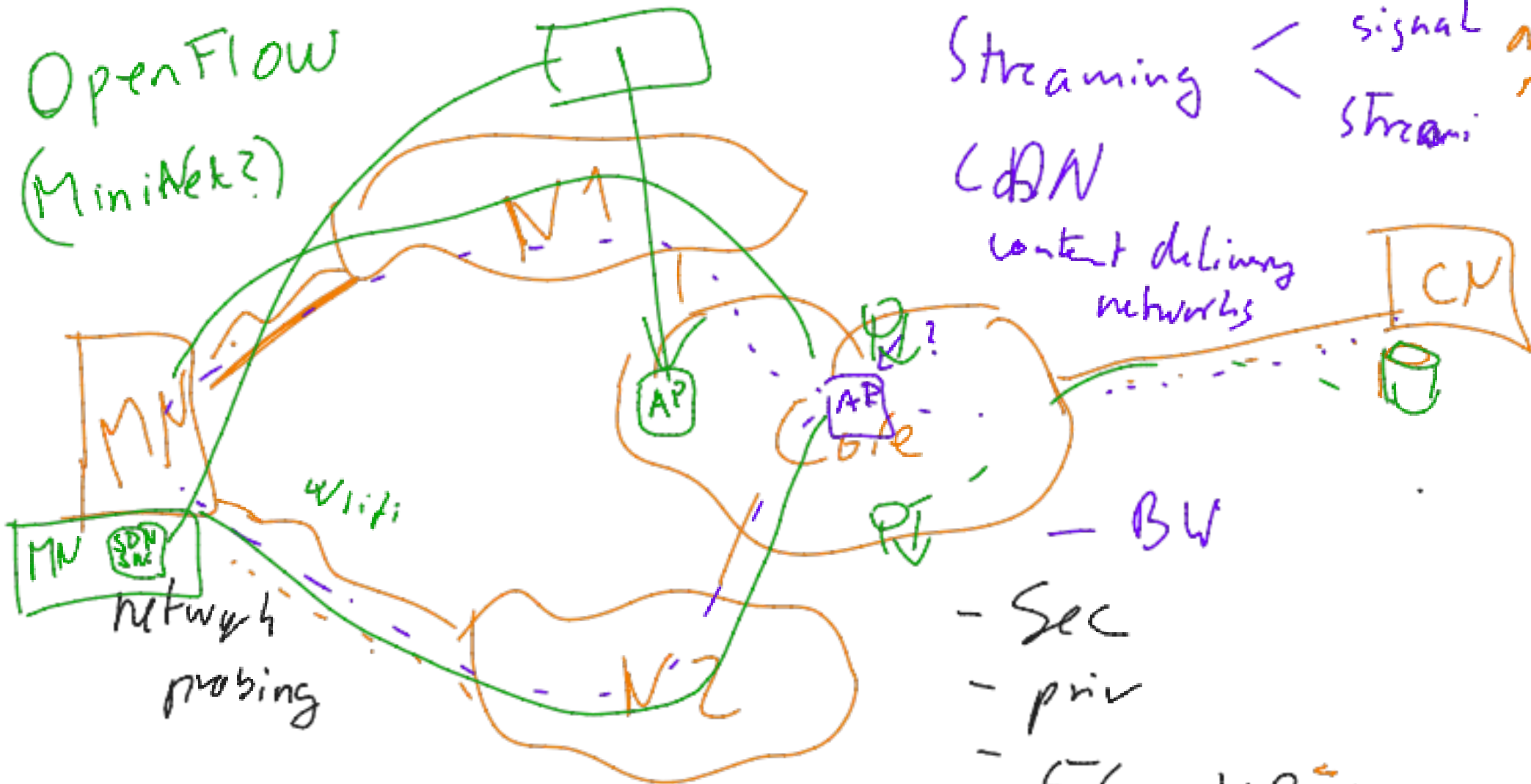


OpenFlow
(MiniNet?)



