



LISTSERV 16.5

[Subscriber's Corner](#) [Email Lists](#)



### 3GPP\_TSG\_RAN\_WG1 Archives

### 3GPP\_TSG\_RAN\_WG1@LIST.ETSI.ORG

View: **Message:** [ [First](#) | [Previous](#) | [Next](#) | [Last](#) ]  
**By Topic:** [ [First](#) | [Previous](#) | [Next](#) | [Last](#) ]  
**By Author:** [ [First](#) | [Previous](#) | [Next](#) | [Last](#) ]  
**Font:** [Proportional Font](#)



[LISTSERV Archives](#)

[3GPP\\_TSG\\_RAN\\_WG1 Home](#)

[3GPP\\_TSG\\_RAN\\_WG1 Jan](#)

**Subject:** [\[LTE\] PUSCH multiplexing](#)  
**From:** Daewon Lee <[\[log in to unmask\]](#)>  
**Reply-To:** [\[log in to unmask\]](#)  
**Date:** Wed, 30 Jan 2008 16:52:04 +0900  
**Content-Type:** multipart/alternative  
**Parts/Attachments:** [text/plain](#) (64 lines) , [text/html](#) (184 lines)

#### Search Archives

#### Advanced Options

#### Options

[Log In](#)

[Get Password](#)

[Search Archives](#)

[Subscribe or Unsubscribe](#)

#### Archives

- [December 2019, Week 4](#)
- [December 2019, Week 3](#)
- [December 2019, Week 2](#)
- [December 2019, Week 1](#)
- [November 2019, Week 5](#)
- [November 2019, Week 4](#)
- [November 2019, Week 3](#)
- [November 2019, Week 2](#)
- [November 2019, Week 1](#)

Dear all,

In our understanding, exact rule of multiplexing ACK/NACK and CQI on PUSCH should be define in order to complete the part of the uplink control discussion. If we consider CQI alone, current description of multiplexing CQI on PUSCH follows the working assumption '**Control signalling mapped to SC-FDMA symbols next to RS:es.**' agreed in RAN1#50. However, the 'near-RS mapping rule' should take care of both CQI and ACK/NACK. Especially, we think ACK/NACK protection is more important than CQI protection in high speed cases. Currently, we are considering 4 alternatives.

Alternative 1: CQI mapping consecutive to RS + ACK/NACK mapping consecutive to RS by puncturing CQI symbols

Alternative 2: CQI mapping consecutive to RS + ACK/NACK mapping next to CQI by puncturing Data symbols (farther from RS)

Alternative 3: ACK/NACK mapping consecutive to RS + CQI time-first mapping (near-RS mapping is not considered)

Among those 3 alternatives, we currently think the alternative 3 is preferable way considering ACK/NACK protection and simplicity in specifications (R1-080267 has detailed description). Alternative 1B and 2 are also described in detail in R1-080483. It would be nice if we can start some discussion on control signal multiplexing on PUSCH to get a conclusion during Sorrento meeting.

Best Regards,  
Daewon

=====  
**Daewon Lee**  
Research Engineer, 3G Standardization Group

[Top of Message](#) | [Previous Page](#) | [Permalink](#)

- [October 2019, Week 5](#)
- [October 2019, Week 4](#)
- [October 2019, Week 3](#)
- [October 2019, Week 2](#)
- [October 2019, Week 1](#)
- [September 2019, Week 5](#)
- [September 2019, Week 4](#)
- [September 2019, Week 3](#)
- [September 2019, Week 2](#)
- [September 2019, Week 1](#)
- [August 2019, Week 5](#)
- [August 2019, Week 4](#)
- [August 2019, Week 3](#)
- [August 2019, Week 2](#)
- [August 2019, Week 1](#)
- [July 2019, Week 5](#)
- [July 2019, Week 4](#)
- [July 2019, Week 3](#)
- [July 2019, Week 2](#)
- [July 2019, Week 1](#)
- [June 2019, Week 4](#)
- [June 2019, Week 3](#)
- [June 2019, Week 2](#)
- [June 2019, Week 1](#)
- [May 2019, Week 5](#)
- [May 2019, Week 4](#)
- [May 2019, Week 3](#)
- [May 2019, Week 2](#)
- [May 2019, Week 1](#)
- [April 2019, Week 5](#)
- [April 2019, Week 4](#)
- [April 2019, Week 3](#)
- [April 2019, Week 2](#)
- [April 2019, Week 1](#)
- [March 2019, Week 5](#)
- [March 2019, Week 4](#)
- [March 2019, Week 3](#)
- [March 2019, Week 2](#)
- [March 2019, Week 1](#)
- [February 2019, Week 4](#)
- [February 2019, Week 3](#)
- [February 2019, Week 2](#)
- [February 2019, Week 1](#)
- [January 2019, Week 5](#)
- [January 2019, Week 4](#)
- [January 2019, Week 3](#)
- [January 2019, Week 2](#)
- [January 2019, Week 1](#)
- [December 2018, Week 4](#)
- [December 2018, Week 3](#)
- [December 2018, Week 2](#)
- [December 2018, Week 1](#)

