

LUXEMBOURG I 5G STRATEGY

5G PARADIGM SHIFT - LIFI TECHNOLOGY

Zero.1 Marc Fleschen CEO/Founder



PRESENTATION FLOW

Points of Discussion

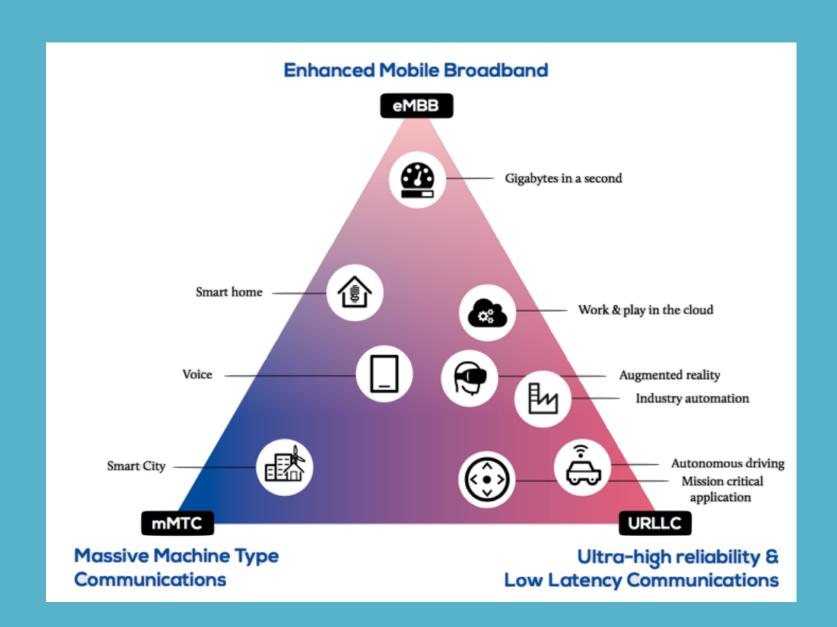
5	5G Specs
5	5G use case families
5	G challenges (spectrum)(satellite)
L	_IFI to support 5G
E	G new business model (opex not capex)
(Conclusion

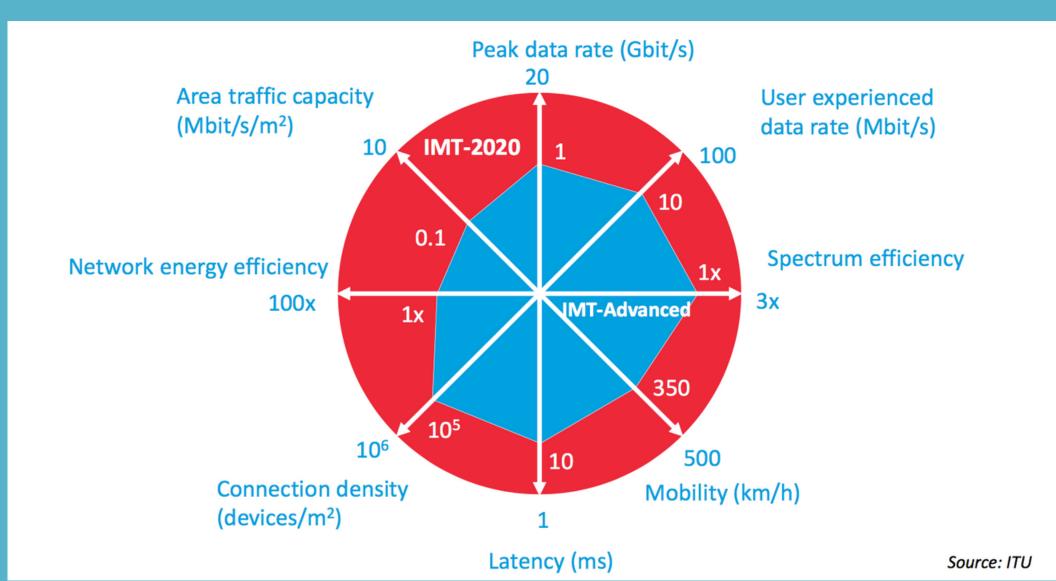
Cellular Generation	Paradigm shifts	Service Pull	Impact
1G - 2G	Analog to Digital	Mobile Telephony	Revolution
2G - 3G	Small cell concept	Mobile Internet	Evolution
3G - 4G	Small cell concept	Mobile Internet	Evolution
4G - 5G	RF to Light	IOT-AR-VR-M2M- V2V etc	Revolution



