

innovating communications

Avoiding Mobile Hedge Computing

Towards an integral IT & network resource management

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On computing at the edge

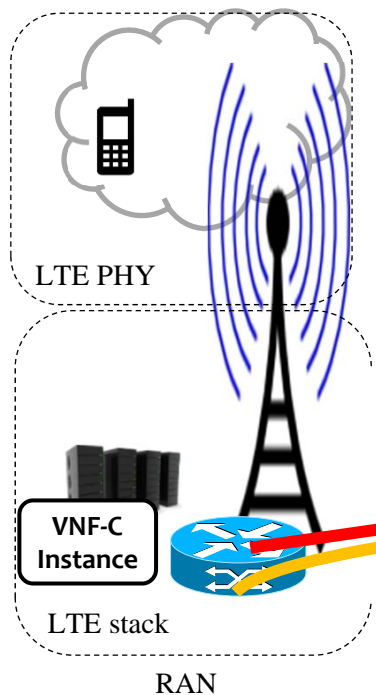
- Some applications and use cases have stringent requirements
- More computing power everywhere
- Backhaul may be an issue
- So, centralization is not always good

Edge computing is good, but...

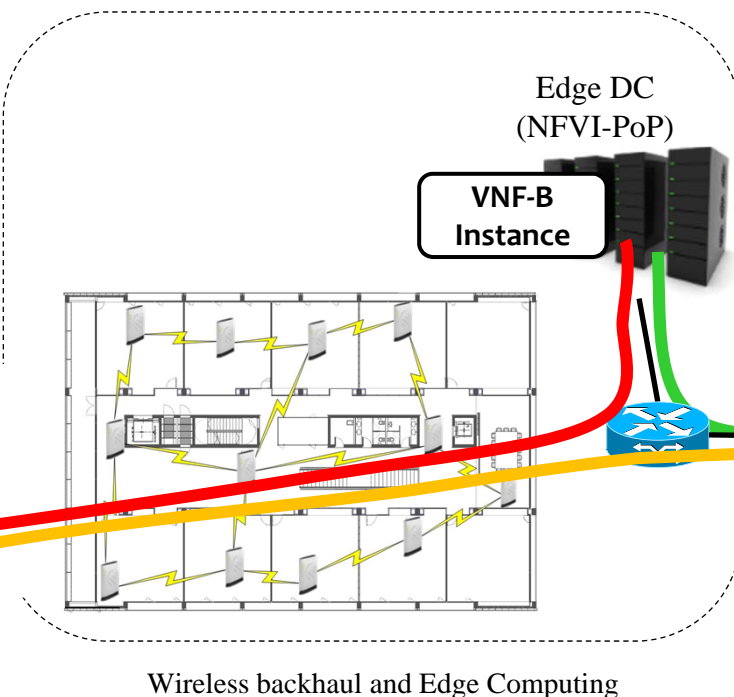
- Can we manage MEC virtual apps in a similar way to any other network function?
 - Virtualization blurs many borders
- Main architectural requirement
 - MEC management should be done in an integrated manner with the rest of the network by solving the following issues...

