One Technology Square,

P.O. Box 293, KY1-1104

19 Eastern Avenue George Town, Grand Cayman Cayman Islands

On Aug 12, 2024, at 9:53 AM, Ian Callow < <u>ian.callow@ofreg.ky</u>> wrote:

! This message was sent from someone outside the company. **BE CAREFUL** with links or attachments.

Leste mensaje fue enviado por alguien ajeno a la empresa. **TENGA CUIDADO** con los enlaces o archivos adjuntos.

Hello

Thanks for the update. You indicated that Flow was expecting an update within 48 hours. Did Flow receive an update?

Regards,

<image001.png>

From: noreply@ofreg.ky < noreply@ofreg.ky > Date: Thursday, 8 August 2024 at 12:29 PM

To: ict@ofreg.ky, outagereports@ofreg.ky

<outagereports@ofreg.ky>

Subject: Update Notification ICT Outage Report from Cable and

Wireless (Cayman Islands) Limited



: OfReg ICT

Outage Reporting

Submitted at 08/08/24 12:28 PM

Number: 14

Final Report
Due Date:

22 August 2024 12:18:46

Submission

Type:

Update Notification

OutageType: Unplanned

OfReg ICT

Outage

Reference

1237679786

Number:

License Type:

Telecom

Telecom Licensee: Cable and Wireless (Cayman Islands)

Limited

Name of Technical Contact (person authorized to submit):

Email of Technical

Contact:	
Phone Number of Technical Contact:	
Island:	Grand Cayman Cayman Brac Little Cayman
Grand Cayman District:	West Bay George Town Bodden Town North Side East End
Cayman Brac District:	Stake Bay Spot Bay Creek West End Watering Place
Area:	Maya1 Subsea cable
Outage Start Date/Time:	21 June 2024 10:00
	June 2024 10:00 Initial Beginning at 1235 UTC on June 21, 2024 a suspected fault condition developed at the Cancun, Mexico Undersea Cable Station All service between the Cancun, Mexico Cable Station and the Half Moon Bay, Cayman Islands Cable Station is suspected to be down. All Service

terminating in or transiting the Cancun, Mexico Cable Station is in a Hazardous Condition.

Technicians are currently onsite investigating the condition. Further information will be provided once it is available.

12:15 update

Troubleshooting with confirms a problem isolated to power fluctuations being observed in the Cancun cable station. The team there checking if there is cable damage or another cause of the problem.

confirms traffic for Cayman is in a linear state i.e. being routed over CJFS NO contributing issues on the Cayman end. -

15:30 update

as advised by AT&T

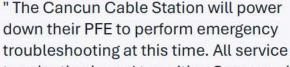
is continuing troubleshooting activities in an effort to isolate the location of a suspected shunt fault

between

No ETR advised.

19:30 Update

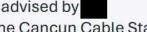
As advised by



terminating in and transiting Cancun will be down during testing. A notification will be sent once the PFE is powered up."

22:00 update

As advised by



"The Cancun Cable Station powered the PFE at approximately 0215 UTC on June 22. Testing confirmed that there is no

optical fault between Cancun

All traffic terminating in or transiting through Cancun continues to be either down or experiencing intermittent hits. Fault location activities continue at the Cancun Cable Station. Maya-1 Maintenance Authorities are currently discussing available options to bring service back up while fault location activities continue."

22 June 10:00 update

Please be advised that our provider continues to conduct testing in order to identify the shunt fault location in Cancun. However, in order to recover the traffic and to provide service stability, it would be necessary to perform an electrical reconfiguration on the MAYA -1 PFE network.

Our provider has established An emergency maintenance to perform the power reconfiguration on June 24th at 0300 UTC (22:00 Sunday night local time).

12:00 update

As advised by

Maya-1 will perform a power reconfiguration of the cable system on June 26th from 0330 UTC to 0930 UTC, in an attempt to bring up service to Cancun. During this Maintenance Window, all traffic on Maya-1 will be down.

If power reconfiguration is successful,

This would allow all service on the system to be up. (June 25th 22:30 to June 26th 04:30) The fault location has not yet been isolated. Additional fault localization activities are currently being planned.

Further information will be provided as it becomes available.