5G SPECS

Network Slicing



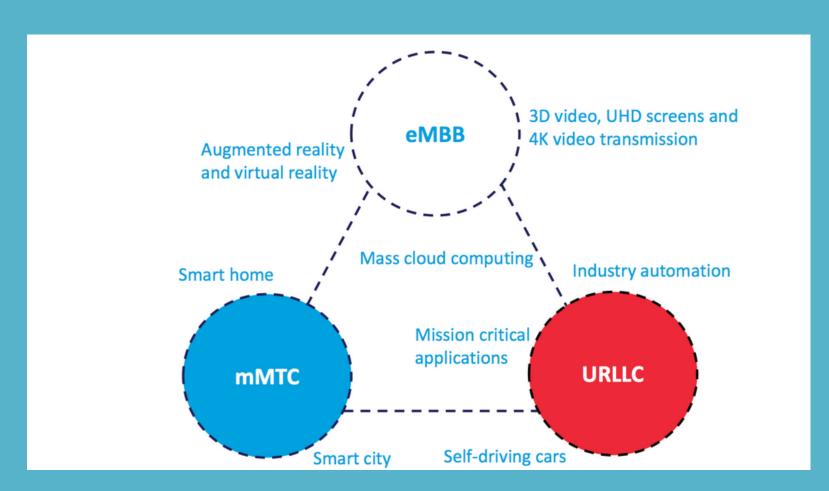


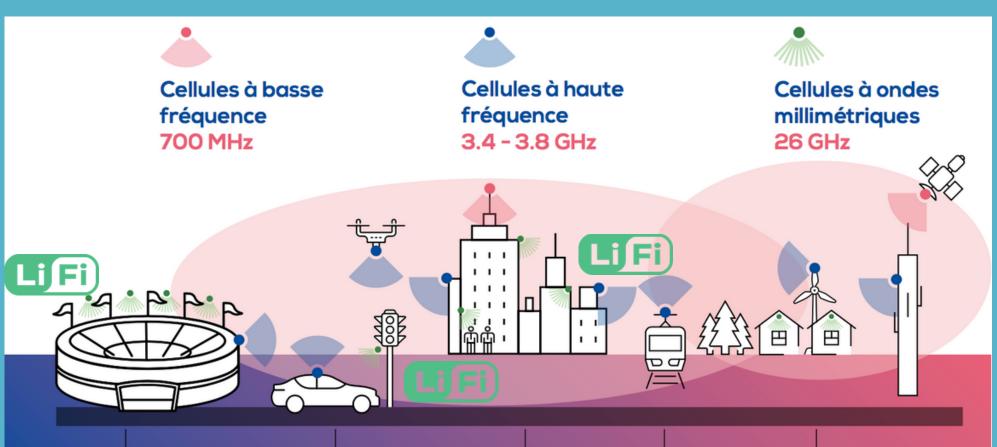
50 Billion IOT connected devices by 2020



