

# **Service Incident Report for 10Gb Link down between Chicago and Amsterdam on 01 May**

Incident Start: 2011-05-01, 13:33:00 [UTC]

Incident End: 2010-05-08, 12:48:00 [UTC]

## **Description**

ASGC detected the link between Chicago and Amsterdam down on May 1, 2011 13:34UTC. After confirmed with the carrier, the event was caused by Yellow/AC-2 submarine cable system cut. Yellow/AC-2 was partially recovered on May 8, 12:45 UTC. ASGC 10G service was back at the same time.

## **Impact**

Except the traffic between Taiwan and US-T1-BNL and US-FNAL-CMS, all communications between TW-ASGC and other Tier1 centers were switched to backup link during the 10G link down period.

## **Analysis**

Yellow/AC-2 system was broken seriously. Services of the system were all down. For there was no sufficient capacity to provide backup service for such amount of users, thus, ASGC has to wait until the submarine cable system was fixed, or partially fixed.

## **Timeline**

May 1, 13:33 UTC: Amsterdam router down.

May 1, 17:34 UTC: Carrier reported that the event was caused by submarine cable cut.

May 2, 01:18 UTC: Requested the carrier to provide backup lambda for ASGC.

May 2, 03:30 UTC: Push again for backup lambda.

May 2, 08:45 UTC: Carrier confirmed unable to get a lambda for ASGC. It would take two weeks to fix the submarine cable system.

May 3, 02:10 UTC: Request to vendor for backup link again, but failed.

May 3, 08:15 UTC: Vendor committed to recover the link on May 10.

May 8, 12:45 UTC: ASGC 10G link was lighted up. All LHCOPN traffic is routed back to 10G link.

May 8, 12:48 UTC: Carrier confirmed that the link is up again.

### **Future Plan**

Another dedicated 2.5Gb link from Taiwan to CERN would be online around August 15, 2011, serving as an online backup link (12.5Gb bandwidth in total when there is nothing wrong) for the ASGC LHCOPN.