

# Integrated Cargo System Production Report July 2009

**Date Prepared**: 11 August 2009

Prepared by: Business Solutions Branch, Information Technology Division

# **Production Report – July 2009**

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# 1 Yearly Overview

## 1.1 System Activity

#### 1.1.1 Summary

Activity Summa	Total	
Exports	Inbound Messages Received by ICS	4,395,301
	Outbound Messages Sent to Clients	5,505,321
Imports	Inbound Messages Received by ICS	22,364,278
	Outbound Messages Sent to Clients	75,852,356

The table above shows activity based on the volume of messages sent by Industry to ICS (Inbound) or sent by ICS to Industry (Outbound), which are counts of messages from the ICS perspective. As such amendments, duplicates, requests for retransmission, etc are included. For example, an inbound Full Import Declaration, which was then amended twice during the reporting period, would appear as 3 Inbound messages.

Request for Status messages submitted by Customs as part of the Heartbeat Monitoring activity (approx. 240,000 messages) are <u>included</u> in the above figures, showing under Exports.

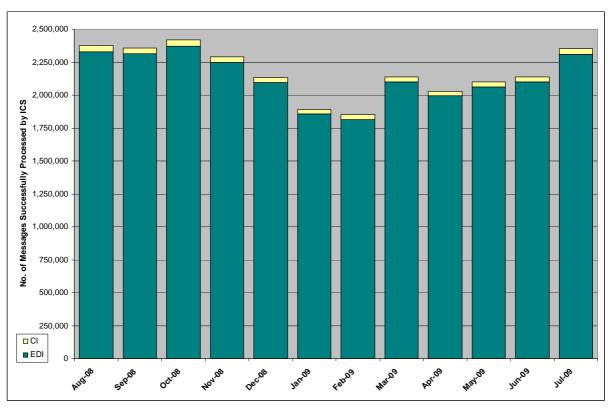
As at midnight **Wednesday 5 August 09**, the number of messages successfully processed by ICS since implementation was:

Exports	20,403,237
Imports	83,986,605
Total	104,389,842

#### Note:

"Successfully Processed" messages are messages received by ICS, either by EDI or CI, for which a response message was sent, including error messages.

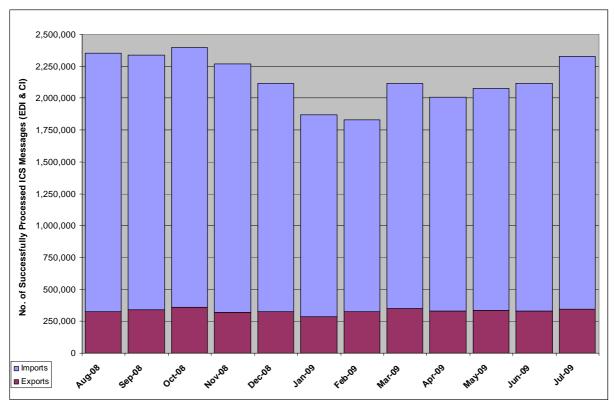
#### 1.1.2 Monthly Successfully Processed ICS Messages (EDI and CI)



#### Note:

"Successfully Processed" messages are those received by ICS, for which a response message was sent, including error messages.

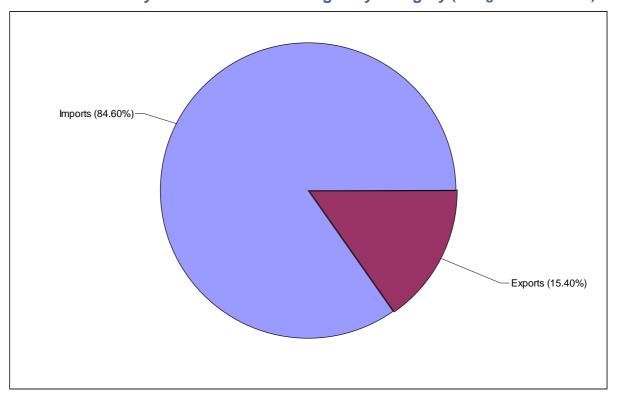
## 1.1.3 Monthly Successfully Processed ICS Messages (Imports and Exports)



#### Note:

"Successfully Processed" messages are those received by ICS, for which a response message was sent, including error messages.

