# Best Practice Guide

A Guide for Industry users of the Customs Connect Facility (CCF) and the Integrated Cargo System (ICS)

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# 1.    Introduction

This best practice document is intended to guide high-volume industry users of the Customs Connect Facility (CCF) and the Integrated Cargo System (ICS) with suggestions which will help optimise processing and will improve response times for cargo lodgement, movement and clearance for all users.

The Department of Home Affairs provisions IT resourcing based on historical usage and estimated future user requirements to meet expected peak demand.

Peak demand is normally in "Core" hours between 08:00 and 17:00 from Monday to Friday, as shown in the graph below of a typical day, with other times labelled as "Non Core".

The spikes in Non Core usage are when Industry Clients send EDI message streams to be processed.
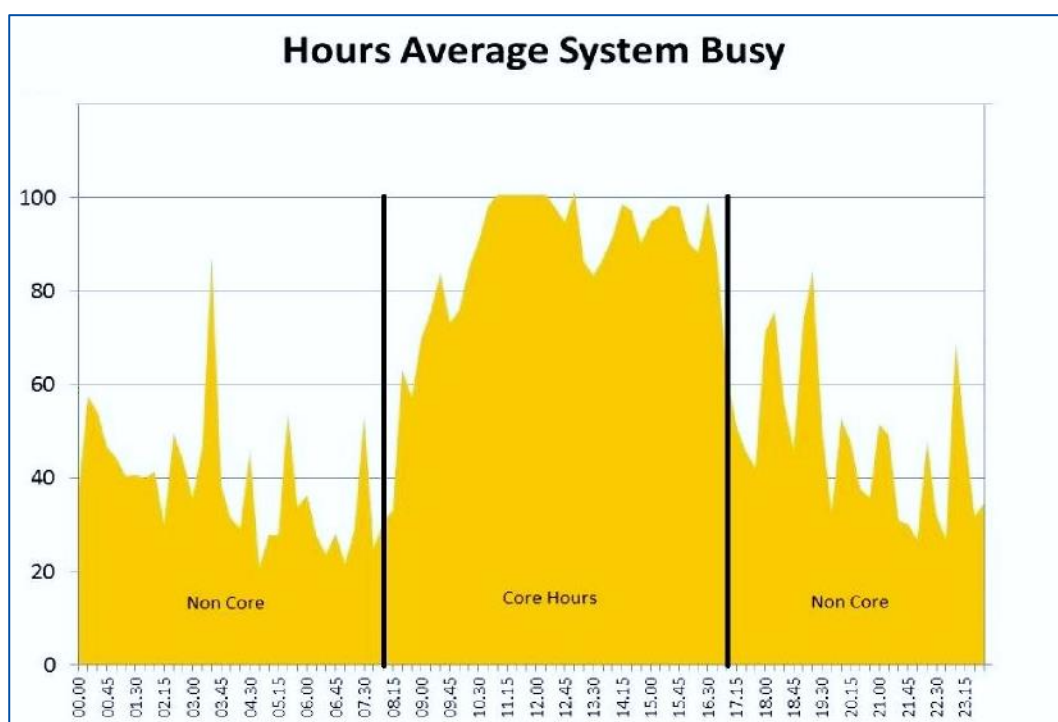


As with all IT resources there are times when peak workload demands can cause systems to become overloaded and in the case of the CCF and the ICS this can result in longer response times for EDI messages.

We believe that by identifying when the ICS is least busy and using these quieter times will maximise resources available for processing during peak demand and thereby minimise response times.

There are also several other suggestions which will help to optimise efficiency of processing and to minimise the need for additional re-processing of messages when changes are reported.

# 2. Best Practice Guidance

Where your organisation has a business requirement to send a large numbers of EDI messages the following is recommended:

## 2.1. Pacing of EDI Interchanges with Single Messages

- Interchange transmissions should be limited to no more than 300 individual messages per minute.
- This will allow for transmission and processing of up to 18,000 messages per hour and will improve reliability of turnaround times of message processing for all users.

## 2.2. Pacing of EDI Interchanges with Multiple Messages

- Overall message transmissions should be limited to 300 per minute.
- Interchanges should contain no more than at most 100 messages, which is optimum for transmisssion.
- Transmission of such Interchanges should be limited to no more than 3 per minute when containing 100 messages each.

## 2.3. Deferral/bring-forward of non-urgent EDI Messaging

- Non-urgent EDI messages should be separately queued and transmitted for processing outside of core hours if possible. This reduces peak core hour workloads and frees up IT resources to be more responsive to urgent, time-critical workloads.

## 2.4. Deferral/bring-forward of non-urgent Cargo Reporting

- The lodging Cargo Reports outside of core hours, wherever possible, will facilitate the best utilisation of the system

## 2.5.    Check the Cargo System Status Service before Transmission

- Industry Clients are able to use the Cargo System Status Service (CSSS) web service to check queue levels before transmitting messages to the ICS. This way Industry can anticipate whether there will likely be delays in responses and possibly defer non-urgent EDI Messaging to non-core hours.