Multi-domain orchestration XHAUL project

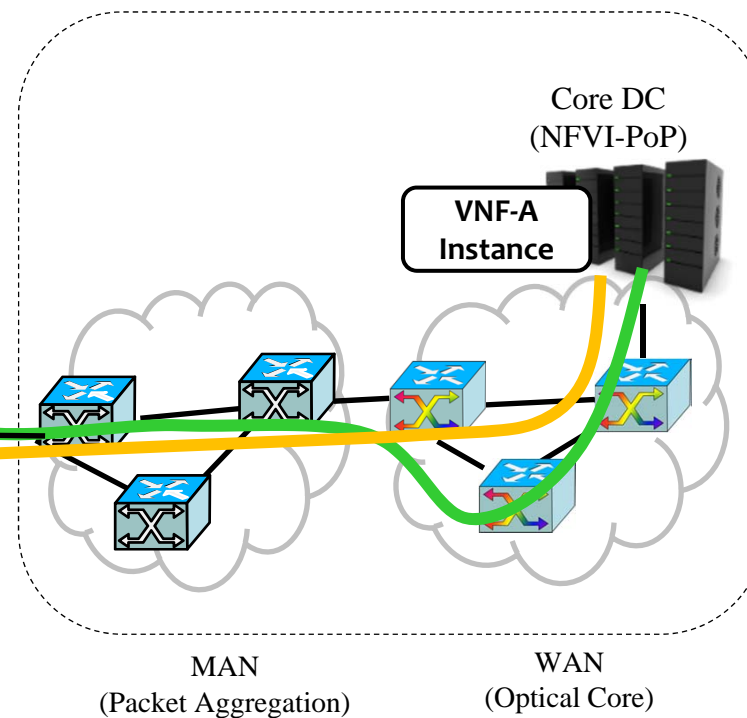
GEDOMIS® Testbed



EXTREME Testbed®

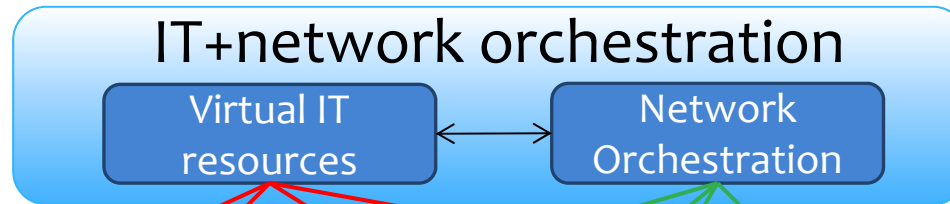


ADRENALINE Testbed®