June 24th Update

As advised by

"The Cancun team is working to locate the fault as quickly as possible. For the past few days Cancun has been experiencing heavy rainfall which was hampering the fault location process. In order to locate the fault, they are draining the manholes along the land route and then measuring the current with a clamp on ammeter. In addition to the rainfall, the voltage on the PFE is fluctuating regularly, making this process more difficult than usual. Cancun expects that a break in the weather today could provide a window to effectively operate. As soon as more information is available, we will provide an update."

25 June 2024 update

As advised by

"It has not been possible to determine the location of the fault as of this afternoon. It is not known if the fault is the land section or the wet section. The next fault location steps are currently being planned.

On 6/26 from 0330 UTC to 0930 UTC, a power reconfiguration of the Maya-1

Cable will be performed. As a reminder, all service on Maya-1 will be down during this maintenance window.

Once the activity is complete, an update will be sent."

26 June 05:30 update

As advised by

"The power reconfiguration began at 0335 UTC, bringing all service on Maya-1 down. During the reconfiguration,

Fail alarm, preventing the PFE from starting up. is currently working with the vendor to resolve the issue as quickly as possible. All traffic on Maya-1 remains down. There is no ETR at the moment. As soon as new information is available, an update will be sent." -26 Jun 2024 17:40 As advised by "While working with the vendor to bring up the PFE, several alarms occurred which prevented the PFE from powering the cable. While several of the issues were resolved, the next step required a spare that wasn't available in the station. PFE will remain in this state at least until we have the necessary spares. Once we realized that it wouldn't be possible to power the system to bring back the traffic that was up before the activity began, Maintenance Authorities and Cable Station Staff worked to place the cable in different powering configurations to bring at least some of the traffic back. However it wasn't possible to perform these alternate power configurations due to the shunt fault in Segment 2, near Cancun. has the only working PFE capable of powering the trunk, and when they powered up they could only power to Cancun because the current was directed to the shunt fault. is currently powering to the Cancun shunt fault, allowing traffic that goes directly from to remain up. All other traffic on Maya-1 is down. We cannot provide an ETR at this time because of the following reasons: The shunt fault appears to be a high

resistance shunt and because of that we are unable to determine if it is a wet fault or land fault. We are unable to determine when this fault will be fixed because we don't have a fault location yet. We don't know how quickly we will be able to get the spare part to the cable station, and we can't be certain that once we install the spare, the issue will definitely be resolved. Until at least one of these issues is resolved, it will not be possible to bring additional traffic back up. Additional fault location activities are currently planned to begin tomorrow or on Friday June 28th. Service from will be brought down so that Cancun can cut the cable in the land section and perform electrical tests in an effort to determine the fault location. We will provide additional updates as soon as possible. " --27 June 2024 update as advised by "The PFE has experienced repeated shutdowns and the decision was made to keep it down until the condition of the cable is improved. The spare needed in was found and work to repair the PFE is ongoing. An update will be provided as soon as new information is available. " Update @ 18:00 as advised by installed the spare part which cleared the alarm and allowed the PFE to be powered up. Once the PFE was repaired, MAs performed the power configuration with

Description of Outage:

Cancun, and service except for the service terminating in or transiting Cancun came back up at 1931 UTC on June 27, 2024. Once the power reconfiguration finished and Maintenance Authorities were checking the status of the traffic on the system, it was noted that traffic terminating in or transiting Cancun was not coming up, despite the Cancun segment being powered. After investigating the measurements on the management system and performing OTDR traces, it was discovered that all fibers are severely attenuated in the ocean. Based on measurements taken during the maintenance window on June 26th, the fibers must have become attenuated within the last 30 hours. Because of this attenuation, it is not possible to bring up traffic to Cancun. the Maintenance Authority , will make arrangements to call out a Cable Ship to repair the cable. As soon as the ship is called out and an ETR / POW is available, a notification will be sent to owners. While the traffic not passing through Cancun is now up, please note that the Maya-1 Cable System is in a Hazardous Condition due to the instability of the shunt and the possibility of the PFE experiencing a shutdown. If PFE shuts down, there is a possibility that all service on Maya-1 will go down 30 June 2024 update In light of the impending storm, efforts are

