# Signaling \& Routing Extension for Links with Variable Discrete Bandwidth 

draft-long-ccamp-rsvp-te-availability-02 draft-long-ccamp-ospf-availability-extension-01

HAO LONG (longhao@huawei.com)
MIN YE (amy.yemin@huawei.com)
Greg Mirsky (gregory.mirsky@ericsson.com)
Alessandro D'Alessandro (alessandro.dalessandro@telecomitalia.it)

IETF 88 CCAMP Nov 2013 Vancouver

## Problem and Solution



| Availability | Remaining <br> sub-bandwidth |
| :---: | :---: |
| $99.999 \%$ | 50 Mbps |
| $99.995 \%$ | 50 Mbps |
| $99.99 \%$ | 100 Mbps |

link bandwidth capacity table

- Packet switching network may pass through the links with variable discrete bandwidth
- Availability is used to describe the bandwidth for such links.
- Availability requirement is proposed to consider when setting up an LSP


## Signaling \& Routing Extension

- "draft-long-ccamp-rsvp-te-availability-02" addresses the signaling extension
- Define an availability flag in the "Profile" filed in bandwidth Profile TLV
- Define an availability requirement sub-TLV to specify the availability requirement
- "draft-long-ccamp-ospf-availability-extension-01" addresses the routing extension
- Define an availability information sub-TLV to notify the availability information for path calculation


## Changes

- Addressed comments received on the draft
- Clarify what if a hop cannot support the availability sub-TLV
- The drafts were updated to align with existing RFC, RFC6003 and RFC4203.
- Change the error code and the error value
- error code "Admission Control Error"
- error value "Requested Bandwidth Unavailable
- Fill in IANA consideration section
- Text improvements


## Open Discussion

- There was comment on reusing the MultiTSPEC draft to solve the problem in IETF 87

- The multi-TSPEC draft seems for different application; not applicable to this scenario


## Next step

-Solicit comments from the group
-Refine the drafts

Thanks

