# 5G Network Design

**VTC Fall**

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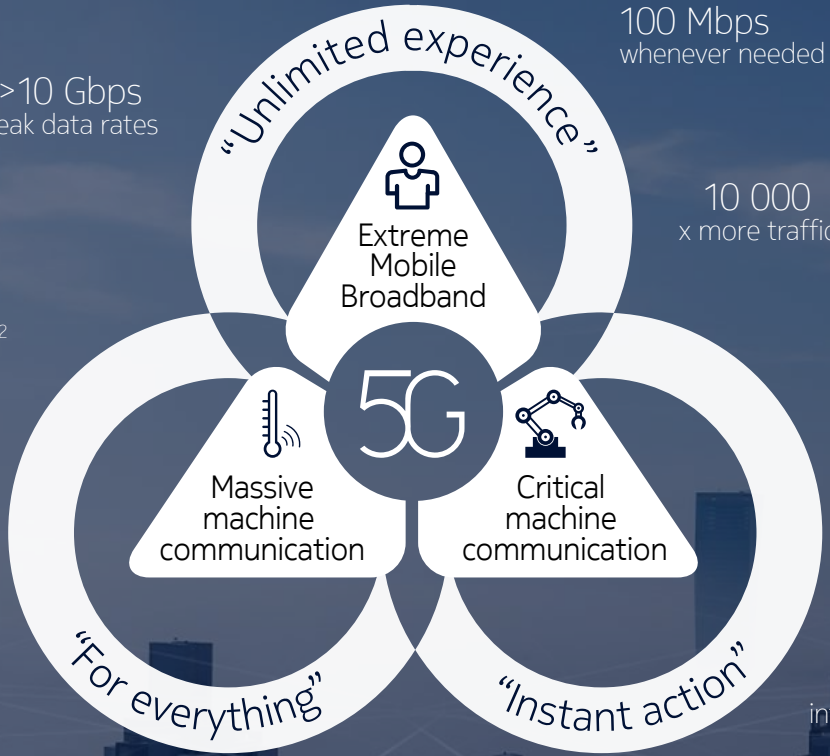
NOKIA Bell Labs

# Panel overview

- Moderator
  - Klaus Doppler, Nokia Bell Labs, USA, Head Connectivity Lab
- Panelists
  - Benoit Pelletier, Interdigital Canada, Member of Technical Staff
  - Ishan Vaishnavi, Huawei, Germany, Area leader Orchestration and Management
  - Simone Redana, Nokia Bell Labs, Germany, Head Mobile Architecture & Systems Research Group
  - Naseem Khan, Verizon USA, Distinguished Member of Technical Staff

- Max 9min presentation from each panelist (2min warning)
- Lively debate

# The network will radically change




## Capacity

>10 Gbps
peak data rates

100 Mbps
whenever needed

10 000
x more traffic

1,000,000
devices per km²

## Latency

<1 ms
radio latency

Ultra low cost
for massive machine coms.

Ultra reliability
< $10^{-5}$ E2E outage

## Connectivity

10 years
on battery

Zero
mobility interruption

## Reliability

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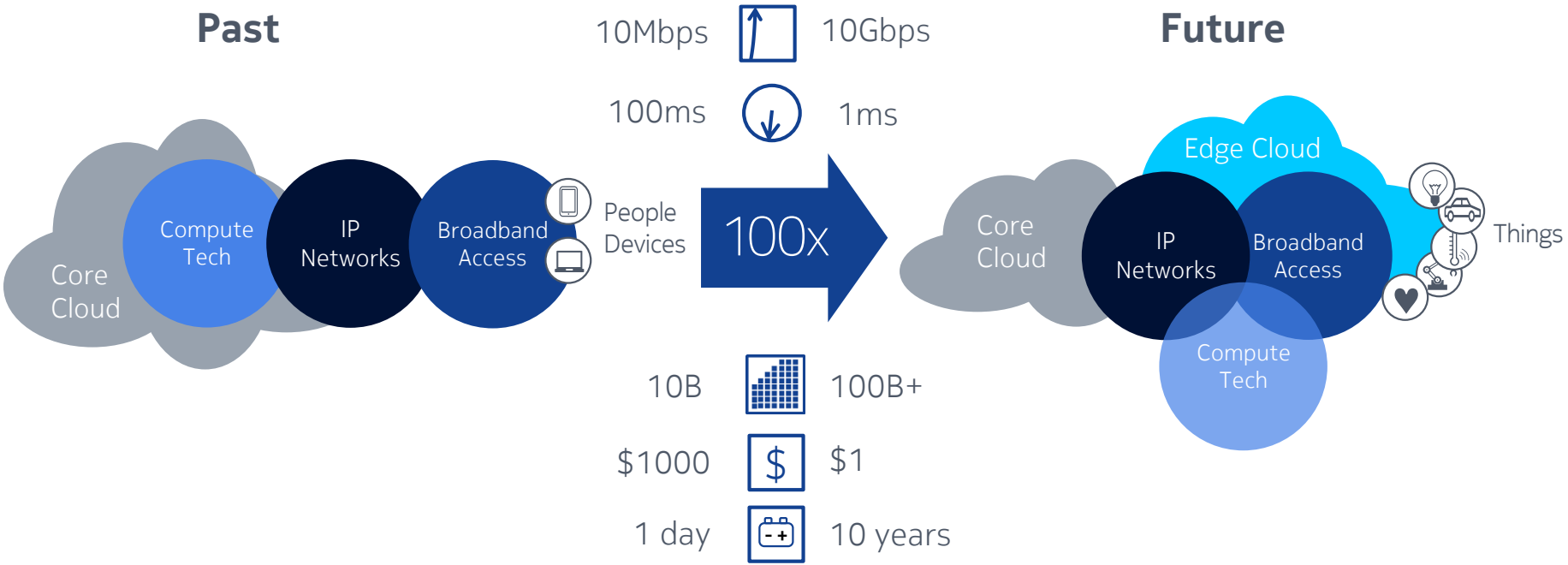
# The Future X Network: The 100yr, 100x shift




**Radically new distributed Future X network architecture**