

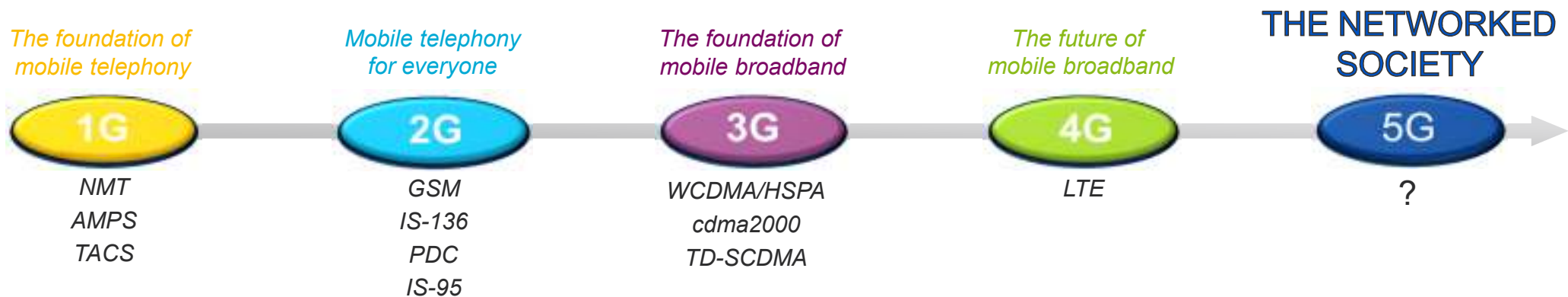


# COLLABORATIVE RESEARCH TO ENABLE THE NETWORKED SOCIETY

Erik Dahlman  
Senior Expert  
Ericsson Research

# WIRELESS ACCESS TECHNOLOGY

*TODAY ... AND IN THE FUTURE*



# THE NETWORKED SOCIETY

IN THE NETWORKED SOCIETY PEOPLE,  
KNOWLEDGE, DEVICES, AND INFORMATION  
ARE NETWORKED FOR THE GROWTH  
OF SOCIETY, LIFE, AND BUSINESS



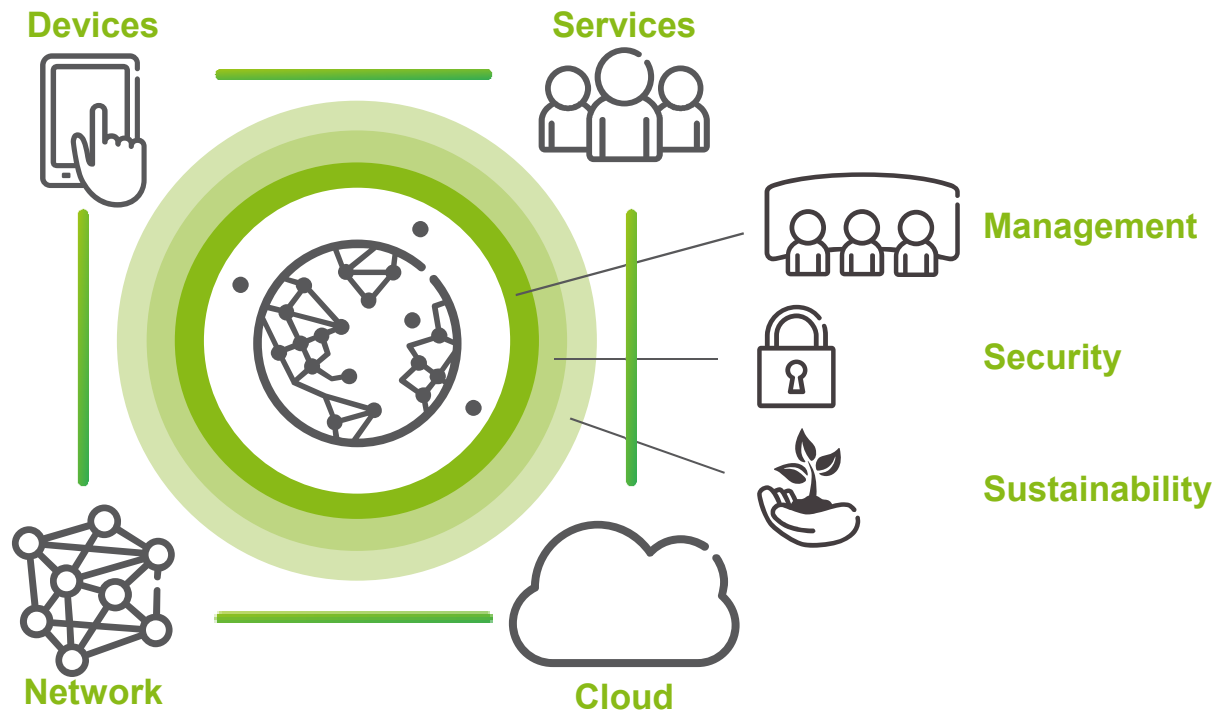
# THE NETWORKED SOCIETY



*Unlimiting access to information and sharing of data  
anywhere and anytime for anyone and anything*