5G USE CASE FAMILIES

Single unified physical network - faster but more agile



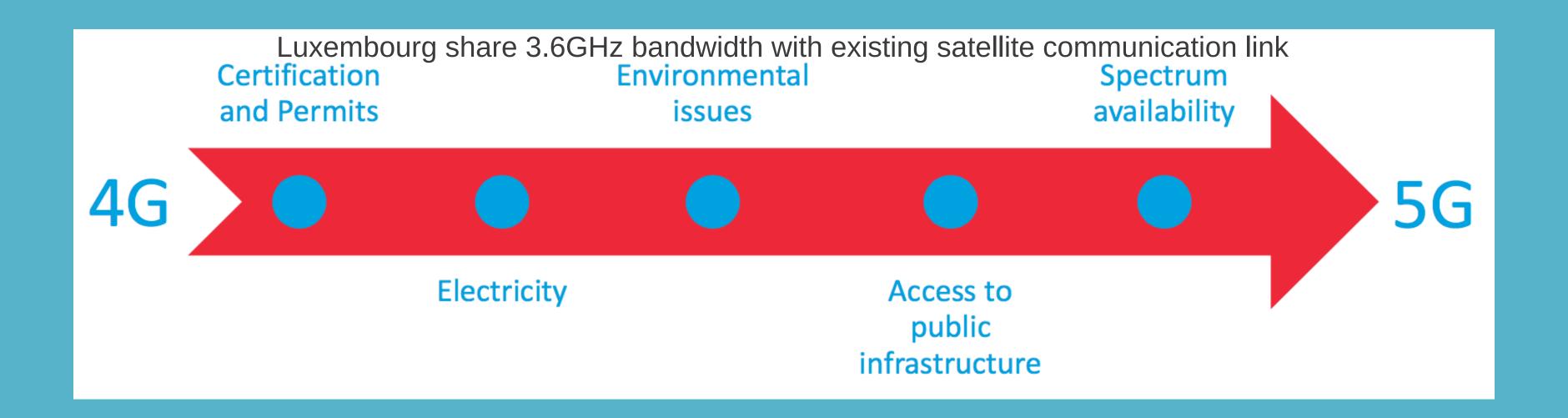


5G will have to be easier to manage and more agile catering for a range of use case and requirements



5G CHALLENGES

Spectrum - Environmental impact - Face long term challenges

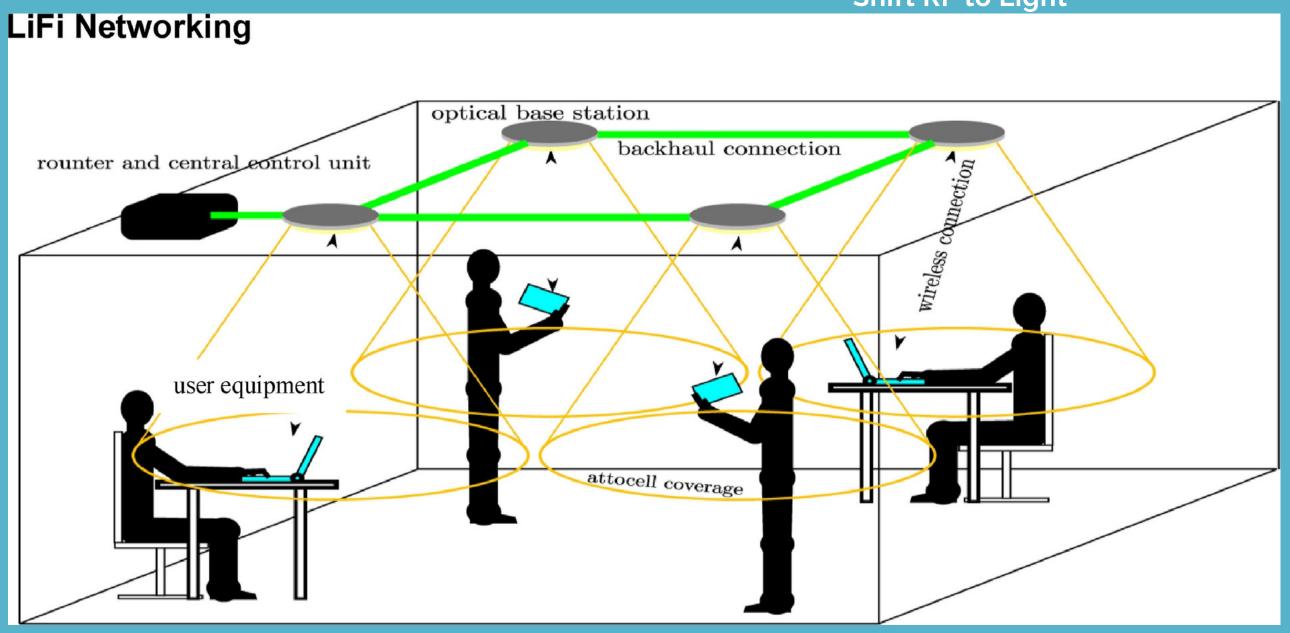


5G will need to answer new global problems such as energy, EMF, Health, interference



