

**Seventh Eastern Caribbean Network Technical Group (E/CAR/NTG/7)
and Fifth Eastern Caribbean Radar Data Sharing Ad-hoc Group
(E/CAR/RD/5) Meetings
St. Kitts, 17 - 18 October 2016**



A presentation by the E/CAR AFS Network Service provider - TSTT

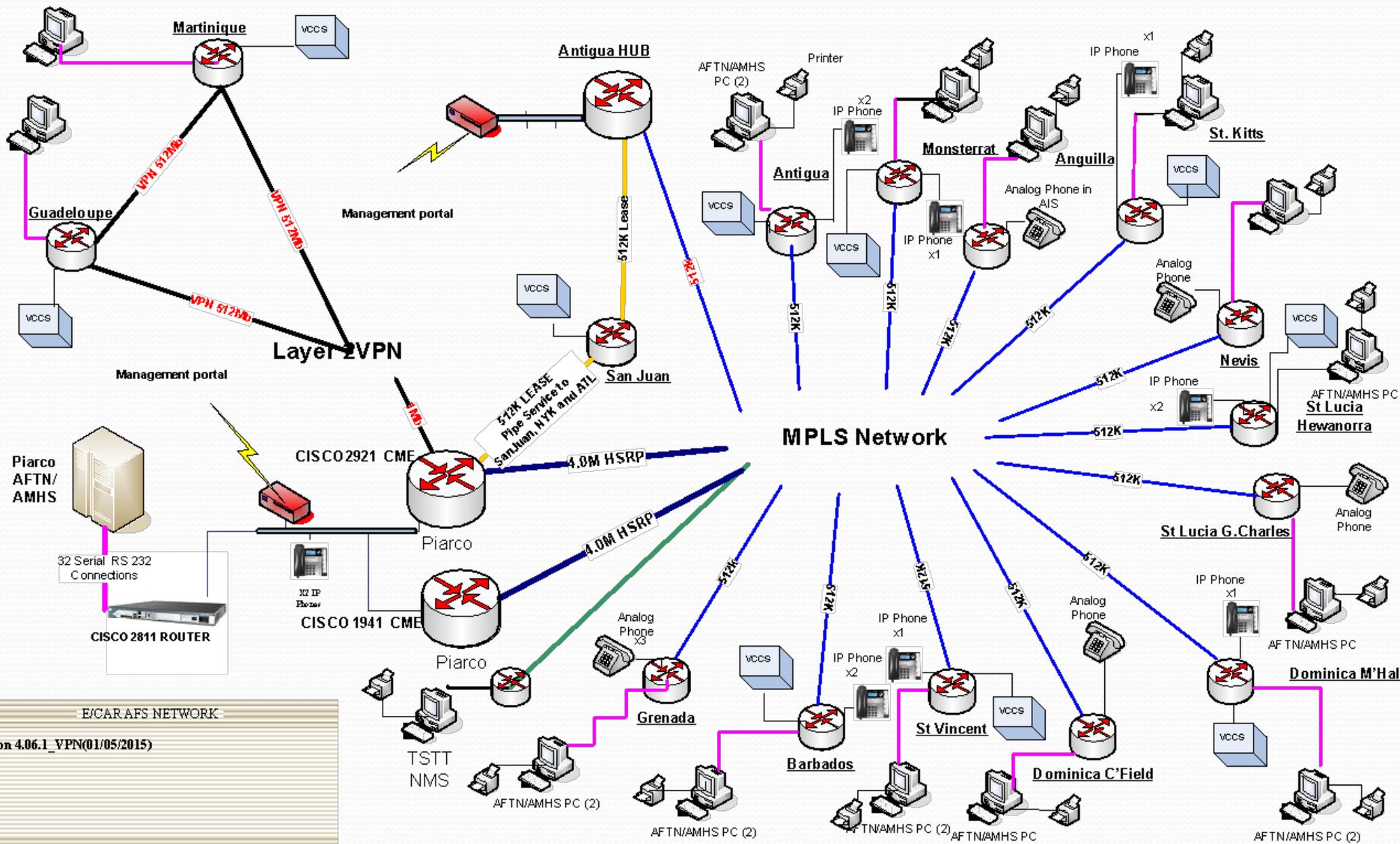
Agenda

1. 3 Aspects of ECAR Network
2. 3 Elements of Managed Service
3. Results
4. Network Performance Analysis
5. Radar Sharing Overview
6. On-going Network Activities

3 Aspects of ECAR Network

WAN Solution for Aeronautical Fixed Service (AFS) network:

1. Regional MPLS circuits with Cisco WAN edge routers.
2. Converged Voice and Data.
3. Redundant paths and standby devices.



