A Lower Effort Per-Hop-Behavior draft-ietf-tsvwg-le-phb-02

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Changes draft...-01 → -02

- Applied many editorial suggestions from David Black
- Clarified what is required for deployment in section
 1.2 (Deployment Considerations)
- Updated IANA section according to David Black's suggestions
- Added Multicast traffic use case
- Added text about implementations using AQMs and ECN usage
- Revised text in the security section

"No Harm" to BE traffic

- Without LE support a provider cannot take advantage of this feature
 - Must be aware in case LE traffic is carried within BE aggregate
- Two types of users
 - LE-min = better treatment allowed
 - do not remark as BE
 - LE-strict = better treatment NOT allowed
 - only transmit if resources otherwise unused (wants to assure no harm property)
 - in case of elevated service: better remark to BE for detection?
 - alternatively: use LE-min + LE transport (e.g., LEDBAT)
 - Detection of LE remarking (DSCP feedback): how?

Next Steps

- Usefulness of LE-min / LE-strict?
 - Do we need two DSCPs to explicitly detect LE elevation?
- Fix DSCP choice
 - suggested 000010 (DSCP= 2)
 - removes ambiguity
 - should not be bleached in case upper bits are cleared (IP precedence), so 000xx0 remain as potential choices in DSCP standard pool
 - more feedback from measurements/experiments
- Reviews and feedback appreciated
- Ready for WG last call?