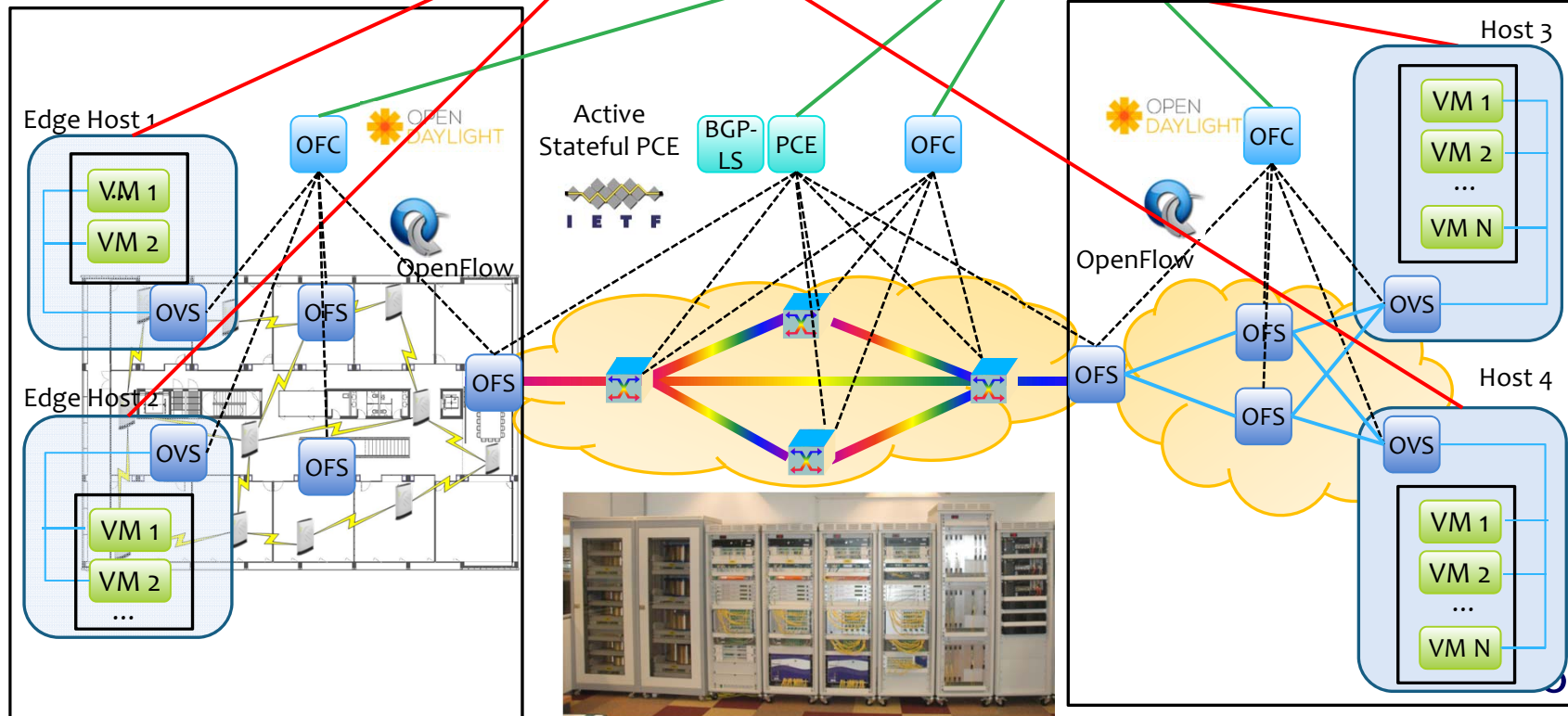
IT & network orchestration

STRAUSS and XHAUL projects



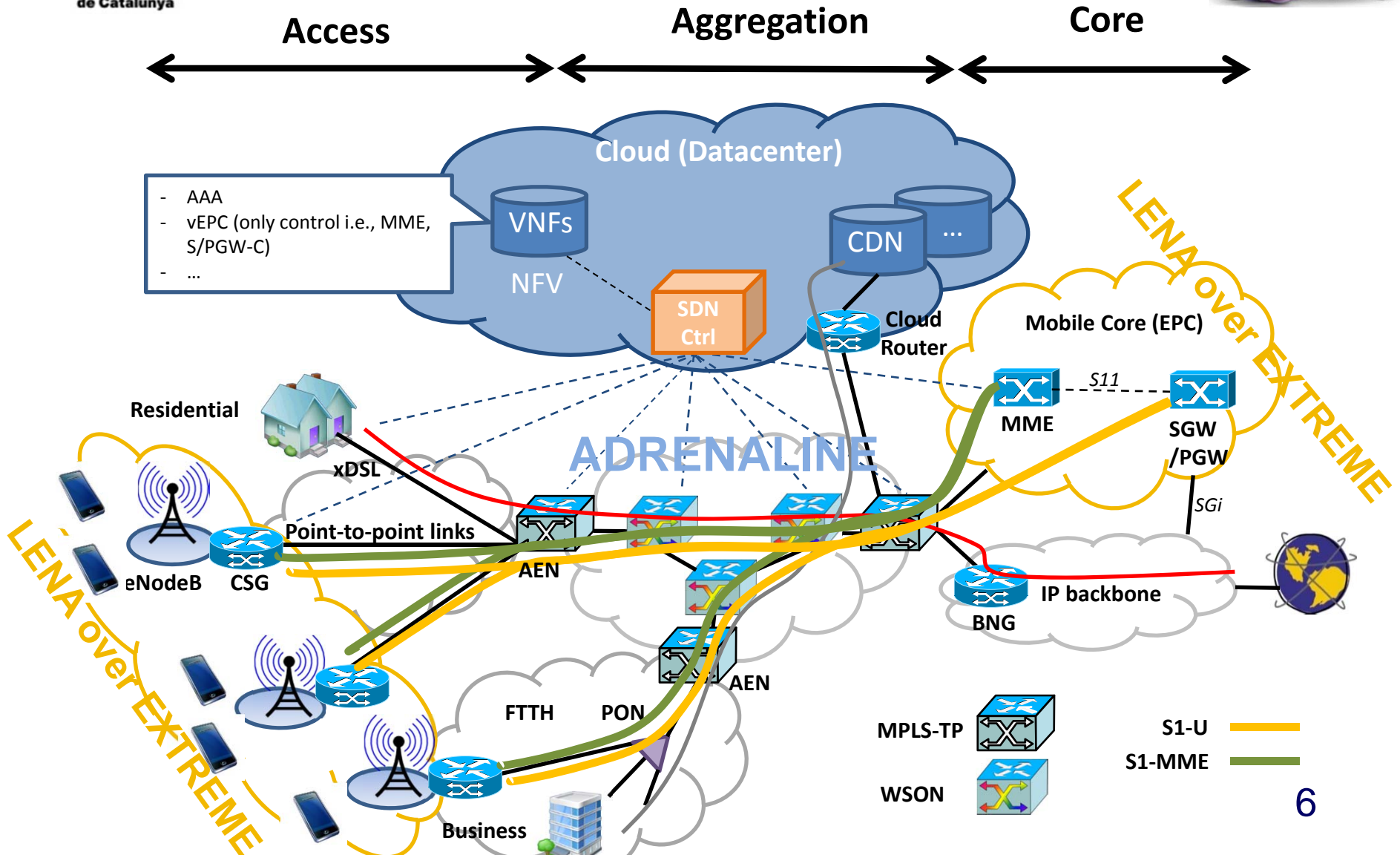
Distributed "Datacenter"

