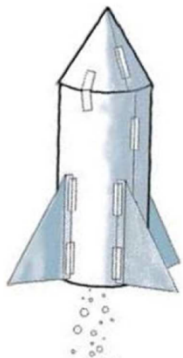




PANEL

What are the key RAN innovations to ignite 5G?



- **Phase III** (2017-2018)
Large-scale trials
- **Phase II** (2016-2017)
System optimisation
- **Phase I** (2014-2015)
Basic research work
- **Ignition phase** (2012-2013)

Bernard Barani, European Commission

Colin Willcock, NSN

Gerhard Wunder, Fraunhofer, HHI

Jossy Sayir, University of Cambridge, UK

Douglas C. Sicker, University of Colorado, US

Moderator:

Dominique Noguét, CEA-LETI



Challenges

- Which main challenges will 5G have to face?
 - What is 5G?
 - Mainstream (Higher rates, More capacity)
 - Disruptive (IoT as part of the (r)evolution, traffic generated by mobile user contents)

- How to move from where we are?
 - Is it only a cellular system evolution?
 - Do we need new core networks as well?
 - How can we make this change an affordable cost?



How can we make it

- Do we need more spectrum?
 - Where can we find it?
 - Is mm-Wave the way forward?
 - Spectrum sharing, are regulators ready?
 - Other thoughts?
 - Is 5G a mixture of technology or will there be a winner-take-all situation ?
- How can we make 5G sustainable?
 - From a economic standpoint?
 - From a CO2 footprint point of view?
- What is the 5G etiquette?
 - How to provide 5G in rural areas vs deployment cost?



Europe in the 5G arena

- How are European initiatives such as H2020 (eg PPP) seen from US and Asia
 - Are there similar incentives for research?
 - Is collaboration already in place?
- What impact on European leadership is expected?
- How to impact standardisation and ensure ROI?



Thanks !