12/23/2019

LISTSERV 16.5 - 3GPP\_TSG\_RAN\_WG1 Archives

November 2018, Week 5  
November 2018, Week 4  
November 2018, Week 3  
November 2018, Week 2  
November 2018, Week 1  
October 2018, Week 5  
October 2018, Week 4  
October 2018, Week 3  
October 2018, Week 2  
October 2018, Week 1  
September 2018, Week 5  
September 2018, Week 4  
September 2018, Week 3  
September 2018, Week 2  
September 2018, Week 1  
August 2018, Week 5  
August 2018, Week 4  
August 2018, Week 3  
August 2018, Week 2  
August 2018, Week 1  
July 2018, Week 5  
July 2018, Week 4  
July 2018, Week 3  
July 2018, Week 2  
July 2018, Week 1  
June 2018, Week 5  
June 2018, Week 4  
June 2018, Week 3  
June 2018, Week 2  
June 2018, Week 1  
May 2018, Week 5  
May 2018, Week 4  
May 2018, Week 3  
May 2018, Week 2  
May 2018, Week 1  
April 2018, Week 5  
April 2018, Week 4  
April 2018, Week 3  
April 2018, Week 2  
April 2018, Week 1  
March 2018, Week 5  
March 2018, Week 4  
March 2018, Week 3  
March 2018, Week 2  
March 2018, Week 1  
February 2018, Week 4  
February 2018, Week 3  
February 2018, Week 2  
February 2018, Week 1  
January 2018, Week 5  
January 2018, Week 4  
January 2018, Week 3

12/23/2019

LISTSERV 16.5 - 3GPP\_TSG\_RAN\_WG1 Archives

January 2018, Week 2  
January 2018, Week 1  
December 2017, Week 5  
December 2017, Week 4  
December 2017, Week 3  
December 2017, Week 2  
December 2017, Week 1  
November 2017, Week 5  
November 2017, Week 4  
November 2017, Week 3  
November 2017, Week 2  
November 2017, Week 1  
October 2017, Week 5  
October 2017, Week 4  
October 2017, Week 3  
October 2017, Week 2  
October 2017, Week 1  
September 2017, Week 5  
September 2017, Week 4  
September 2017, Week 3  
September 2017, Week 2  
September 2017, Week 1  
August 2017, Week 5  
August 2017, Week 4  
August 2017, Week 3  
August 2017, Week 2  
August 2017, Week 1  
July 2017, Week 5  
July 2017, Week 4  
July 2017, Week 3  
July 2017, Week 2  
July 2017, Week 1  
June 2017, Week 5  
June 2017, Week 4  
June 2017, Week 3  
June 2017, Week 2  
June 2017, Week 1  
May 2017, Week 5  
May 2017, Week 4  
May 2017, Week 3  
May 2017, Week 2  
May 2017, Week 1  
April 2017, Week 5  
April 2017, Week 4  
April 2017, Week 3  
April 2017, Week 2  
April 2017, Week 1  
March 2017, Week 5  
March 2017, Week 4  
March 2017, Week 3  
March 2017, Week 2  
March 2017, Week 1

12/23/2019

LISTSERV 16.5 - 3GPP\_TSG\_RAN\_WG1 Archives

February 2017, Week 4  
February 2017, Week 3  
February 2017, Week 2  
February 2017, Week 1  
January 2017, Week 5  
January 2017, Week 4  
January 2017, Week 3  
January 2017, Week 2  
January 2017, Week 1  
December 2016, Week 5  
December 2016, Week 4  
December 2016, Week 3  
December 2016, Week 2  
December 2016, Week 1  
November 2016, Week 5  
November 2016, Week 4  
November 2016, Week 3  
November 2016, Week 2  
November 2016, Week 1  
October 2016, Week 5  
October 2016, Week 4  
October 2016, Week 3  
October 2016, Week 2  
October 2016, Week 1  
September 2016, Week 5  
September 2016, Week 4  
September 2016, Week 3  
September 2016, Week 2  
September 2016, Week 1  
August 2016, Week 5  
August 2016, Week 4  
August 2016, Week 3  
August 2016, Week 2  
August 2016, Week 1  
July 2016, Week 5  
July 2016, Week 4  
July 2016, Week 3  
July 2016, Week 2  
July 2016, Week 1  
June 2016, Week 5  
June 2016, Week 4  
June 2016, Week 3  
June 2016, Week 2  
June 2016, Week 1  
May 2016, Week 5  
May 2016, Week 4  
May 2016, Week 3  
May 2016, Week 2  
May 2016, Week 1  
April 2016, Week 5  
April 2016, Week 4  
April 2016, Week 3

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.