Core Datacenter



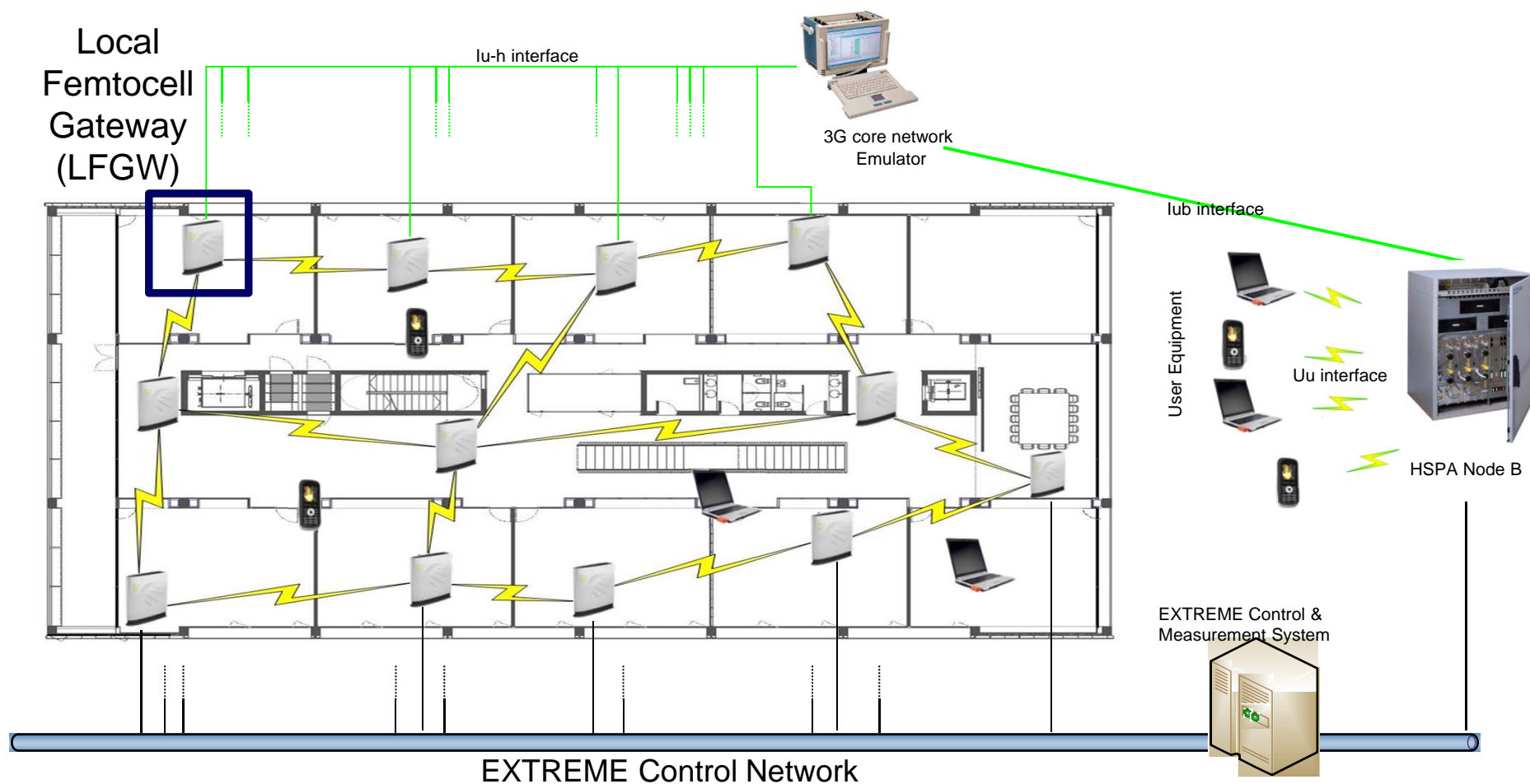
Mobile and transport layer blurring

COMBO project



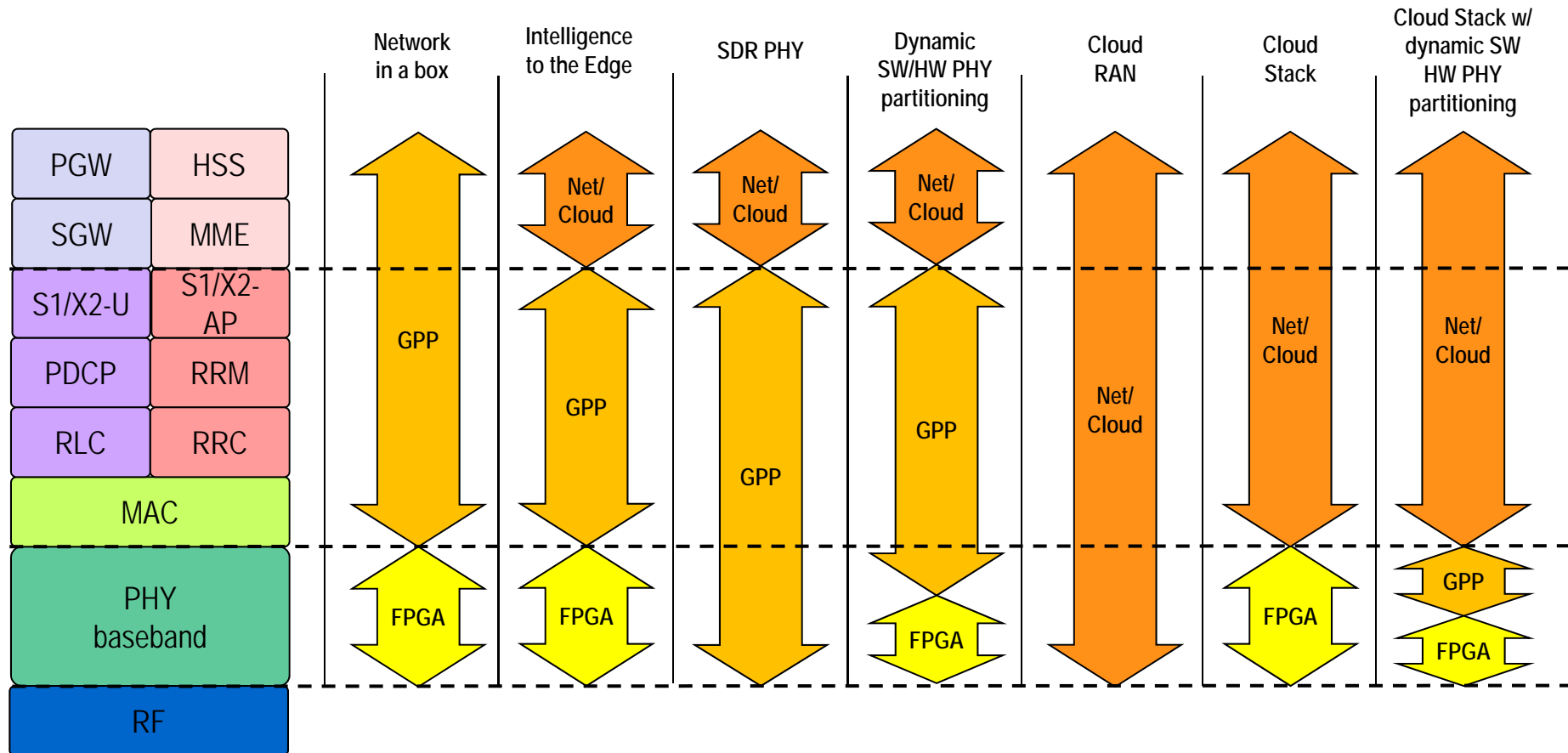
