarders Council of Australia said the new system was causing his industry to lose $2.6 million per day.[36] "We said in September we were scared witless it wouldn't work," the executive director said. "We were told we were doomsayers. We have been told that as late as October 11 the system was not in a position to be cut over, but they did it anyway."[37]

Soon Apple Computer, which was shipping its iPod Nano and iMac G5 products to retailers in Australia, reported delivery delays, as did Toys R Us, which reworked its advertising and promotion plans to account for anticipated shortages of DVD players and game consoles. Car deliveries fell three days behind; car manufacturers sent staff to the docks to work 24 hours a day processing documents by hand. A distributor commented, "We have to run our stock pretty tight, so if this [delay] goes on for an extended period we'll be in deep trouble. We have run out of stock on some key items, so the clock is definitely ticking."[38] One national camera retailer said the "shelves are bare" of new product, which was sitting at the airport awaiting clearance.[39] As their business slowed, warehouses and freight movers began to lay off staff.

The impact of ICS was felt at every port in Australia, but Sydney, the country's busiest port, was particularly hard hit. Freight handlers complained that some goods were being cleared too quickly, pointing to shipments of ammonium nitrate and other sensitive or dangerous goods that were leaving Port Botany before the paperwork was finished. Although the new Cargo Risk Assessment component of ICS was not operating as intended, a Customs spokesman said everything was "risk assessed" before it left the port. "We don't necessarily need all the paperwork," he noted, "to complete a full and comprehensive risk assessment about a cargo."[40]

Within a few days, Customs had applied temporary fixes and developed work-arounds, including spreadsheets and web pages, to facilitate cargo clearance. Clearance rates increased, but were still less than half the pre-ICS rate. Opposition Customs spokesman Senator Joe Ludwig noted, however, that

> "The reality is that much of the clearance work is today going back to the pre-computer age of pen and paper, with Customs staff across the nation diverted from their regular tasks to assist in manual clearance."[41]

Moreover, once the clearance bottleneck was removed the problem shifted downstream to storage, because another bug in ICS disrupted notification to importers that their cargo had been cleared. Transport operators began reassigning trucks to other tasks rather than losing money by having them wait for freight that was not known to be cleared; even if the logjam suddenly broke, there would be no trucks to move the freight.[42] Almost a month after cutover, a senior manager of the Brokers and Forwarders Council said,

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[36] AAP Newswire, "Government Should Face Savage Criticism Over Ports, Union Says," 25 October 2005AAP
[37] Barker, 21 October
[38] Hayes, Simon, "Xmas Imports Stuck in Customs," *The Australian*, 1 November 2005,
p 39
[39] Ibid.
[40] Clark, Andrew, "Ports Crisis Sparks Security Alert," *Sydney Morning Herald*, 27 October 2005, p 7
[41] Wong, Kean, "Customs Pledges a Quick Fix," *The Australian Financial Review*, 27 October 2005, p 10
[42] Barker, 21 October

"Some work-arounds have significant cost associated with them. Some of these things are just diabolical. We are a long way from getting out of the woods. The system still doesn't work, it's only working now because of these manual work-arounds."[43]

As the problems continued, Customs CIO Harrison refused to meet with the media, leaving NSW regional director David Collins to hold daily press conferences. "Things we tested, which worked well, in reality didn't work well," Collins said. "We are well aware that this is causing a lot of pain and heartache."[44] Summoned to testify at a Senate Estimates Committee hearing, Harrison said that ICS was working fine when it went live. "We have what we would term trivial incidents outstanding, as you would [even] with any software package you buy off the shelf," Harrison said. "Those trivial incidents were numerous but the reality is in relation to the functionality that was critical to the performance of the ICS, it was all available on October 12."

Harrison claimed that the main problem was brokers filing incorrect information. With the system's security-sensitive "zero tolerance" of variations in data, if a single digit or character in an item number were misplaced, the entire transaction would be rejected. Information could not be amended on the fly; making changes required the user to withdraw the transaction and re-enter it, which then resulted in the transaction going to the end of the processing queue. "We expected teething problems, we knew there would be problems," Harrison told the Committee.