E/CAR/AFS NETWORK
 Version 4.06.1_YPN(01/05/2015)

3 Elements of Managed Service

1. Monitor

- Fault Management
- Availability & Performance Monitoring.

2. Analyze

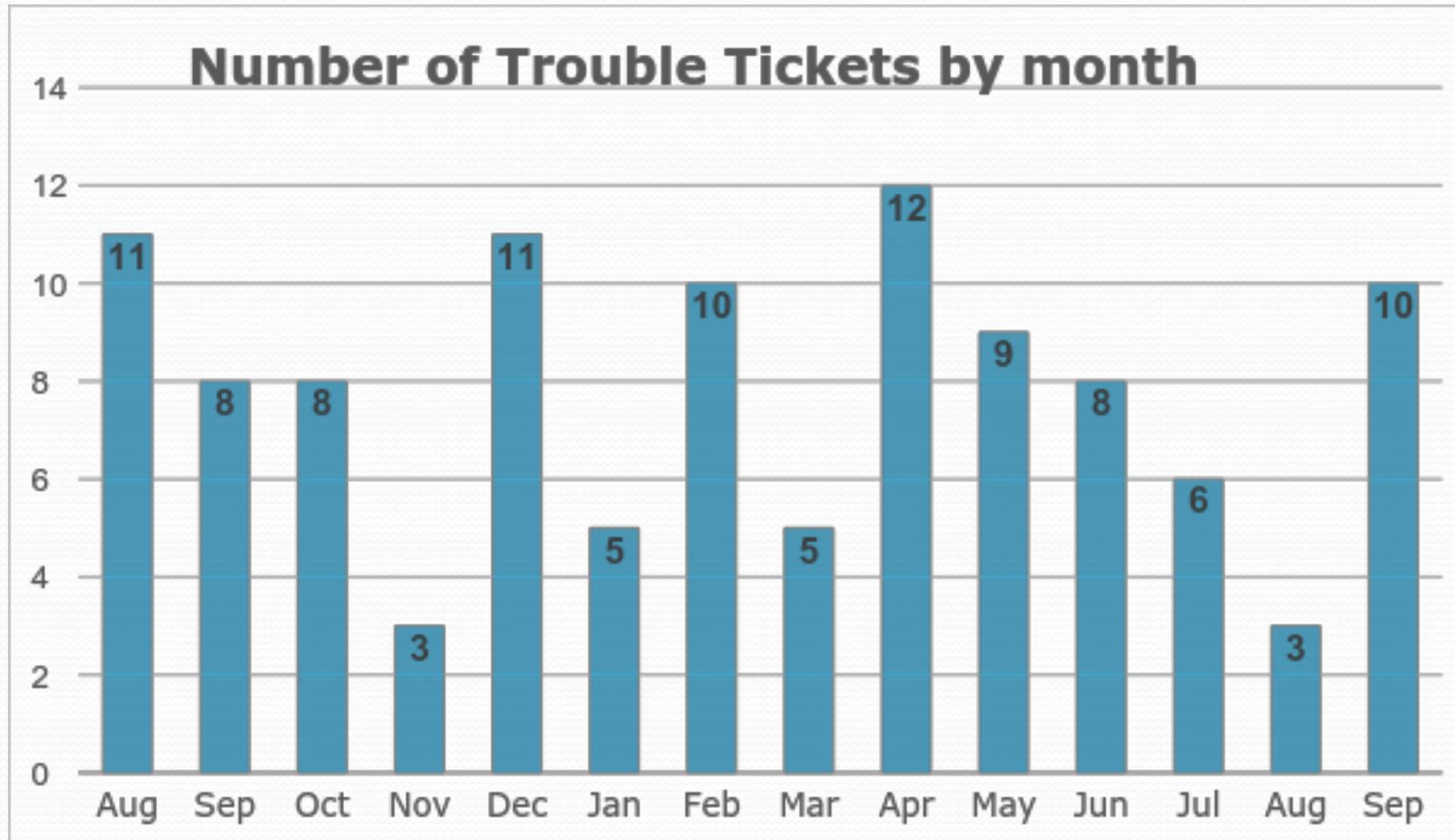
- Fault Analysis.
- Remediation.

3. Remediate

- Configuration changes.
- Upgrades.