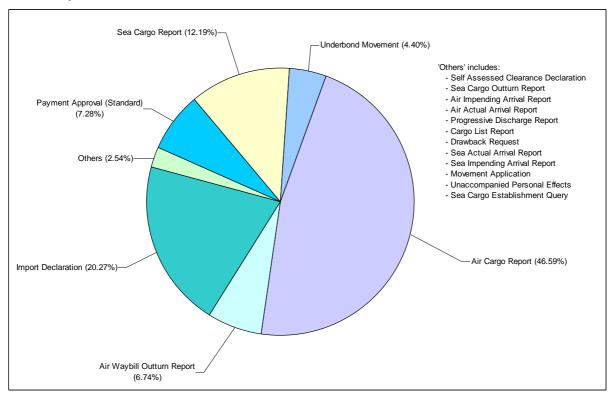
#### 1.1.4 Successfully Processed ICS Messages by Category (1-Aug-08 to 31-Jul-09)



#### Note:

"Successfully Processed" messages are those received by ICS, for which a response message was sent, including error messages.

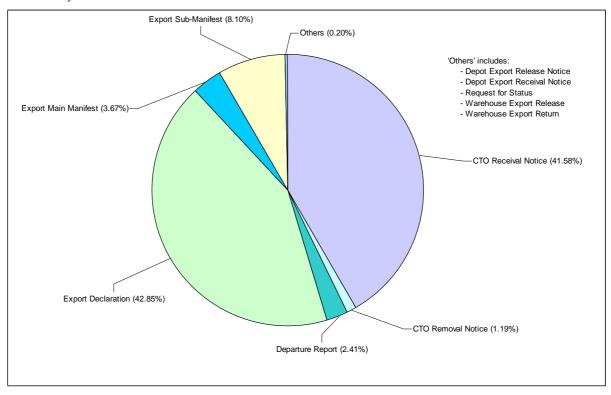
# 1.1.5 Imports Successfully Processed ICS Messages by Type (1-Aug-08 to 31-Jul-09)



#### Note:

"Successfully Processed" messages are those received by ICS, for which a response message was sent, including error messages.

# 1.1.6 Exports Successfully Processed ICS Messages by Type (1-Aug-08 to 31-Jul-09)



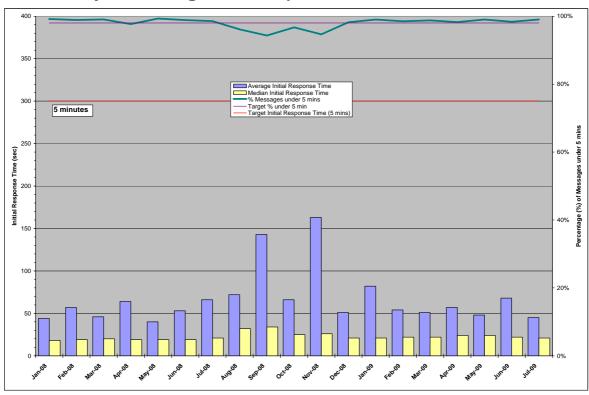
#### Note:

"Successfully Processed" messages are those received by ICS, for which a response message was sent, including error messages.

#### 1.2 EDI Message Initial Response Times

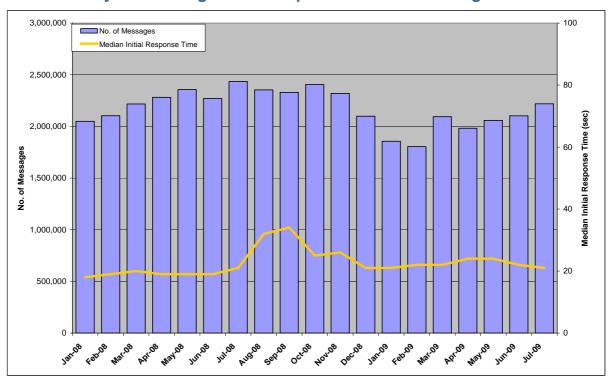
Initial Response time is defined as the time from when the message is received to the corresponding initial advice message leaving Customs.