*Anything can be connected!*

# THE NETWORKED SOCIETY



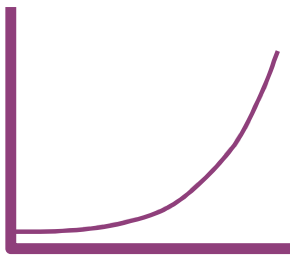
Wireless Connectivity  
is key

# FUTURE WIRELESS ACCESS

## KEY CHALLENGES



### Massive growth in Traffic Volume



“1000x and beyond”

### Massive growth in Connected Devices



“50 billion devices”

### Wide range of Requirements & Characteristics

- Data rates
- Latency
- Reliability/availability
- Security
- Device energy consumption
- Device cost
- .....



**Affordable and sustainable**

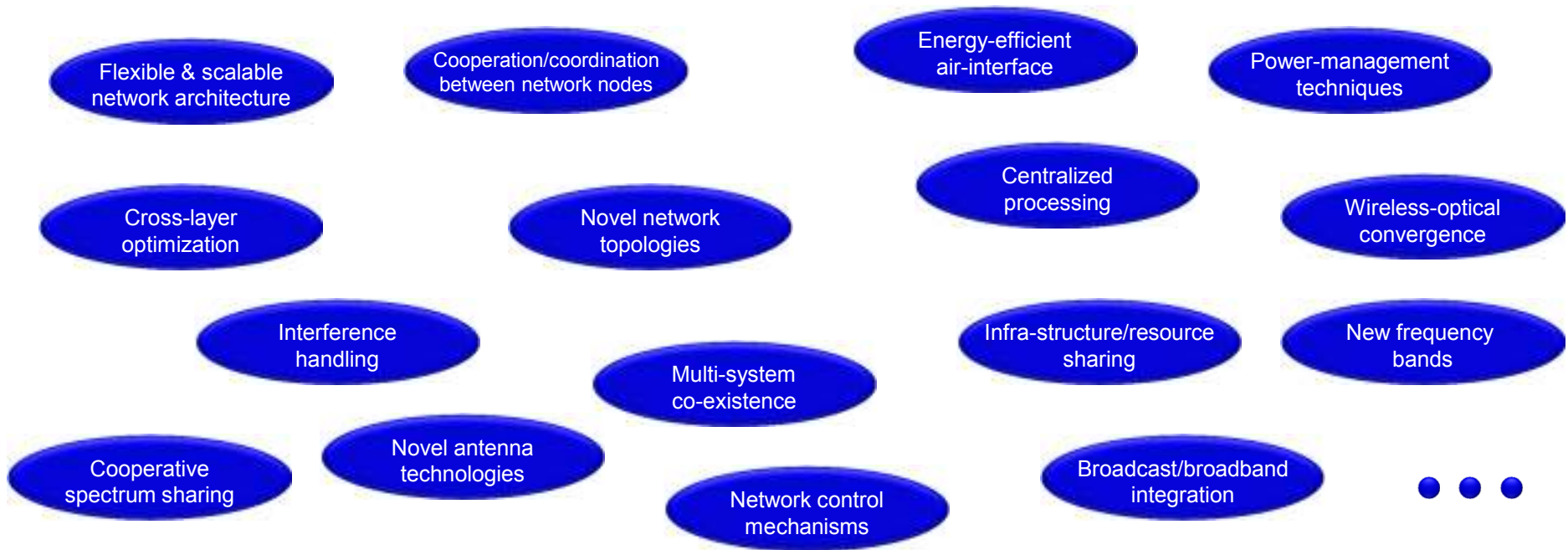


# TO REALIZE THE VISION OF THE NETWORKED SOCIETY WE NEED ...



- › ... an extremely flexible overall wireless access solution ...
- › ... tightly integrating different radio-access technologies ...
- › ... jointly supporting an extreme range of service requirements and characteristics ...
- › ... being able to operate over a wide range of spectrum under different conditions ...
- › ... in a cost-efficient and sustainable way

# SOME RESEARCH AREAS





# SOME EU-SPONSORED PROJECTS

... AND THEIR IMPACT ON MOBILE COMMUNICATION