being made to secure a pathway around

Cancun to provide protection for CJFS. Team currently working on configuration and will update once pathway comes online. July 3rd. Team completed configuration of alternate pathways to over MAYA1 cable bypassing CANCUN July 5th Team and OLOs Confirmed no interruptions in service during passage of the storm July 11 Update As per "The Maintenance Authority continues to work with the Ship Provider to obtain permits from the Mexican Government to perform the repair. As of yet there is no estimate as to when the permits will be obtained. As soon as additional information is available an update will be sent." (The Maintenance Authority on the affected segment is The C&W Subsea network team advises: FLOW/CW continue to work with to expediate the required Permits that would allow the GMSL Cable Ship to enter and work in Mexican Waters. The process commenced last week and is expected to take 30 days. We are pushing to have it done quicker and are constantly in touch In parallel we are working to getting out own dive contractor in country (with

support of particle, PA for permissions) to investigate the fault area. This process will shorten the eventual repair duration when the ship arrives as we'll have ends prepped and will be able to fully quantify the extent of the damage to reduce any project risk (ship wrecks, sea floor conditions, cause of the fault, qty of cable required etc.)

We're hopeful to commence this work on Friday/Saturday Jul 12/13 as weather is favorable.

Update July 14th

As advised by ATT

"All segments of Maya-1 will be powered down from Tuesday July 16th at 1100 UTC (6am EST) to Wednesday July 17th at 0100 UTC (Tuesday 16th 8pm EST) to perform a dive inspection of the cable fault.

All traffic on Maya-1 will be down during this maintenance window.

The purpose of the dive inspection is to:

- -Survey the area and identify the section of cable that is faulty.
- -Determine the needed spares.
- -Place the cable in an open condition so that the power configuration can be changed to power

-This would allow all traffic not terminating in Cancun to remain in a normal (not hazardous) condition while we wait for the ship to arrive to the repair grounds, and potentially for the duration of the repair.

The Maintenance Authority continues to work with the Ship Provider to determine the needed permits to perform the repair. Additional information will be provided as it becomes available" ------

July 16 th Update

As advised by "After Maya-1 was powered down, divers surveyed the cable starting from the suspected fault location from the Cancun Cable Station. Significant chafing damage from contact with the rocky seafloor was found inshore, towards the Cancun station. The dive survey will continue tomorrow morning to determine the extent of the damage towards the station. The dive team determined that the end of the cable appeared to be good from the Cancun Cable Station. They cut the cable, brought it onboard the dive vessel, and sealed the end so that the cable head should remain in open condition. The cable was then lowered to the seabed. The stations other than Cancun then finished powering the cable at 2220 UTC (17:20 EST) on July 16th. were able to power the trunk because the was placed in an open condition by the divers. All traffic other than the traffic terminating in or transiting Cancun is now up and in a normal (non-hazardous) condition. All traffic terminating in or transiting Cancun will remain down until the Cable Ship repair is complete. The Maintenance Authority and Cable Ship continue to work to obtain the needed permits for the repair. Further updates will be provided as they become available."

14 of 16

July 18 update
As advised by

"The dive survey was completed on July

17th, 2024.
damaged cable was found
inshore of the fault location. The damaged
section is
from the Cancun Cable Station to
from the station.
All traffic terminating in or transiting
Cancun will remain down until the Cable
Ship repair is complete. The Maintenance
Authority and Cable Ship continue to work
to obtain the needed permits for the
repair."
July 20 update
The C&W Subsea network team advised:
"Permit Process for Cable Ship Wave
Sentinel entrance into is well
underway with and all authorities.
Divers have completed inspection of the
fault area and prepped ends for cable ship
arrival for quicker repair operation.
Repowering and reconfiguration of the
MAYA-1 trunk was completed also,
allowing the repair to be completed while
other segments of MAYA-1 remain up.
Spare cable and kits were loaded onto the
CS Wave Sentinel last night from the
Repair ship is expected to depart this
morning (July 20th) to complete a repair
on the
The MAYA-1 Repair is slotted
to commence immediately after, permit
pending.
July 24 AM update.
Permits still pending.
Library Annual Control
July 31 AM update

Permits still pending

August 8 AM update

Approvals are still pending for final permits in Mexico for the MAYA-1 Repair.

Expect to have an update within 48 hours

Number of Customers Affected:

Estimated Restoration Date/Time:

24 August 2024 23:30

<image001.png>

Redacted under section 15 (b) of the FOI Act (2020 Revision)