#### 1.2.1 Monthly EDI Message Initial Response Time



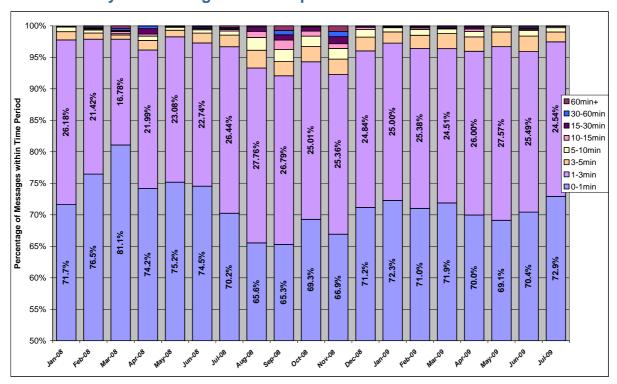
The chart above shows Initial Response time for all messages as an average and median for the month, as well as the percentage of messages under the target of 5 minutes.

## 1.2.2 Monthly EDI Message Initial Response Time and Message Volume



The chart above shows the median Initial Response Time by month for all messages, as well as the number of messages received.

#### 1.2.3 Monthly EDI Message Initial Response Time Breakdown

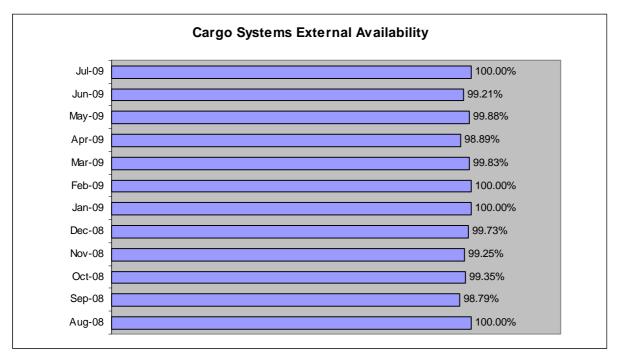


The chart above shows the percentage of all messages whose Initial Response time fell within the defined time periods. Initial Response time is defined as the time from when the message is received to the corresponding advice message leaves Customs.

## 1.3 Service Availability

#### 1.3.1 Service Available – External

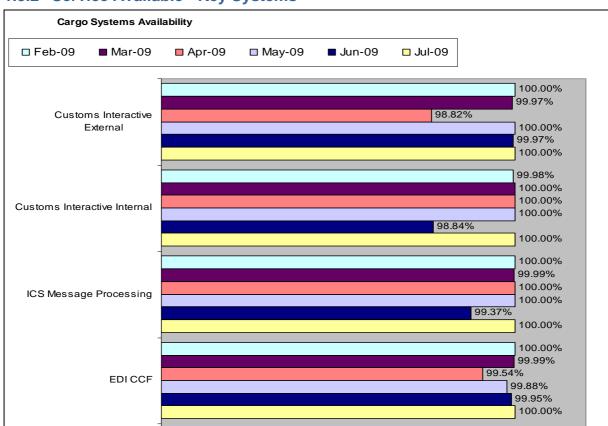
Average availability of services to Customs clients for the 12 months 1-Aug-08 to 31-Jul-09 was 99.58%.



#### Note:

Electronic cargo systems availability to Customs clients - Target is 99.7% (availability against a typical work day).

#### 1.3.2 Service Available - Key Systems



For details of Service Issues and Impacts refer to Section 0, page 18.

