ICS Outage Report – Sunday 21 August 2011

Saturday 20 - Sunday 21 August 2011

An upgrade to Customs and Border Protection's IT Infrastructure was scheduled to occur during an outage window of 6 hours on the weekend of 20 & 21 August 2011. These upgrades necessitated an outage to components of the Integrated Cargo System (ICS) and the Customs Connect Facility (CCF) that reside or rely on the infrastructure.

Two separate changes were scheduled to be implemented and while neither change entailed a high degree of technical complexity it was known that both would require more than 4 hours to be implemented. Because of this, the changes could not occur in the routine scheduled outage window that occurs each Wednesday morning. A longer than normal extraordinary outage window of 6 hours was scheduled to run from 23:00 on Saturday evening until 05:00 on Sunday morning.

Standard functionality testing performed following the system outage flagged major issues with EDI messaging and ICS access for external clients. System problem identification and resolution processes were commenced immediately and by 08:00 am partial EDI functionality had been restored. As full EDI functionality was not restored notification was posted to advise that Phase 1 of the Business Continuity Plan (BCP) was invoked at 08.35 am with Phase 2 invoked at 09.45 am.

At 11.33 am EDI messaging problems were resolved however, as ICS access had not been restored, Phase 2 of the BCP remained in place.

ICS access was resumed at 12.35 pm. At 14.20 pm all backlogged messages had been cleared and BCP arrangements were ceased and advice was posted.

During this period, Customs and Border Protection provided support to industry through the agreed BCP arrangements and facilitating urgent cargo clearances through the Customs Information and Support Centre (CI&SC).

Technical Details

There were two separate changes scheduled for this outage window.

The first was an Initial Program load (IPL) or complete shut down and restart. This was necessary because of the number of system software updates that were due for installation.

The second change was an 'on site hardware' relocation and upgrade. Data from the old servers was mirrored across to new servers and cable relocations were necessary to bring the new servers into employment. This was the change that was identified as the root cause of the extended outage.

Investigation concluded that during the 'mirroring' of the servers, data held in the new servers suffered corruption.

A post implementation review of the changes and related incidents has been conducted. A number of recommendations have been identified for implementation as future permanent corrective actions.

Impact

During the incident CI&SC received around 140 extra cargo incoming calls. Additional CI&SC staff were brought in to facilitate the calls and clearance for urgent goods.

During the outage, the BCP was invoked for Export & Imports. CI&SC received 66 requests to process contingency files. 58 file requests were successfully processed and 8 file requests were received with errors or incomplete data.

Communication

Industry was continually notified of the incident through:
- the Cargo Support website (ICS Updates),
- emails through the Cargo Support mailing list