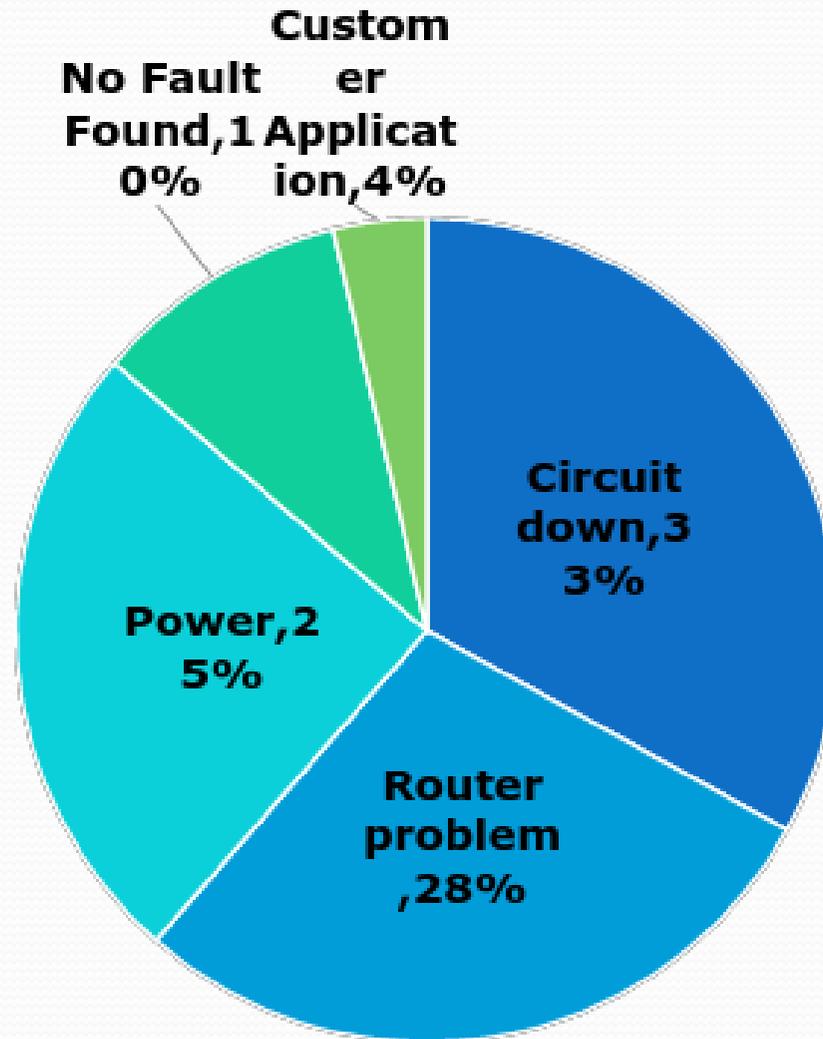
Results

Results



Total number of trouble tickets	: 109
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ECAR Faults by type: Aug 2015-Sep 2016