#### 1.3.3 Service Fully Operational

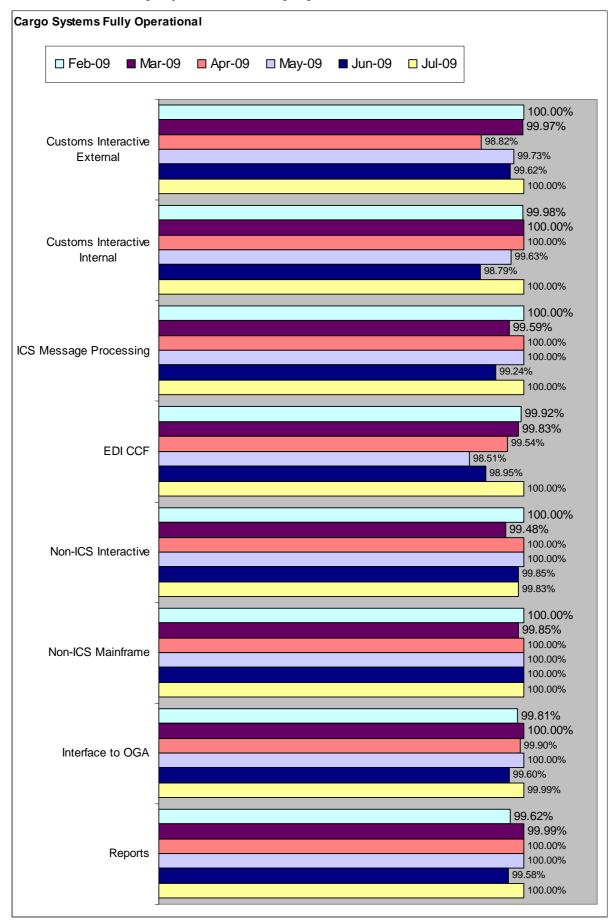
Average operational effectiveness of services for the 12 months 1-Aug-08 to 31-Jul-09 was 98.53%.



The chart above shows the percentage of time the electronic cargo systems were operating at expected performance, with no visible disruption or reduction in expected service for clients.

As an example, a slow down in processing of Customs Interactive or EDI messaging transactions due to a Customs network communications congestion would be treated as not operating at expected performance, even though message processing continued and the service was still available to clients.

#### 1.3.4 Service Fully Operational - Key Systems



For details of Service Issues and Impacts refer to Section 0, page 18.

# 2 Monthly Detail (July 09)

#### 2.1 System Activity

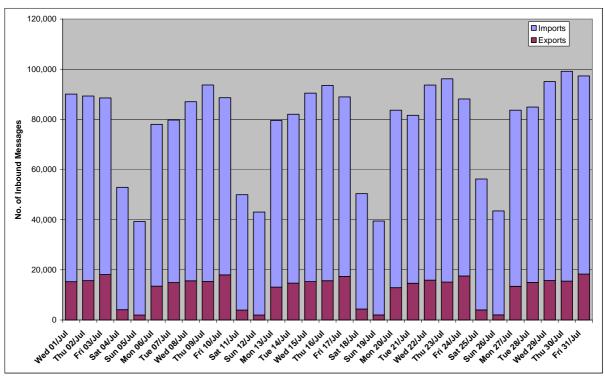
#### **2.1.1 Summary**

We	Total	
Exports	Inbound Messages Received by ICS	381,303
	Outbound Messages Sent to Clients	477,580
Imports	Inbound Messages Received by ICS	2,026,522
	Outbound Messages Sent to Clients	6,812,891

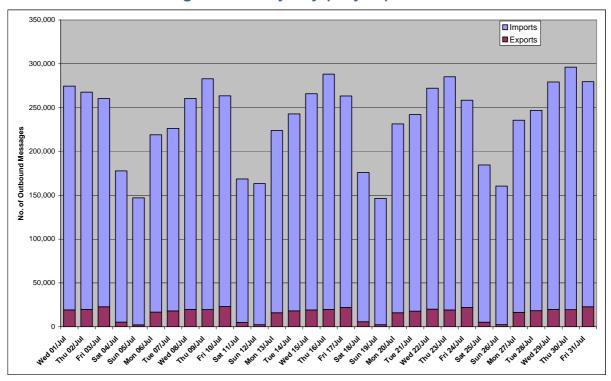
The table above shows activity based on the volume of messages sent by Industry to ICS (Inbound) or sent by ICS to Industry (Outbound), which are counts of messages from the ICS perspective. As such amendments, duplicates, requests for retransmission, etc are included. For example, an inbound Full Import Declaration, which was then amended twice during the reporting period, would appear as 3 Inbound messages.

