1) Industry Outlook

Our sector is managing two **different** transitions

1. Wave 1: Voice to **Mobile Internet**
   - Ubiquitous Networks
   - Smart Devices
   - Locally Relevant Content/Services

2. Wave 2: Towards **Cognitive Computing**
   - 5G
   - Intelligent Connectivity
   - Data Economy (Gigabit Society)
   - Artificial Intelligence
1) Industry Outlook

Telcos underperformed global market average by -13 ppts in 2017 and by -9 ppts in 2018 (YTD).

Gaps in 1) Connected (3.2 Bn) and 2) Unconnected (0.9 Bn) POP

3) CapEx Growth per Region (US$ Bn)
+ US$ 44 Bn global spectrum expenditure in 2018-20E

Source GSMA Intelligence

Source Ovum, Analyst reports
2) Challenges: balancing conflicting priorities
The conundrum: low prices + competing infrastructures + high quality

- Data Explosion (growth >50% per annum)
- Regulation
- Licenses/Taxes
- Lack of Scale
- Business Case (Returns on Investments)
- Spectrum Fragmentation
- Competition Global Platforms
- Reliability, Security and Privacy
3) Ideas:

If we fast forward to 2030….
what decisions we would have liked to take today in 2018?

- Industry Policy (Multi-year Objectives)
- Market Structure (Regulatory Modernization)
- Use Cases & Business Models
- Talent & Innovation
- Predictability (Spectrum and Fiber)
- Legacy Simplification
- Co-investment PP Partnerships
- Local Ecosystems