## The Cargo System Status Service
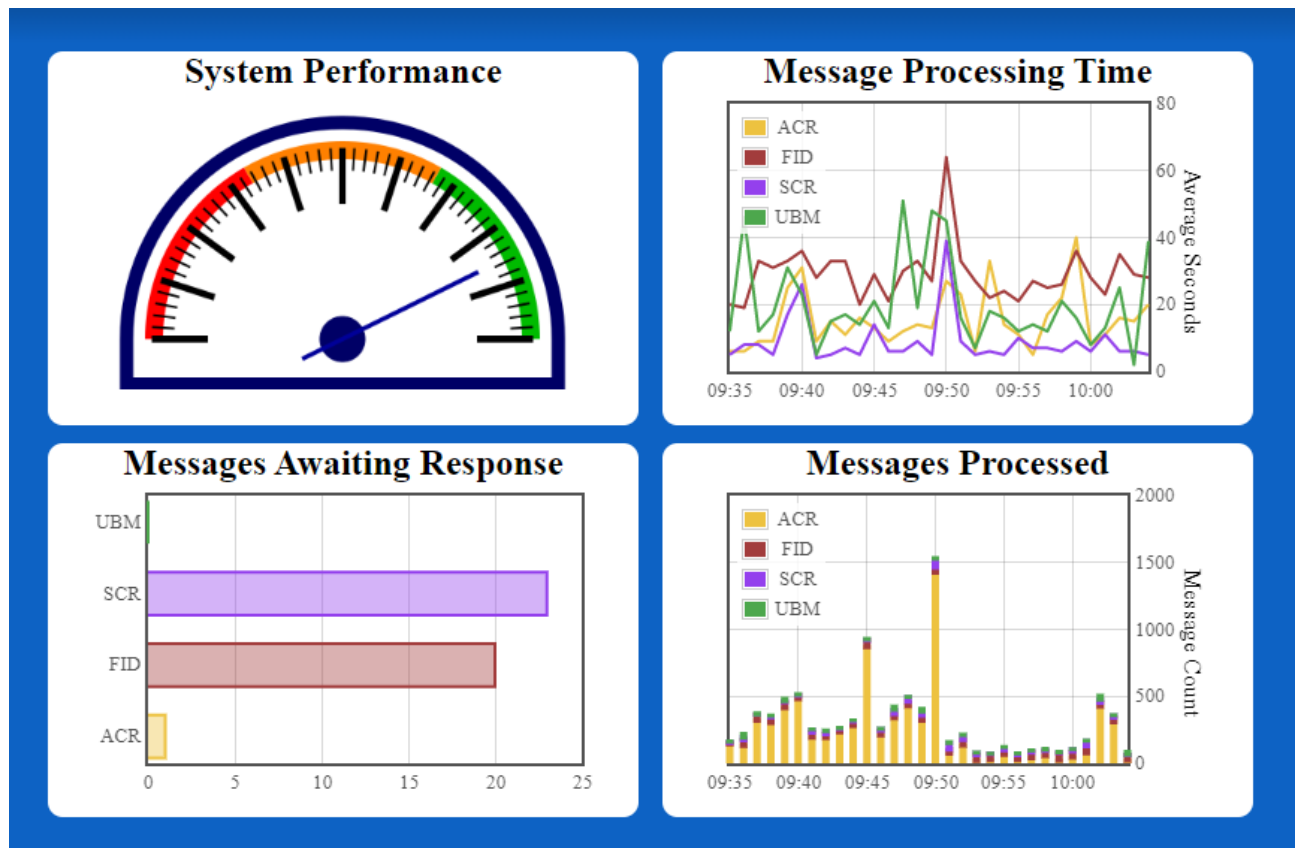


**System Performance –**

Green   = Good to submit more work to the ICS, but always throttle transmissions to 300/minute.
Orange = System is busy, please hold off submitting large quantities of work.
Red     = System is degraded, please limit transmissions if possible.

- The CSSS can be found at:
  https://www.ccf.customs.gov.au/CPS/cargoProcessingStatus.htm

## 2.6.    Changes in Industry Workloads and Timing

- If your organisation is planning to change its message work profile and/or message volumes, please inform the Department via Cargo Systems Support (CSS) or ICS Business Support. We can collaboratively assess potential impact upon the ICS and include this information into our future capacity planning processes.

## 2.7. Change in Business Practice

- There are other work practices that will aid the Department in providing a more responsive system. These are listed as following.

### 2.7.1. Report Master Air Waybill before House Air Waybill Air Cargo Reports

- There are details (Flight, Discharge Port, and Estimated Arrival Date) on Master Air Waybill cargo reports which are more accurate than those reported on the House Air Waybills under the same Master Bill. When the Master is reported, all House Bills previously reported under the same Master Bill are inspected and updated with the more accurate details from the Master Bill. Where possible we need to improve the accuracy of the House Bill details to ensure there is little variance with the Master Bill. By doing so this lessens the derivation procedures and the overall processing load on the system.

- Where an Industry Client handles the reporting of both the Master and House Bills and the data for the House Bills are available at the time the Master Bill is ready for submission, it is strongly recommended that the Master Bill be sent ahead of the House Bills. The House Bills can be sent after a small delay, say 5 minutes, to allow the processing of the Master Bill to complete.

### 2.7.2. Report Airline Code, Flight Number, Estimated Arrival Date and Discharge Port accurately on House Air Waybills

- Inaccurate detail in the above fields on a House Bill will require updating when the Master Bill is reported. Where the House Bills are reported before the Master Bill and the details are already correct, the system does not need to update the House Bill records, hence also avoiding the need to recalculate cargo status and the associated outbound messaging. With the potentially large number of House Bills under a Master Bill, there will be savings in system processing when these updates can be avoided.

# 3. Outages

In order to maintain a healthy robust system, there is a need to shut down the ICS to apply application or system updates. These shut downs are done on a regular basis to provide a familiar maintenance pattern to Industry Clients.

For application updates the scheduled outage window is 00:00 - 04:00 every Wednesday. Scheduled outages for systems maintenance are quarterly, on Saturdays between 23:00 and 04:00 Sunday. Updates are generally advised to Industry via the ICS Announcements page.