- BW
- Sec
- priv
- 5G URLLC

network
probing

Network probing

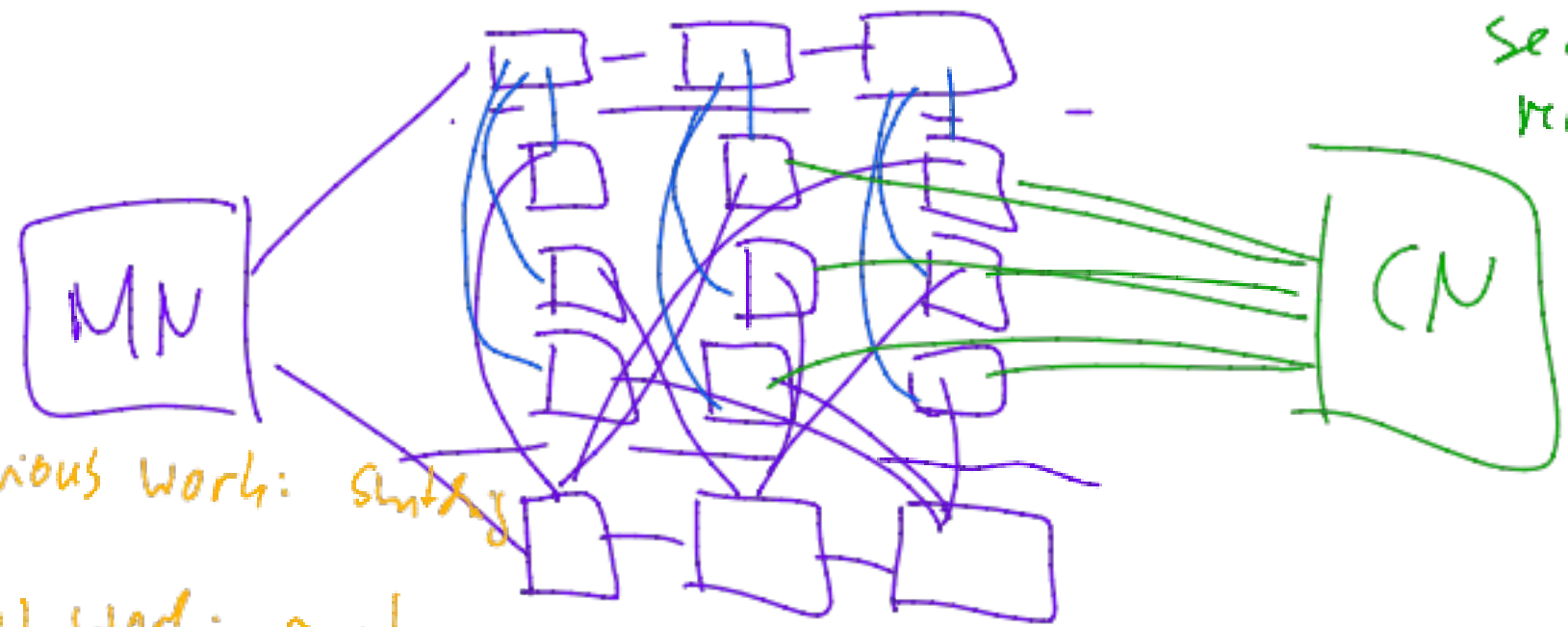
✓ data

- (double) sending split

? eval. parameter

cost: ^{US} shortest way

sec, priv
reliability latency
...



previous work: *Shutty*

new work: appl. spec. requirements/vouchers

Service parameters of sec?

BW #A / Delay #B

Subj
alarm

reliability

#C
reliability of packet / packet loss / delay

Service #1

BW

streaming

BW

Service #2

delay // VoIP
(video)

Arstands

virgic
delay

Social network
IT alarm (fire, ...)
fall

eHealth

Sec

priv

reliability

delay

packet loss

- Energie - light
- Low power - mobility
- IOT

- 3.5 Billion people "unconnected"
- 6? IOT ← buzz

mm M2M Broadband
Loss

5G req.

process control
US\$

ultra reliability URLLC
low latency

e-SIM
billions of devices
US\$

m IOT



SCOTT key message
"elevator pitch"

largest security
project in EU

57 partners from
12 countries



80 M€ budget
35 M€ EU&national

8 partners from
Norway



IoT is the game changer and driver for digitalisation, and SCOTT contributes through:

- Answer the **IoT** need for a new and **more advanced security paradigm** through **security classes**
- Create a **Convincing privacy assessment** through **privacy labelling**
- Establish a **clear link** between **security and safety**

SECURITY



PRIVACY

TRUSTABILITY



USABILITY



SAFETY



Automotive

Home

Rail

5G

Avionics

IoTSec.no = Publications = NEK Standard Norge

Open discussion:
- network knowledge
- network probing (time, traffic, - variability)

1 → hvor ofte foretages netværket seg

micro segmentation
appl. spec. routing

Methodology for use cases applied to WP8 "Managed Wireless"

Steps



■ Core use case: "Managed wireless"

- Analysis of protocols for monitoring wireless access (C.1)
- Provide tools for identification of "bad" wireless (C.2)
- Manage wireless remotely (C.3)

■ Extended use case: Service differentiator for future services

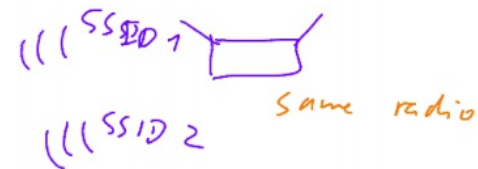
- Routing, e.g. micro-routing (E.1)
- Network segmentation (E.2) and slicing (E.3)

■ Future services and application areas

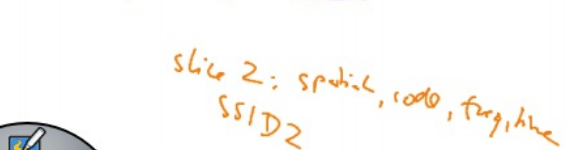
- TelCo 5G network slicing (F.1)
- IoT Gateway monitoring (F.2)
- IoT Management (F.3)

■ leading to Demo and Impact

network segmentation



network slicing
spatial, code, freq. time slice



Paper TOC

Intro Review for 5G
SDN
(CDN) ← use case
Application specific requirements
Tab

Impl

Eval Tab A "nett"

Ackn:
IoT Sec
SCGT