




STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

PUBLIC INTEREST FINDING

Traffic Operations Division

January 27, 2017

TO: Chief Roadway Design Engineer
FROM: Principal Signals, Lighting, and ITS Engineer 
SUBJECT: Recommendation for Public Interest Finding

Based on review of the following described electronic traffic related item, the Traffic Operations Division recommends that it be certified for the procurement as a public interest item in Nevada as documented here in.

Manufacturer: Alcatel Lucent Enterprises

Name and Model: OS 6865 Series Switches

Description of Device: A field hardened Ethernet switch meeting NEMA TS2 specifications for temperature as well as support for the shortest path bridging (SPB) protocol.

Description of Need: Shortest path bridging simplifies the deployment of L2 networks by listening and sending data across all available network data paths. In the spanning tree protocol (STP), being replaced by SPB, only certain paths are made available causing the data network to undergo a massive reconvergence of the system to avoid a possible loop in the network. SPB listens to all paths and uses the path that is the most efficient based on certain performance metrics.

Economic/Cost Analysis:

The economic cost savings is that it requires less effort to maintain a statewide based data network. This manifests itself in fewer outages due to network changes (add, moves, or deletions) or outages since the system automatically, without disruption, falls back to an alternate path (one of ten monitored paths).

Jurisdiction/Extent:

Statewide

Limitations/Conditions:

The data network environment consists of hundreds of Ethernet switches where operation of the system can be improved by moving to SPB in lieu of STP.

Request for PIF other than the standard 2 years:

2 Years

Justification for PIF other than the standard 2 years:**Justification for PIF:**

The SPB protocol is a relatively new standard and other manufacturers such as RuggedCom and Comtrol have not built SPB compatible equipment. Another factor is that NDOT's core network (managed by NDOT IT) uses SPB to distribute data across the State. The use of SPB makes sense from an ITS and IT perspective that will ensure compatibility with IT.

NDOT USE ONLY

Date of PIF:

January 27, 2017



PIF Expiration: January 27, 2019

DocuSigned by:
Paul M. Frost Paul M. Frost 2/2/2017
DD875A6E3A69401... Chief Roadway Design Engineer _____ Date

Approved Rejected