

# 1. Team Assignment

Members in each sublayer

- 1.1. RRC
- 1.2. SDAP
- 1.3. PDCP
- 1.4. RLC
- 1.5. MAC

## 1. RRC

- a. Overview Presentation of the layer
- b. Introduction to .ASN1
- c. Protocol data units, formats and parameters (ASN.1)
  - i. RRC messages
- d. System Information Acquisition
  - i. MIB, SIB1
  - ii. SIB 2 - 9
- e. RRC connection establishment
- f. RRC reconfiguration
  - i. Cell group configuration
  - ii. Radio Bearer configuration
- g. Timers

## 2. SDAP

- a. Figure out the QoS flow to DRB mapping rules
  - i. Default mapping
  - ii. Configured mapping
  - iii. Reflective mapping

\* RLC and PDCP work is already assigned to people.

## 3. MAC

- a. List of configuration Parameters

- b. Understanding UE MAC architecture, elements present
- c. Multiplexing and assembly
  - i. Logical Channel prioritization
- d. DL-SCH data transfer
- e. UL-SCH data transfer
- f. Protocol Data Units, formats and parameters
  - i. MAC PDU
  - ii. MAC CE

## DPDK (Data plane development kit)

It's a library for faster packet processing. Ultimate objective is to convert the C code we write into dpdk to achieve low latency.

### 1.1. Getting Started

[http://doc.dpdk.org/guides/linux\\_gsg/](http://doc.dpdk.org/guides/linux_gsg/)

[http://doc.dpdk.org/guides/prog\\_guide/index.html](http://doc.dpdk.org/guides/prog_guide/index.html) - Programmer's guide

<http://doc.dpdk.org/api/> - API guide

### 1.2. Core components

- 1. Rte\_eal + libc
- 2. Rte\_malloc
- 3. Rte\_timer
- 4. Rte\_mempool
- 5. Rte\_membuf
- 6. Rte\_ring
- 7. rte\_debug

### 1.3. Tasks

- 1. Proper installation guide
- 2. A running example

## Interfaces

- 1. NG
- 2. FAPI
- 3. F1 and E1