23rd of February 2021 #CelticPropDay

How to recover the economy after covid-19
The role of 5G-6G

Pedro Mier
President of AMETIC
AMETIC is the association that represents the digital industry in Spain.

The IT & Content sector generates 532,822 employees
115,154 million €
9.2% GDP 2019
(Source: ONTSI 2019)
The world after Covid-19:

• Will never be the same?
• Shall we take the challenge to really change our world?
Which will be the trends in our “post Covid-19 world”?

• Economy recovery or social recovery?
• How to fight against inequality, unemployment and lack of future for the new generations?
• What about sustainability?
• It’s enough to recover or we need to transform?
Planet Positive Economy

• New trends examples: BCorp, Impact Investing, ESG (Environmental, Social and Corporate Governance), BlackRock, etc.

• Purpose as a claim of the new generations
What about connectivity within this new scenario?

- New Social Trends (urban to rural, working from home, immigration, new geopolitical actors, demographic changes, pandemics, etc.)
- Shall 5G-6G help society to advance in the right direction?
- Which should be the drivers? (Ex. One Web)
What about Energy Consumption?

ICT is the key enabler to decarbonize our lifestyle

- Some of the positive *Greening-by-ICT* effects:
  - *Dematerialization* – less travel, less transport, ...
  - *Efficiency gains* – traffic, energy grids, buildings, ...
- Covid-19 made some of these pretty clear

![Graph showing ICT emissions and carbon savings](image)

<table>
<thead>
<tr>
<th>Sector</th>
<th>GtCO₂e</th>
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</thead>
<tbody>
<tr>
<td>Manufacturing</td>
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<tr>
<td>Energy</td>
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<td>Buildings</td>
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<tr>
<td>Mobility</td>
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<tr>
<td>Agriculture</td>
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<tr>
<td>Total global</td>
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<tr>
<td>Global ICT Emissions 2030</td>
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</tr>
<tr>
<td>Saving Factor</td>
<td>9.7</td>
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</tbody>
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*Source: Sustainable ICT systems for a green world*

Keynote, CELTIC-NEXT Day
December 2, 2020

Dr. Klaus Grobe
Dir. Global Sustainability,
ADVA Optical Networking
Some questions...

• Will be the networks capable to adapt themselves to the new mobility and social living trends?

• Will be the spectrum a “public asset” or just a “concession or a property” for telecom operators?

• Shall telecom low orbit satellite constellations be a good solution for 100% territorial coverage?
Some new relevant technologies

- SDN, AI based networks, AR-VR, Edge Computing, LO Satellites, Quantum Communications...
- How will we manage to keep human development at the center?
- Will the foreseen mix between, physical, virtual and biological worlds be a help to human development?
A new opportunity for Europe?
Will 6G new generation telecommunications be a tool for achieving One Health (Human, Animal & Environmental)?

Source:
Simone Sommer
Directora del Instituto de Ecología Evolucionaria y de Conservación Genómica
UNIVERSIDAD DE ULM

Serge Morand
Director de investigación, ecólogo, CNRS y del CIRAD
The Bill Gates Warning

“Climate Disaster is the first priority for Mankind. All the research and Innovation efforts should be directed to avoid it”

Bill Gates
Conclusions

• Avoid Climate Disaster should be a must in all innovation efforts

• Human beings should be at the center of any innovation goals

• One Health (People and Communities, Animals and Plants and Ecosystems and Environment) should be respected

• 5G and new generation 6G can help economy and social reconstruction and transformation, if these considerations are followed

• Europe has an opportunity to be at the driving seat again
Now, the floor is yours... good luck!
Thank you very much for your attention!