Edge and core borders blurring

BeFEMTO project



RAN borders blurring

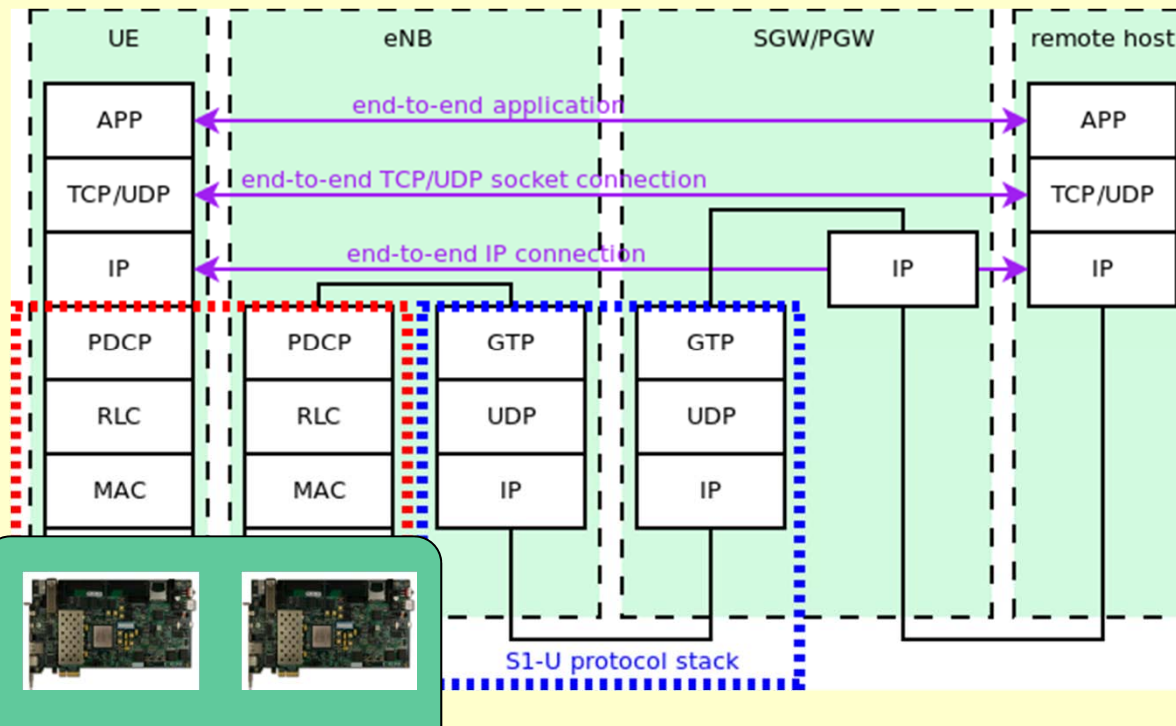
Flex5Gware project

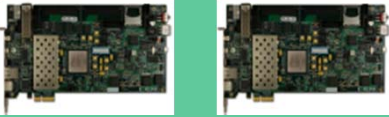