Request for Status messages submitted by Customs as part of the Heartbeat Monitoring activity (approx. 20,000 messages) are <u>included</u> in the above figures, showing under Exports.

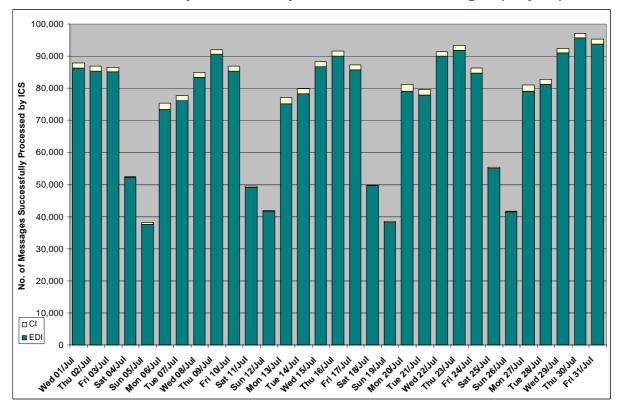
#### 2.1.2 Inbound Message Volume by Day (July 09)



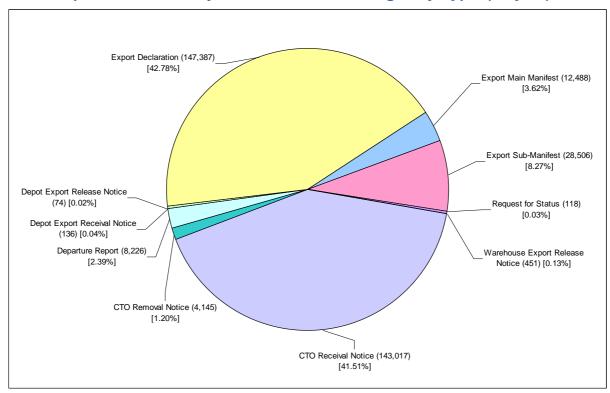
#### 2.1.3 Outbound Message Volume by Day (July 09)



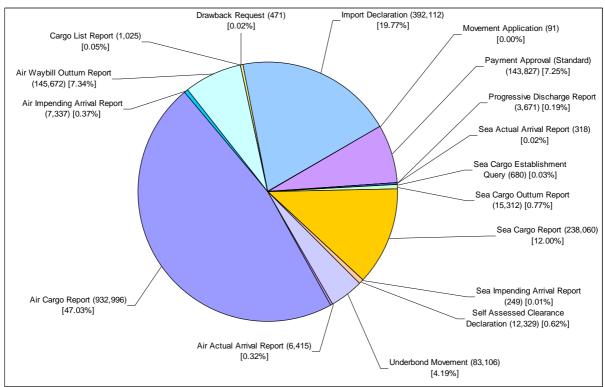
#### 2.1.4 Production - Daily Successfully Processed ICS Messages (July 09)



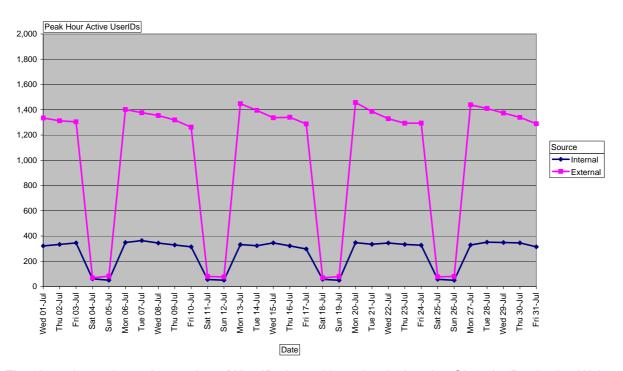
#### 2.1.5 Exports Successfully Processed ICS Messages by Type (July 09)



