Data plane Enhancement Taxonomy

draft-ietf-detnet-dataplane-taxonomy-04

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History of the Taxonomy draft

- Started as the Chair’s request.
- Defined One performance-related categorization & Six functional categorizations.
- Specified two Reference topologies
- Specified seven Suitable categories.

Revisions on the 04 draft

- New Terminologies
  - regulator
    - A functional entity that makes the arrival process of a flow conform to a predefined process. Note that the term regulator is equivalent to shaper.
  - scheduler
    - A functional entity that determines when a packet is transmitted. Note that the term scheduler is equivalent to packet scheduler.
- Revised terminology
  - suitable category
    - A category within which all the solutions are suitable for deterministic networking (before)
    - A category within which solutions can be suitable for deterministic networking (after)

Revisions on the 04 draft

- Abbreviations

2.2. Abbreviations

DetNet: Deterministic Networking

CQF: Cyclic Queuing and Forwarding

TAS: Time Aware Shaper

FQ: Fair Queuing

DRR: Deficit Round Robin

ATS: Asynchronous Traffic Shaping

RT: Reference Topology

E2E: End to End

GCL: Gate Control List

IR: Interleaved Regulator

FIFO: First In First Out

RSpec: Requested Specifications

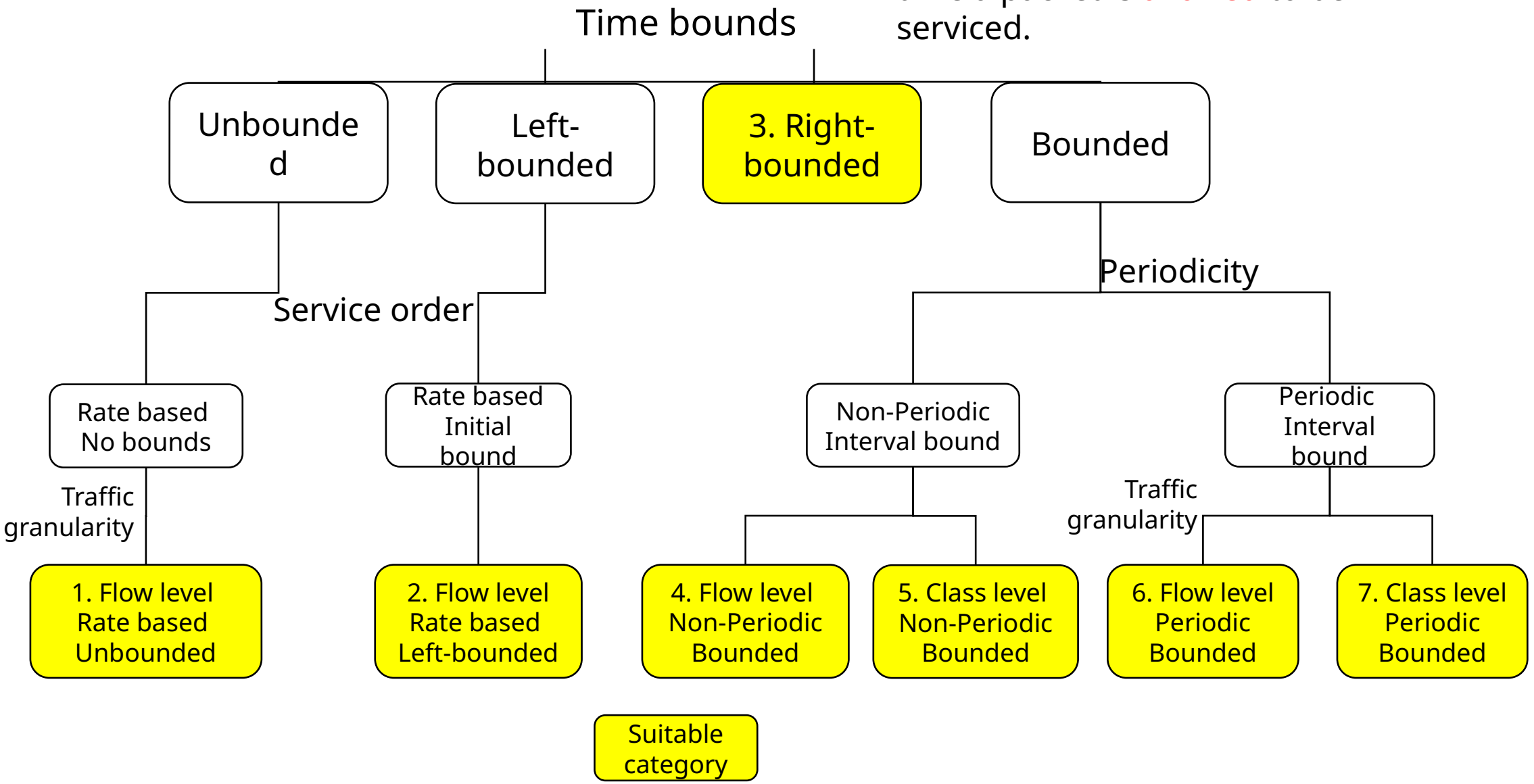
TSpec: Traffic Specifications

IVN: In-Vehicle Network

CC: Command and Control

Recap: Seven suitable categories

* Time bound: A latest (or earliest) time a packet is allowed to be serviced.



Future plan

- Stabilize the document
- Start the approval process
- Note: This document is not to nominate or select candidates for suitable categories.

Thank you

- Please take a look at

  https://datatracker.ietf.org/doc/draft-ietf-detnet-dataplane-taxonomy/