RAN borders blurring

RAN virtualization testbed

LENA stack over EXTREME Testbed

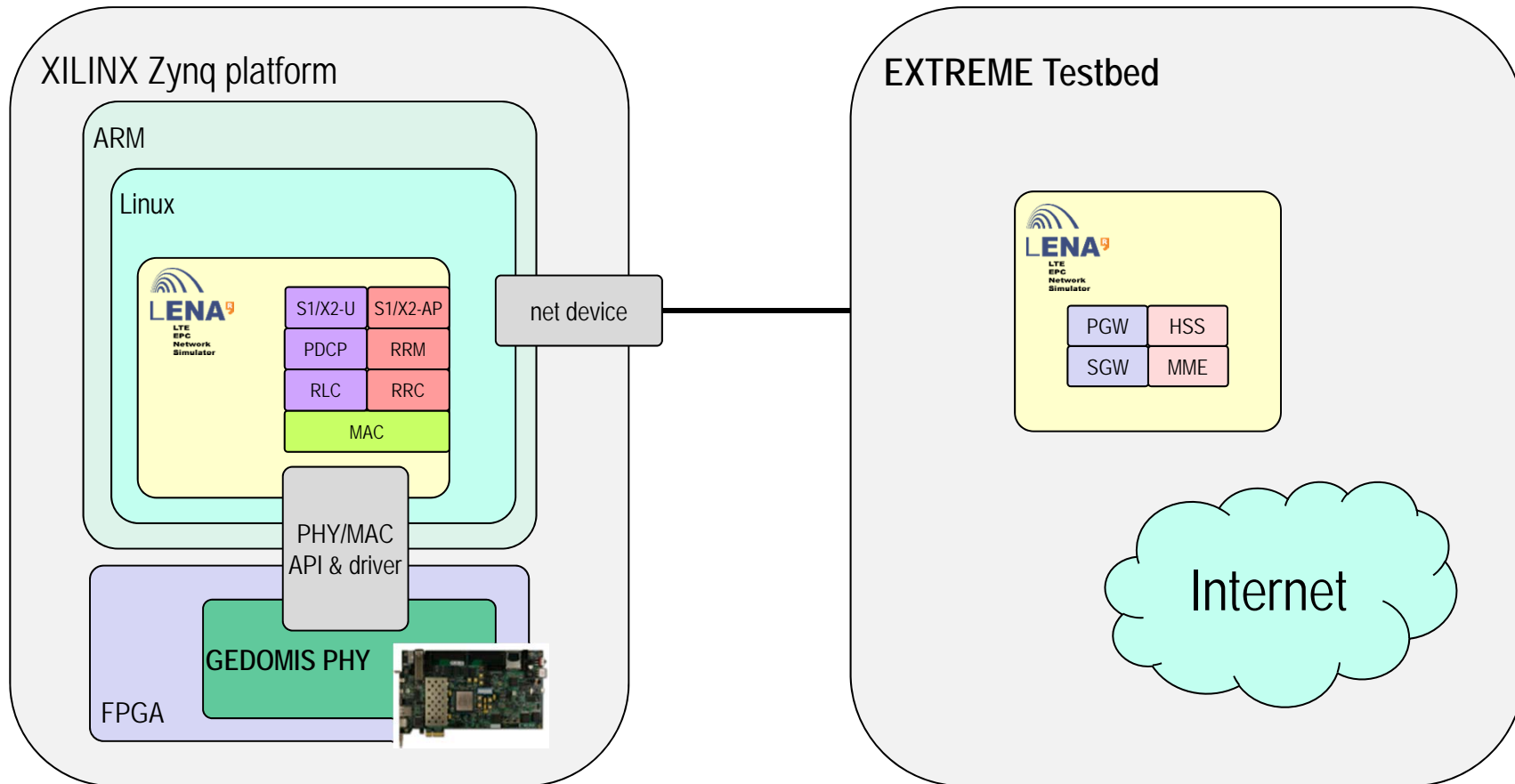