## 2.1.6 Imports Successfully Processed ICS Messages by Type (July 09)

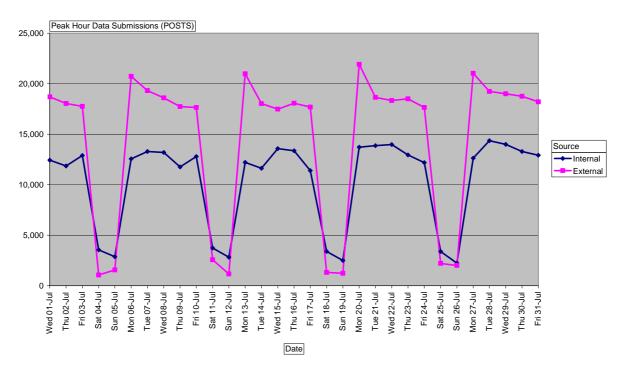


## 2.1.7 Customs Interactive Daily Peak Hour Active Users



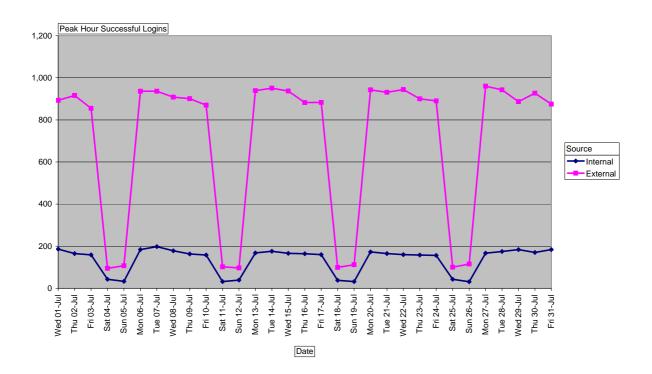
The chart above shows the number of UserIDs logged in and actively using CI on the Production Web Servers in the Peak Hour during a given day.

#### 2.1.8 Customs Interactive Daily Peak Hour System Activity



The chart above shows the number of data submissions (Posts) in during the Peak Hour a given day and is indicative of the System Activity/Load. An example of "Data Submission" would be a user clicking the "Save" button on an ICS screen.

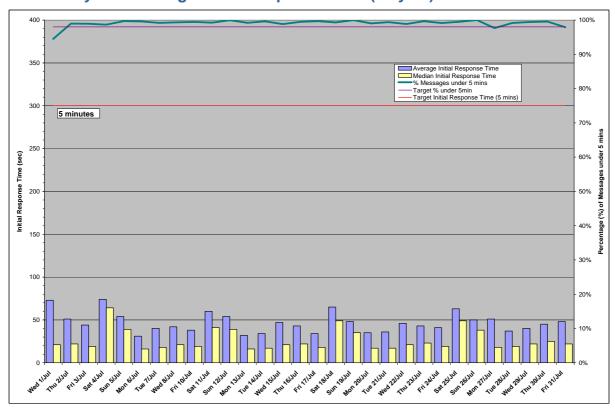
## 2.1.9 Customs Interactive Daily Peak Hour Successful Logins



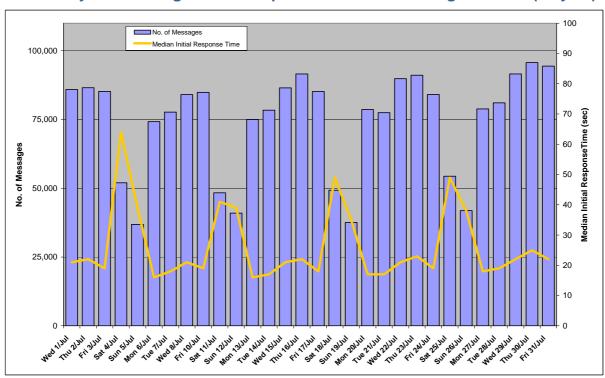
The chart above shows the Successful Logins to the Production web servers during the Peak Hour for a given day.