"We did not know the nature and we did not know the extent. We certainly did not know that a major issue would be the incorrect insertion into the system of information that would clog up the machine."[45]

Acting Prime Minister Mark Vaile also placed responsibility for the problems with users, saying, "I think the point needs to be made that, firstly, there are about 6000 containers sitting on Australian wharves that have been cleared by Customs that are awaiting removal by their agents, by the brokers. It would be very helpful if agents and brokers who have containers that are already cleared by Customs [would] move them out to help unblock the logistical supply chain." Importers and freight forwarders, however, said they were unable to identify their own containers on the list of those cleared by Customs.[46]

With ports still choked, and lawsuits threatened, following the installation of ICS, Customs Minister Chris Ellison said that he was not responsible for the disruption, because he had received repeated assurances from Customs officials that the system was ready. "The advice I got," Ellison said, "and I got this from industry as well, was that the software developers indicated they were ready to go. … Customs' advice to me was that the old system was [overly] patched and it could not continue. No-one has ever put it to me that the ICS shouldn't happen."[47] "You rely on computer experts," Ellison explained, "and if the minister had to be an expert himself, you'd be battling to find someone qualified."[48]

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[43] Hayes and Jenkins, 8 November
[44] Ibid.
[45] Hayes and Jenkins, 8 November
[46] Fisher, David, "Ports Chaos Takeaway Plan," *Daily Telegraph*, 28 October 2005, p 13
[47] Wong, Kean, "Customs Minister: I Relied on Experts," *The Australian Financial Review*, 7 November 2005, p 3
[48] Ibid

However, Customs Chief Executive Woodward said that Customs "knew there would be problems" with ICS and that "significant difficulties" were identified early in its implementation.[49] A senior industry participant said that the "straightforward" minister Ellison had been misled.

> "While the minister has got industry around to talk about this [concern about a lack of system testing] at round tables since February, there has been a singular lack of consultation by Customs – the consultations have been a monologue, not a two-way discussion about our concerns. The minister was misinformed by Customs and the [commercial] software developers, who were living on a promise from Customs that the Customs part would be ready by July for an October 12 rollout."[50]

Although he would soon change his mind, in the early days of the difficulties Minister Ellison said he was considering shutting down the new system. "I've told Customs all stops have to be pulled out to fix this problem," Ellison said. "If Customs is not able to address [the problems], we'll roll back the system."[51] Five days later, under attack by the opposition, Ellison had reached a decision.

> "I am confident that this new system will be in place and will serve the industry and the community very well," he said.[52]

The decisions

As weeks went by with little improvement in the backlog at Australian ports, support grew for reverting to COMPILE, or at least for extending its life. Although there was a legislative requirement for all Customs clients to connect to ICS by December, there was concern within the Department that the new system did not in fact have the capacity to handle the load. Customs' legal unit advised that COMPILE could continue to operate "while there is a need to supplement import reporting by brokers and forwarders."[53] Eventually Minister Ellison confirmed that COMPILE would be brought back online to work alongside ICS. He pledged that there would be no danger to national security.[54] Importers were told that problems were likely to persist until the middle of 2006. Moreover, some components of the new system would never be as fast as the system it replaced. "There was an expectation," said a spokesman for an informal coalition of ICS users, "with a new $200 million-plus system, that it would be quicker than the legacy system, not slower, and that's not the case."[55]

Some regarded the decision about COMPILE, as welcome as it was, as an indication that all was not well. A spokesman for the Customs Brokers and Forwarders Council said,

> "There must be some problems they are not telling us about. I have serious doubts that Customs has told us the truth regarding ICS. We think there could still be some major

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[49] Ibid

[50] Wong, 7 November

[51] Stapleton and Hayes, 21 October

[52] AAP Newswire, 25 October

[53] Connors, Emma, and Kean Wong, "Crippled Ports Revert to Their Old Customs," *The Australian Financial Review*, 2 November 2005, p 1

[54] Porter, Jonathan, "Obsolete System to Help Clear Backlog," *The Australian*, 27 October 2005, p 2

[55] AAP Newswire, "Government Facing Tens of Millions in Customs Compensation Claims," 6 December 2005

failings in the system, because we have asked for changes, changes that Customs have told us are minor technicalities, yet they still haven't been done."[56]

With the technical issues being assessed, attention turned to compensation for damages suffered as a result of the implementation of ICS. A Melbourne lawyer noted that the full extent of the compensation claims was not yet clear. "I think it would be in the tens of millions, probably upwards of that," he said, "but the problem is a lot of damages won't come out for some time." Most of the damages would be for additional charges, both from ports and from container companies, to brokers, forwarders, and ultimately importers. In addition, the lawyer said, "There will be costs associated with people missing out on business, there will be costs for people who have had to work overtime because the system was working slowly. There is also likely to be some stress claims because people have worked very long hours in very frustrating circumstances, I should add, to try and get goods cleared."[57]

The managing director of a customs broker said, "This debacle has the potential to be the largest class-action [legal suit] ever taken against the government, where damage was done unnecessarily with a system released despite industry warnings." One distributor said that the delays had caused him to lose at least $400,000 in repeat orders from retailers,[58] while a building company noted that "A five-day delay on a $30 million building can cost $25,000, and a client will seek to recover that."[59] Minister Ellison announced that Customs would consider compensation for "business hardship caused by identifiable system failures."[60]