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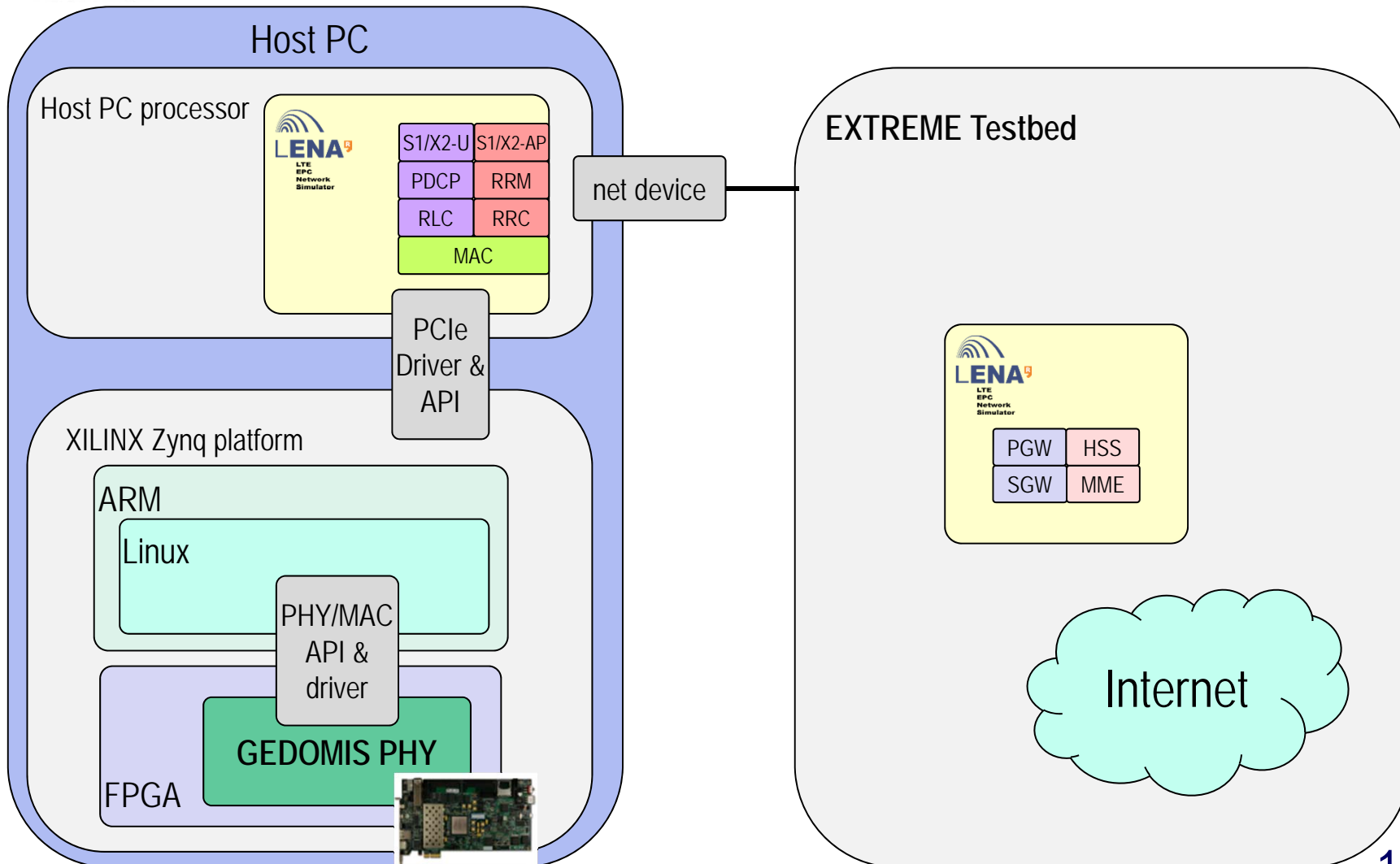
Examples of RAN borders blurring

Intelligence to the Edge approach (I)



