

# ***Net Neutrality in 5G***

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# Objectives and research question

- Main research question:
  - How can we identify traffic differentiation in a 5G network in the context of net neutrality?
- Objectives:
  - Define the concept of net neutrality.
  - Characterize the 5G network architecture.
  - Analyze the “Network data analytics function” (NWDAF).
  - Simulate the 5G Core Network and its components.
  - Define and implement a use case for testing.
  - Test and validate the developed function.

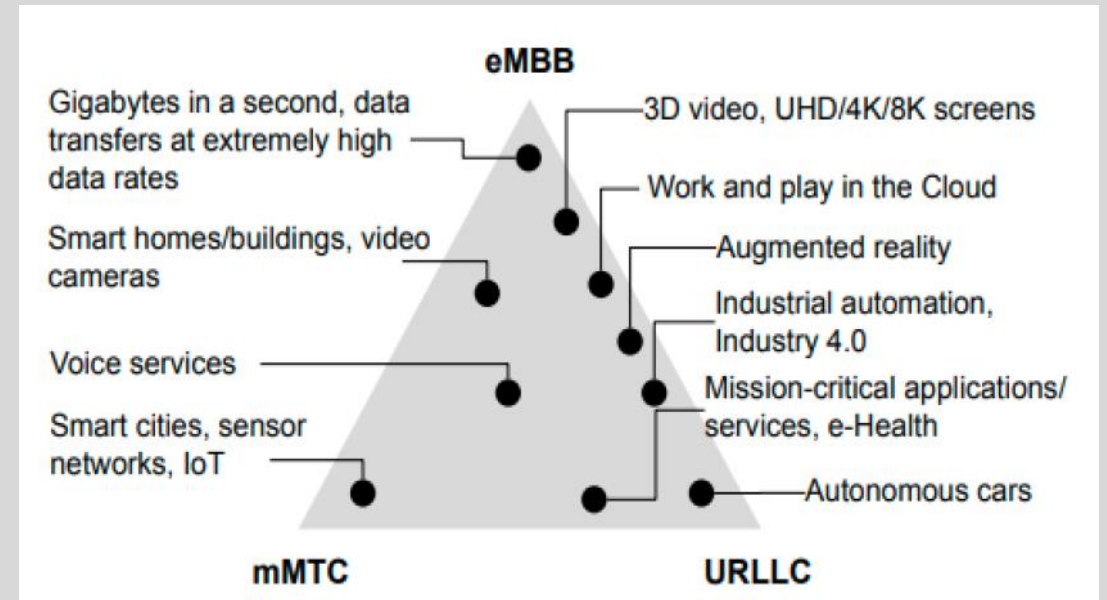
# ***Network neutrality and 5G***

- Context:

- All Internet traffic, regardless of origin, destination, or content, should be treated equally.
- 5G network slicing
- Slices designed to customize certain Quality of Service (QoS) requirements

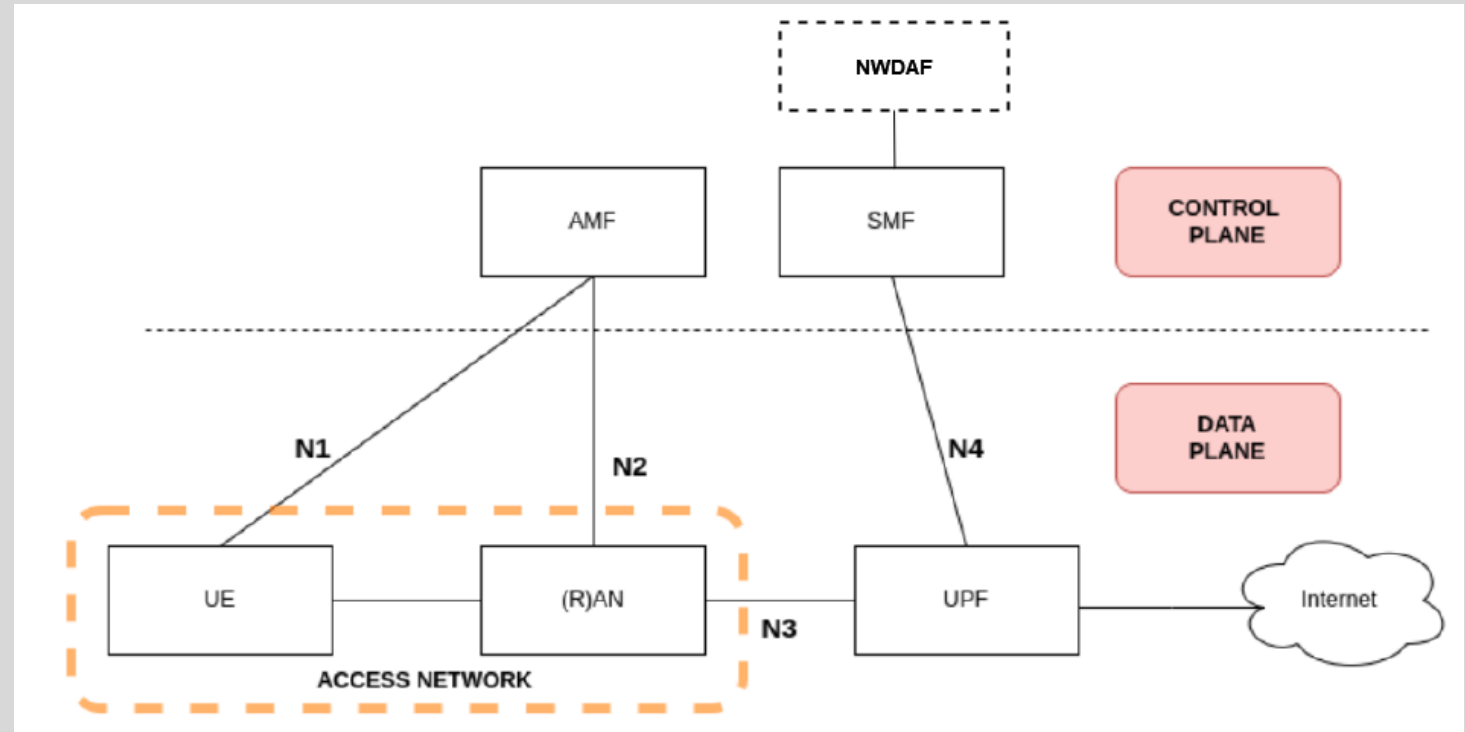
- Problem:

- Creates potential conflict with the net neutrality principle.



# ***5G architecture and NWDAF***

- Data Plane
- Control Plane
- Network functions (NFs)
- NWDAF



# ***Proposed solution***

- Previous works had no access to the ISP network
- NWDAF capable of detecting TD within 5G Core network
- Network regulators will be able to acquire data from the 5G network

# ***Proposed solution***