#### 2.2 EDI Message Initial Response Times

#### 2.2.1 Daily EDI Message Initial Response Time (July 09)



## 2.2.2 Daily EDI Message Initial Response Time and Message Volume (July 09)



# **Service Issues and Impacts**

2.3 Outages

Date	Duration	Description
July 2009		
None		
June 2009		
Tues 30 June 09	1 hr 28 mins	A process on the ICS mainframe failed which prevented inbound messages from being passed from the CCF to the ICS. When the process was restarted, all queued messages were processed normally.
Wed 10 June 09	1 hr	(as above)
Fri 5 June 09	1 hr 4 mins	(as above)
May 2009		
Wed 27 May 09	56 mins	A system user account on a CCF server expired causing database connection failures shortly before a scheduled outage on 27 May, resulting in all inbound EDI messages failing for 56 minutes. The account was reactivated and set to a non-expiring account to prevent future reoccurrences. An additional slowdown of 10.25 hours occurred while the previously failed messages were reprocessed
April 2009		
Wed 15 Apr 09	3 hrs 15 mins	The F5 switches in the gateway had a failure which caused an outage to CI external users. It also caused problems in downloading EDI reference files and AQIS connection. Service was restored after failing over to the backup switches.
Tue 7 Apr 09	4 hrs 30 mins	Telco had a hardware failure which made the internet unavailable at BHDC. The secondary Telco had internal configuration issues which stopped it from working. Service was restored after the configuration issues were rectified by the back up Telco. EDI and CI External were affected during this period for all clients except Direct Connects.
March 2009		
Tues 17 Mar 09	15 mins	A load balancer in CCF failed, causing messages to queue up. These messages were resent when service restored. No messages were lost.
February 2009		
None		
January 2009		Outage required to rectify a deployment problem that affected usage of the
Wed 14 Jan 09	15 mins	Underbond movement screen in ICS.
December 2008		
Wed 10 Dec 08	2 hrs	Issues during deployment of an ICS upgrade resulted in an overrun of the deployment window.
November 2008		
Thu 27 Nov 08	3 hrs 30min	EDI CCF slowed and then stopped due to file systems filling up.  Housekeeping jobs were run to clear the filesystems, and the backlog processed.
Mon 17 Nov 08	2 hrs	An underbond transaction was submitted that started to loop. This resulted in ICS triggers failing, and ICS outbound messages stopped. The EDI processing was restarted, and the significant backlog of messages were processed.
October 2008		
Wed 1 Oct 08	30 min	A scheduled deployment took 30mins longer than expected, resulting in an additional 30min outage.
Wed 8 Oct 08	4 hrs 12 mins	Export declarations could not be successfully lodged, as a result of an issue with the new ICS release. A code fix was deployed to correct the issue.
September 2008		
Mon 8 Sept 08	8 hrs 30 min	A failed maintenance job resulted in significant queuing in CCF EDI. This was exacerbated by problems in newly deployed industry software, resulting in excessive numbers of invalid messages being sent to Customs. Messages from two companies using this software were disallowed, to reduce the queuing. Messages finally cleared at 5:54pm. Work was then completed to address the problems in the maintenance job, and the job re-run.
August 2008		
None		

