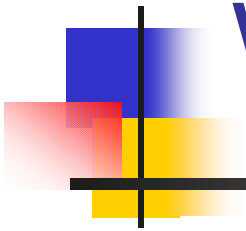


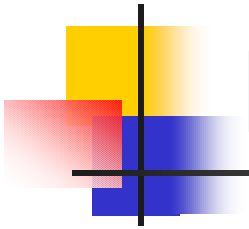
Status: TCP over 2.5G and 3G Wireless Networks

draft-ietf-pilc-2.5g3g-03.txt

7 August 2001

Hiroshi Inamura

NTT DoCoMo Inc.



Motivation for the ID

- To bridge the two communities
  - “Internet/TCP People”
  - “2.5/3G Radio Link People”

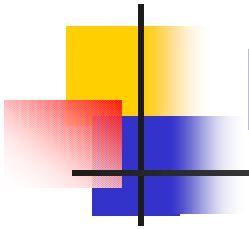
On the WG LAST CALL, several comments raised;

- Section 3.2 : Applications
- RLC description against 3GPP RRC
- BDP (Bandwidth Delay Product) for 2.5G/3G networks
- Split TCP
- Other comments

Section 3.2 : Applications

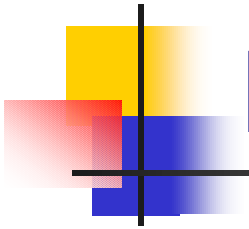
- Comment:
  - Inadequate description
- Action Taken
  - Removed entire Section 3.2.
  - Revised concise description is added to Section 1, “Introduction”, as an applicability statement.

Reorganize Section 2 “2.5G3G Link Characteristics”



- RLC description against 3GPP RRC
- BDP for 2.5G3G networks

RLC description against 3GPP RRC



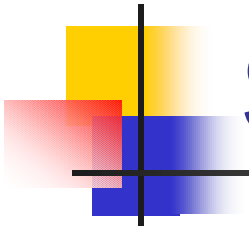
- Comment: “Section 2 description of W-CDMA contradicts 3GPP RRC (3GPP 25.331)”

- 3GPP specification is broad and thus specific implementation is inevitable
- In the new revision, clear distinction between 3GPP and implementation will be emphasized

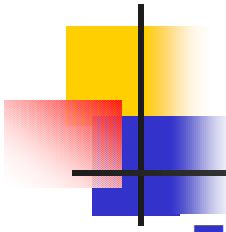
BDP (Bandwidth Delay Product) for 2.5G/3G networks

- Comment :
  - “link BDP tends to large” is vague.
  - “I wonder if there is any information which covers the BDPs of a range of such (2.5G/3G) services”
- Action taken:
  - Experiment with FOMA
- Open for suggestion

Summary of Reorganizing Section 2

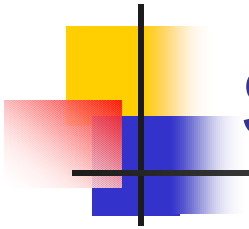


- Clear distinction between 3GPP spec and specific implementation
- Outline
  - Brief desc. of Link ARQ
  - Brief desc. of 3GPP spec for W-CDMA
  - Implementaion example
    - (Typical) RTT
    - (Typical) BDP



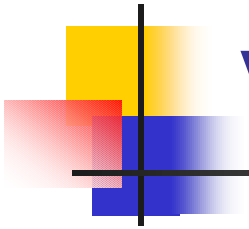
Split TCP(1)

- Comment:
  - “Does this ID really advocate ‘careful’ Split TCP as an IETF recommended approach?? “
- Background:
  - Split TCP discussed in the context of “Lager Initial CWND”



Split TCP(2)

- Initial CWND > 2 is effective for long latency channels
  - This draft does not attempt to recommend Split TCP
    - “PEP” RFC discusses pros and cons of Split TCP
  - Initial CWND > 2 is discussed in RFC2414
    - But, experimental
- Recommendation (statement in section 3.1.2):
  - RFC2581: initial cwnd=2 is recommended and STD
  - Deal with initial cwnd>2 (up to 4380Bytes) as experimental
    - Leverage PEP device feature, in accordance with “PEP” RFC.
    - Accelerate RFC2414 for STD track (as written “Open Issues”)
      - “Proposed STD” soon!



Various other comments

- Thank a lot for LOTS of Editorial comments! Very helpful!
  - We hope it is fixed now.

- Contact:

Hiroshi Inamura

Inamura@mml.yrp.nttdocomo.co.jp