In December 2005 the Federal government announced that Customs had been given an additional $100 million to fund the completion of the CMR project and the Department's increased workload. The announcement revealed that consultancy firm Ernst & Young had been engaged to do an emergency review assessing "activities, costs and ways to improve Customs' financial position." The review was not made public. It was also announced that retiring Australian Taxation Office commissioner Michael Carmody would replace Customs chief executive Lionel Woodward as of 1 January 2006.[61]

Looking back over the previous two months, a Brokers and Forwarders Council spokesman said in mid December,

> "There are going to be a lot of dislocations in the industry as a result of the 12th of October. It's not a date that was a shining light in Customs modernisation programs."[62]

[56] Connors and Wong, 2 November

[57] AAP Newswire, 6 December

[58] Wong, Kean, and Peter Roberts, "Customs Faces Compo Bill for IT Mix-up," *The Australian Financial Review*, 28 October 2005, p 15Wong and Roberts

[59] Wong, Kean, "Minister Faces Grilling Over Ports Chaos," *The Australian Financial Review*, 31 October 2005, p 5Wong, 31 October

[60] Wong and Roberts

[61] Connors, Emma, "Customs Gets $100m Relief to Fix Crisis," *The Australian Financial Review*, 7 December 2005, p 1Connors, 7 December
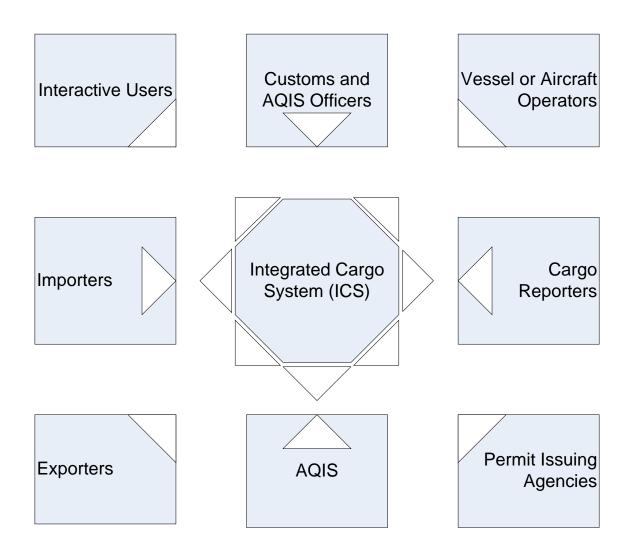
[62] AAP Newswire, 6 December

Exhibit 1:

ICS Governance Arrangements

	Forums	How often met	Description
Executive level	Deputy Chief Executive Officer Briefing (Customs)	Monthly	Provided high level overview and management of the CMR project.
	CMR Management Board[182] (Customs/vendors)	Six weekly and as required	Provides strategic advice and management to the CMR project. Executive decision making forum with ability to approve major decisions and funding allocations.
	Audit Committee	Three monthly	Chaired by the DCEOs. Provides advice on all matters relating to audit, evaluation, risk management and fraud control.
	CMR SES/Directors Transition Group (Customs)	3-4 weekly	Brought together all areas of Customs (including regions) to discuss CMR issues.
	CMR Executive Group (Customs/vendors)	Weekly	Meeting between Customs and Consortium project managers.
Project level	ICS Working Committee (Customs/vendors)	Weekly	To discuss progress of both the Consortium and Customs against project schedule.
	Project Team Meetings (Customs)	Weekly	To discuss progress and emerging issues.
	Project Team Meetings (Consortium)	Weekly	Communicate schedule conditions and significant issues at the project and team levels to the Consortium project manager.
	Infrastructure Planning and Provision Meeting (Customs/vendors)	Weekly	Coordinate EDS' provision of infrastructure environment with the ICS schedule and design.
	Integration Assessment Team Meeting (Customs/vendors)	Weekly	Integrate ICS and CCF products. Discuss progress against project schedule and agree on impact/action required.
	ICS facilities and accommodation meeting (Customs/vendors)	Weekly	Discuss facility and accommodation requirements.
Change Control	Change Control Board	Weekly	To ratify change requests for functionality, data model and project schedule.
	Change Advisory Board	3-4 weekly	Reviews, assesses and approves changes.
	Change Planning Committee	Weekly	Decision rights to schedule changes.

Source: "Customs' Cargo Management Re-engineering Project," Australian National Audit Office Report No. 24, 2006 - 2007

Exhibit 2: A suggestion

The ICS User Context Diagram

Interactive Users	Customs and AQIS Officers	Vessel or Aircraft Operators
Importers	Integrated Cargo System (ICS)	Cargo Reporters
Exporters	AQIS	Permit Issuing Agencies

Source: http://customs.gov.au/webdata/miniSites/sdg/overview/the_ics_Context.htm