LIFI TO SUPPORT 5G

Shift RF to Light

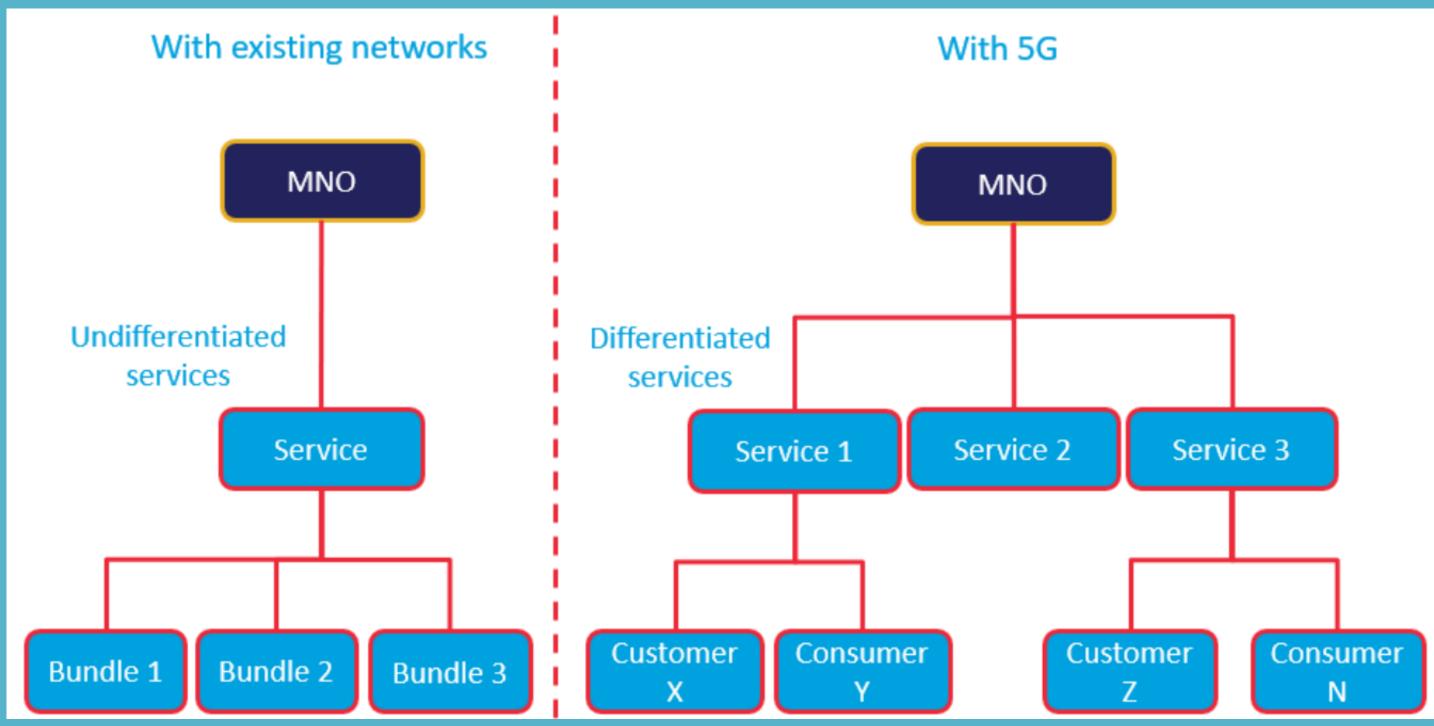


- Low latency
- High speed data transmission
- RF free no interference
- Light+Data in a single point
- Energy saving
- Optical attocell
- Any existing LED
- Extra wireless capacity
- Bandwith Off loading
- Cost effective
- IEEE standard 802.15.7 / 802.11bb