2.4 Not Performing as Expected

2.4 Not Performing as Expected			
Date	Duration	Description	
July 2009			
None			
June 2009			
Wed 24 June 09	19 mins	Slow processing in QSP resulted in delayed EFT receipting.  Mainframe operating at 100% of CPU, but with no business impact to	
Tues 16 June 09	57 mins	users.  Exchange rates were successfully loaded into the ICS, but exchange rate	
Wed 10 June 09	9 hrs 40 mins	files were not sent to EDI reference file users.  Intermittent issues with EDI message processing resulted in 2726 valid	
Mon 1 June 09	7 hrs	messages being rejected by the CCF with no response being sent to the user.	
May 2009			
Tue 12 May 09	8 hrs	Exception Error when conducting searches for EDNs. During this 8 hour period, this search was the only aspect affected and was resolved by a deployment of ICS in the regular outage window.	
April 2009			
Sat 4 Apr 09	10 hrs 30 mins	The border routers in the gateway had a hardware failure which stopped the flow of messages to clients connected to router 2 (TNT, FedEx & 1 Stop). Clients were failed over to their secondary communications whilst while service was restored.	
March 2009			
Mon 2 Mar 09	5 mins	Messages were delayed due to a node failure in CCF.	
Mon 9 Mar 09	54 mins	Messages were delayed in CCF due to issues with the sql agent. The agent was restarted, which resolved the problem.	
Tue 24 Mar 09	30 mins	ICS messages delayed 30 mins due to a large volume of incoming messages from AQIS. This was due to the AQIS link being down and message volumes accumulating.	
Thu 26 Mar 09	8 hrs	EXAMS running very slowly. This was due to network issues within the Baulkham Hills Data Centre.	
Fri 27 Mar 09	8 hrs	EXAMS running very slowly. This was due to network issues within the Baulkham Hills Data Centre.	
Mon 30 Mar 09	3 hrs 30 mins	TARCON running very slowly. This was due to network issues within the Baulkham Hills Data Centre	
February 2009		ICC	
Thu 19 Feb 09	5 hrs	ICS reports were unable to be sent to the internal reports repository, due to lack of space. Old files were removed to free up space, and jobs re-run.	
Tue 17 Feb 09	24 mins	The ICS CI External & Internal interface was unavailable for 24 minutes.	
Various	N/A	There were several instances of CCF servers failing during the month, that resulted in small numbers of EDI messages being corrupted. In some cases these were recovered, however in other instances clients were required to resend messages. This issue is due to known ongoing infrastructure problems.	
January 2009			
Wed 21 Jan 09	13 hrs	CCF outbound messages were affected by maintenance in the CCF environment. 3,500 messages that were affected were resent.	
Wed 14 Jan 09	10 hrs	Users were unable to access underbond movements in ICS, due to a deployment issue.	
December 2008			
Thu 11 Dec 08	8 hrs 40mins	ICS Teradata reporting was delayed due to the failure of the CA7 batch scheduler on the ICS mainframe.	
Wed 10 Dec 08	5 hrs	5% of EDI inbound messages were being rejected due to an introduced code defect which wasn't handling a particular special character sequence in a message (a single quote). An emergency change was deployed which corrected the problem.	
November 2008			
None			
October 2008		A user rupping a transaction multiple times used a similiarnt portion of	
Wed 1 Oct 08	30 mins	A user running a transaction multiple times used a significant portion of available resources, causing a slowdown across all other applications. These transactions were cancelled and performance returned to normal. Changes have been made to ensure this transaction can not be run multiple times concurrently.	
Thu 9 Oct 08	7 hrs	Some users experienced problems submitting Export Declarations under certain conditions. A code fix was applied to resolve this issue.	
Sat 11 Oct – Mon 13 Oct 08	60 hrs	ICS and EXAMS running slowly, and in some cases transactions timing out. No root cause determined, but appeared to be connectivity issues, not application issues. Problems resolved on Monday.	
Thu 23 Oct 08	2 hrs 24mins	Delays in ICS processing due to a looping underbond transaction.  Transaction withdrawn, and processing times returned to normal.	
[	l .	1 Transaction miniarami, and processing times returned to normal.	

Date	Duration	Description
Fri 31 Oct 08	30 mins	Delays in ICS processing due to a looping underbond transaction.  Transaction withdrawn, and processing times returned to normal.
September 2008		
Sun 28 Sept 08	8 hrs	Connectivity issues due to faulty hardware in network. Router replaced and service restored.
Mon 22 Sept 08	1 hrs	Delays in outbound messages due to maintenance jobs not running.
Fri 19 Sept 08	30 mins	Delays in outbound messages due to very heavy load from INTERCEPT reporting
Fri 12 Sept 08	11 mins	Delays in messages of 11mins from ICS due to very heavy load
Mon 1 Sept 08	2 hrs	Delays of up to 10 mins for cargo movement due to queuing on the CCF transform node. Restarting WDI resolved the problem.
August 2008		
Mon 18 August 08	5 hrs 23 mins	Delays of up to 10mins for EDI outbound message processing, due to WDI experiencing issues in the CCF transform step. Restarting WDI resolved the problem.
Mon 11 August 08	3 hrs	CCF Transform delays for EDI outbound message processing, due to WDI issues in the CCF transform step. Restarting WDI resolved the problem.
Thu 7 August 08	2 hr 27 mins	Slowdown for EDI message processing, particularly Air Cargo reports, due to contention. Messages were set to process serially until the backlog had cleared.

#### End of document