1.

5G Core → amfcfg.yaml

- Mobile Country Code (MCC)
  (3 digits)
- Mobile Network Code (MNC)
  (2-3 digits)

• Tracking area code (TAC)
  (1 digit)

• Data network name (DNN)

• User plane information
  gnB1 → name of the node.

5G UEs: • SupI → number of UE
            (UE11, UE12, UE21)
            (`imsi - 0.... 11 / 12 / 21)
            (nome do terminal)

2. 5GC Start order: (compounts)

1 - Mongo DB
2 - NRF
3 - UDR
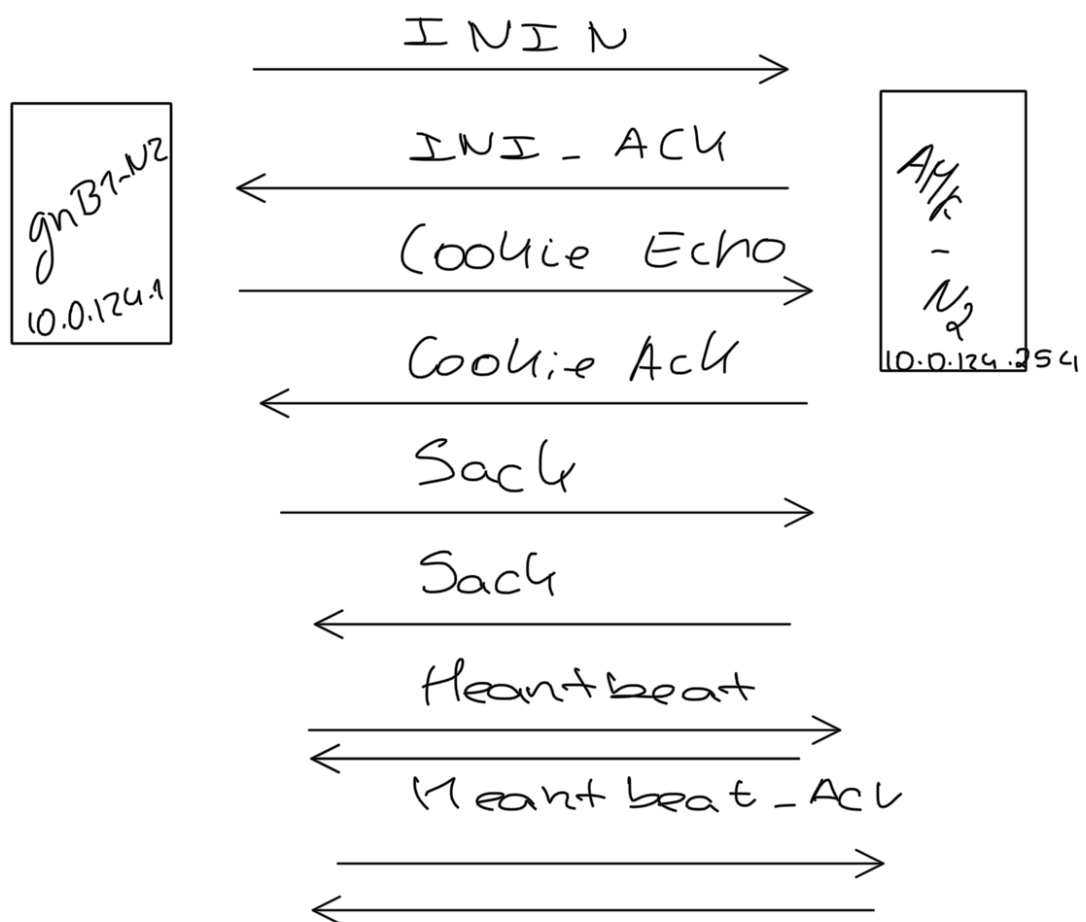4 - UDM
5 - AUSF
6 - NSSF
7 - AMF
8 - PCF
9 - SMF
10 → Web UI

Protocols involuidos → ICMPv6, ARP,
                        TCP, HTTP2

MDNS, PFCP

PFCP ⇒ SMF → UPF
(Request and response
para se ligarem).

3. gNBs start
SCTP protocol:

```
              ININ
gNB1-N2  ────────────────────→  AMF
         ←─── INI_ACK ───────       -
10.0.124.1   Cookie Echo            N2
         ────────────────────→  10.0.124.254
         ←─── Cookie Ack ─────
              Sack
         ────────────────────→
              Sack
         ←────────────────────
              Heartbeat
         ────────────────────→
         ←────────────────────
              Heartbeat_Ack
         ────────────────────→
         ←────────────────────
```

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NGAP Protocol

NGAP Setup Request :. Global RaNNode Id:
gNB1 ──────→ AMF   global GND-ID

· RANNode Name ;

```
_____
```

· Supported TA List:

TAC + mcc (1)
(1)   + mnc (01)

Slice 1 e 2.

· Default Paging DRX

NGAP Setup Response :

· AMF Name : AMF

· Served Guami List

· TAC + mcc + mnc

· Slice 1 e 2

4. UE creation

Protocol
(AMF - SMF)   (HTTP 2)/NGAP/NAS- 5GS

↳ PDU session establishment

Protocol   (PFCP)
(SMF - UPF)   ↳ Session establishment
request / response   (create
PDR, FAR
qER)

Session modification
request / response (update

Protocol (HTTP 2)

(AMF - AUSF) — Data, headers, settings

window update, goaway

5. Connectivity

GTP < ICMP > - Tunnel endpoint identifier

$$(TEID = 1)$$

6. QoS

Upload — 10 mb/s

download — 20 mb/s