5G NEW BUSINESS MODEL

Service differentiation shift

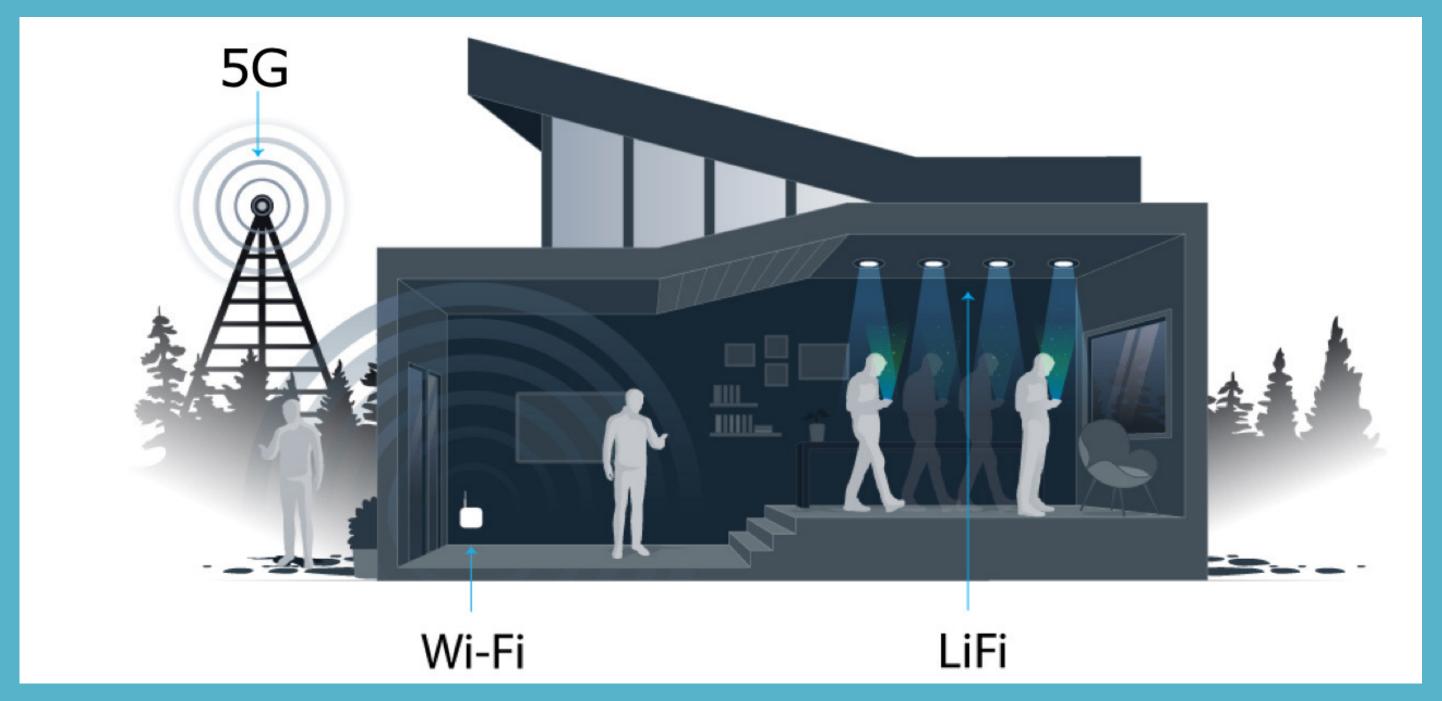


The changes of service provisioning models will influence the charging models and support OPEX over CAPEX



CONCLUSION

Multi layer - Multi services



A single layer can not answer all the new challenges LIFI can support 5G by solving some of the issues







THE ADVANCE OF TECHNOLOGY IS BASED ON MAKING IT FIT IN SO THAT YOU DON'T REALLY EVEN NOTICE IT, SO IT'S PART OF EVERYDAY LIFE.