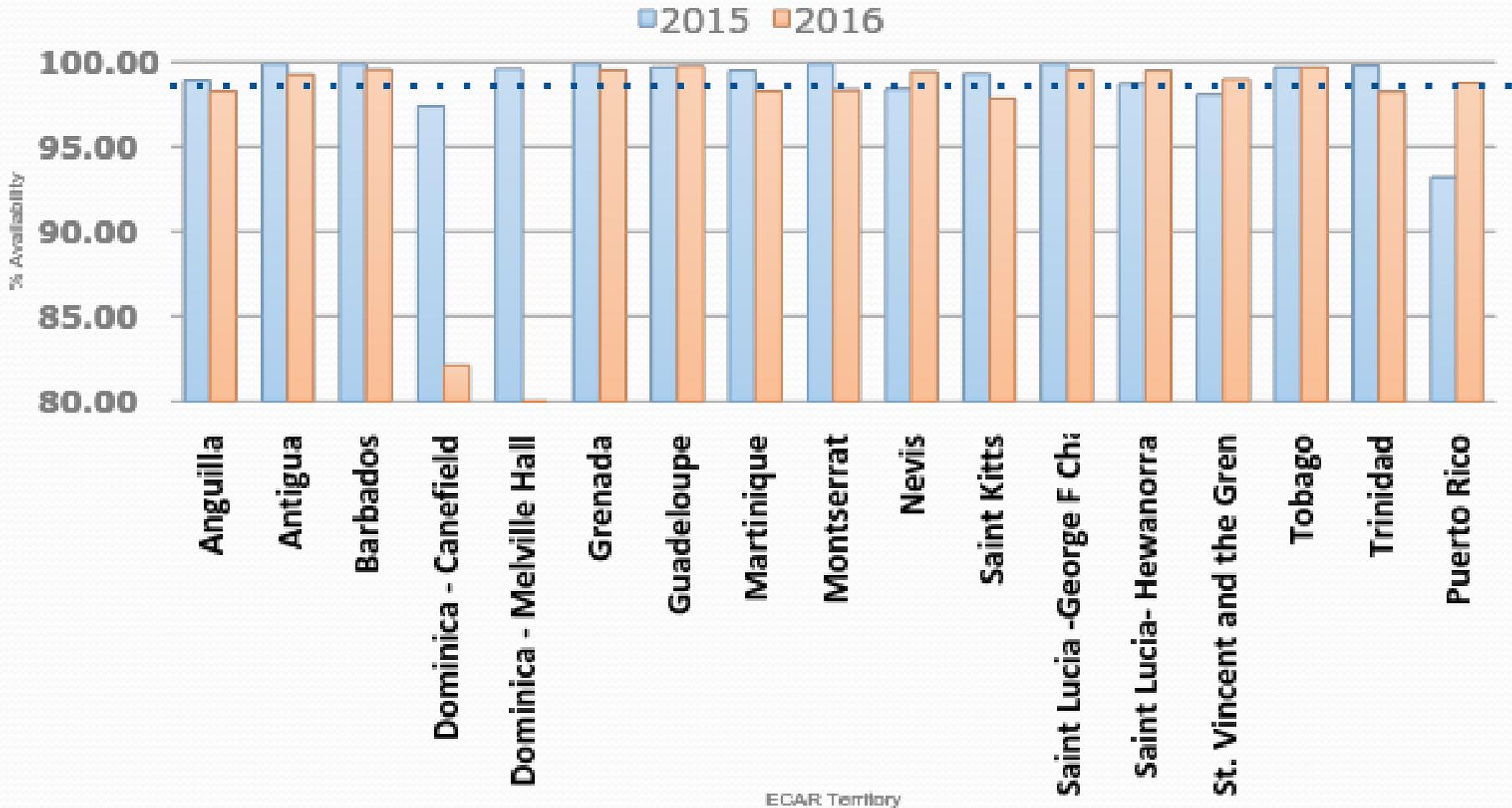
Results

Top 10 ECAR Number of Faults by Territory Year on year 2015/2016

Country	2015	Country	2016
Anguilla	10	Martinique	14
Saint Kitts	10	Guadeloupe	13
Martinique	7	Anguilla	11
Nevis	7	Dominica-Canefield	10
Dominica-Canefield	6	Antigua	8
Antigua	5	Saint Lucia-Hewanorra	8
Guadeloupe	5	Montserrat	7
Tobago	5	Saint Kitts	7
Trinidad	5	Puerto Rico	7
Barbados	4	Trinidad	5

Results

% Availability ECAR year on year comparison



Findings

Key Issues

1. Dominica Douglas Charles site currently out of service (OOS) due to Force Majeure.

Challenges

DOMINICA POWER FLUCTUATIONS

- There is the constant issue as it relates to power regularity and conditioning on the island. The frequency of outages has decreased but it is suggested a power regulation analysis be conducted at both airports in order to deliver safe and clean power to AFS hardware.
- **NOTE : Equipment room was destroyed by flood. Site has to be reinstalled as a new site when the location is ready. (Douglas Charles /Melville Hall)**

SAINT KITTS

- Adverse environmental conditions continue to affect routers....replacement primary needed

Routers and switches were relocated to Tower Equipment Room during 2015 maintenance.

GUADELOUPE

- The secondary router needs a replacement.
- The fans, power supply and RPS are faulty.

On-going Network Activities

- New St Vincent Argyle Airport ECAR Node implementation
- DOMINICA CANEFIELD NODE REPLACEMENT
- New line to NYK (1849) configured and software tested. To be completed during Nov 2016 maintenance.
- New ring down line between San Juan (1844) and Piarco (5004)) configured and software tested. To be completed during Nov 2016 maintenance.

On-going Network Activities

Ring down line was configured at Tobago to replace service provided by PBX destroyed by lightning strike.

AICC ring down lines to Piarco being configured and tested during 2016 Maintenance. Anguilla and San Juan need additional voice cards for completion.



Thank You

