



5G TestBed, IIT Madras

# nFAPI Packetizer and De-packetizer

Version 1.0

**Project Guide:**

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# Abstract

nFAPI stands for “Network Femto/Functional Application Platform Interface” and resides between L2/L3 and the PHY layer. It’s primary purpose is to manage the PHY and allow synchronised data flow between the L2/L3 device and the PHY device - referred to as VNF (virtual network function) and PNF (physical network function) respectively. nFAPI is responsible for transmitting data along with the applicable configuration from the VNF to the PNF in an orderly manner where the appropriate configuration is matched with the data.

The primary motivation for the nFAPI system is to allow the L2/L3 and the PHY to reside on separate devices having an IP link. Furthermore, it allows a single VNF instance to configure and control a number of PHY instances within the PNF

The functional application platform interface (FAPI) is an initiative within the small cell industry to encourage competition and innovation among suppliers of platform hardware, platform software and application software by providing a common API around which suppliers of each component can compete. In doing this, it provides an ‘interchangeability of parts’ to ensure that the systems vendors can take advantage of the latest innovations in silicon and software with minimum barriers to entry, and the least amount of custom re-engineering, and It follows several API’s.

## **Note :**

Further details of the modules constructed can not be posted here since my work belongs to the confidential property of 5g Testbed lab IIT Madras.