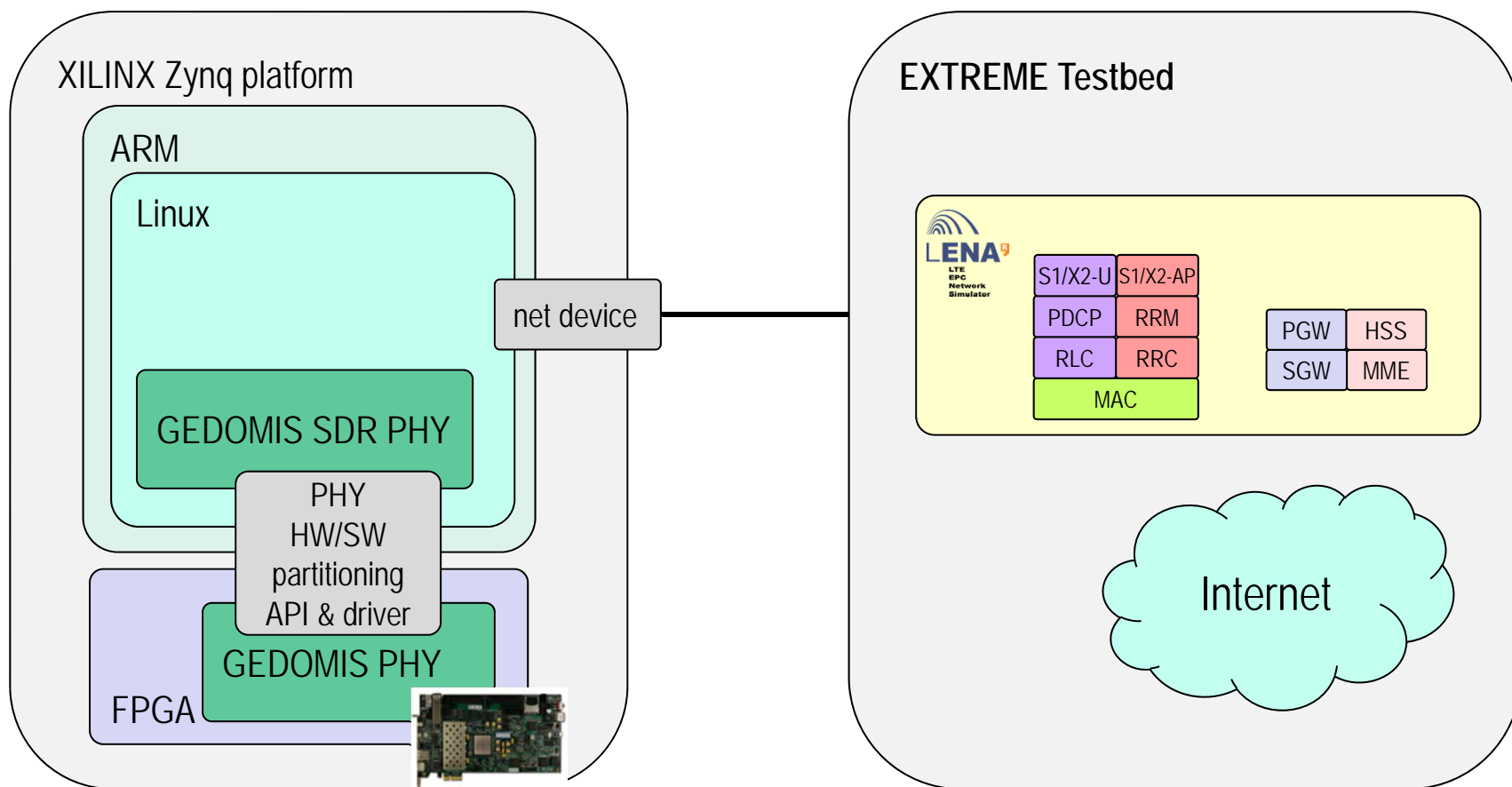
Examples of RAN borders blurring

Intelligence to the Edge approach (II)



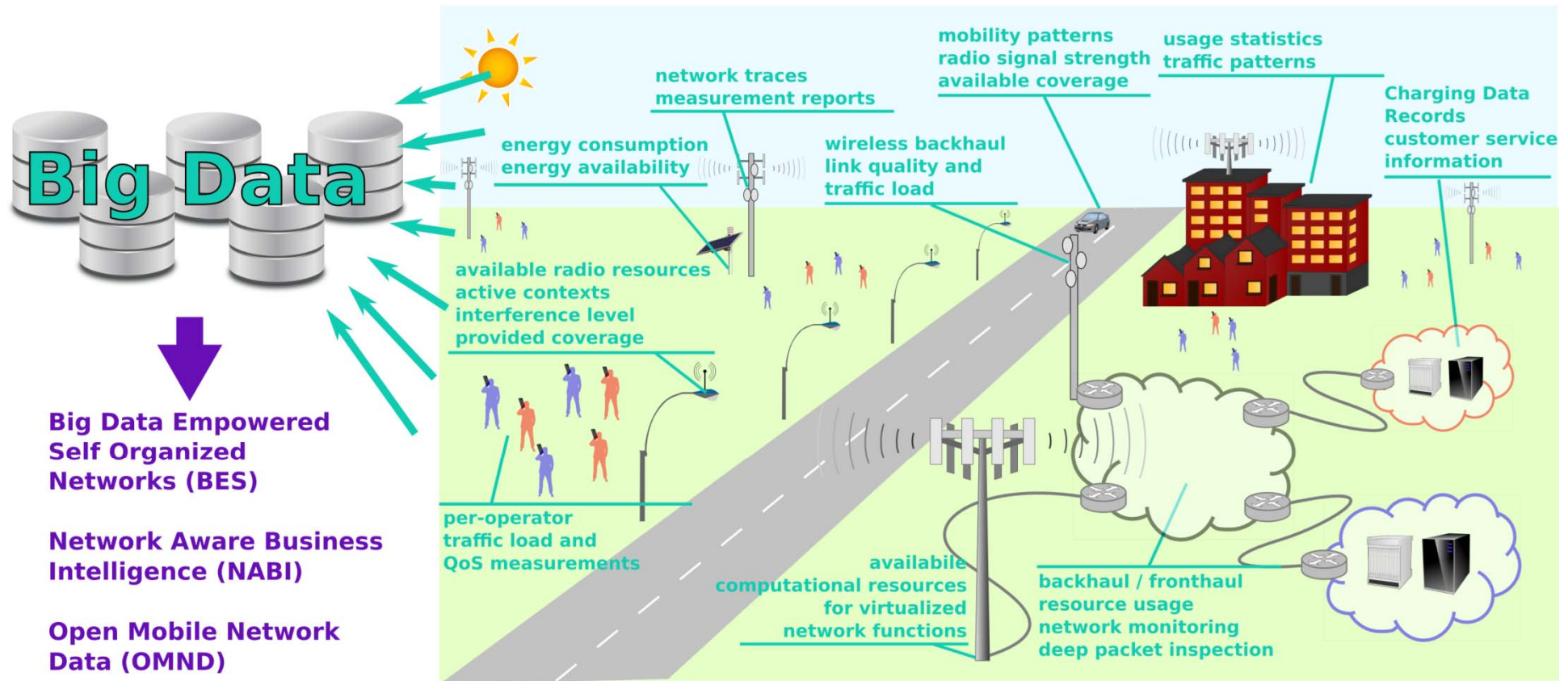
Examples of RAN borders blurring

Cloud Stack with Dynamic HW/SW PHY partitioning



Big Data-enabled SON

Enabler of IT & network resource management



In summary

- MEC seen as an integral part of IT & network function virtualization management ecosystem
- We don't have edge functions and core functions, just virtual functions
 - With potentially different requirements

Thank you!

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