

Devising Luxembourg's national 5G strategy

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Agenda

Meet inCITES
Consulting

Key Findings

Business case
5G Forecasting
5G Pilots
Challenges and
recommendations

5G Strategy
Timelines

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Who we are

20+

years of ICT experience



30+

satisfied customers (MNOs, vendors, regulators, EC)



100+

journal publications

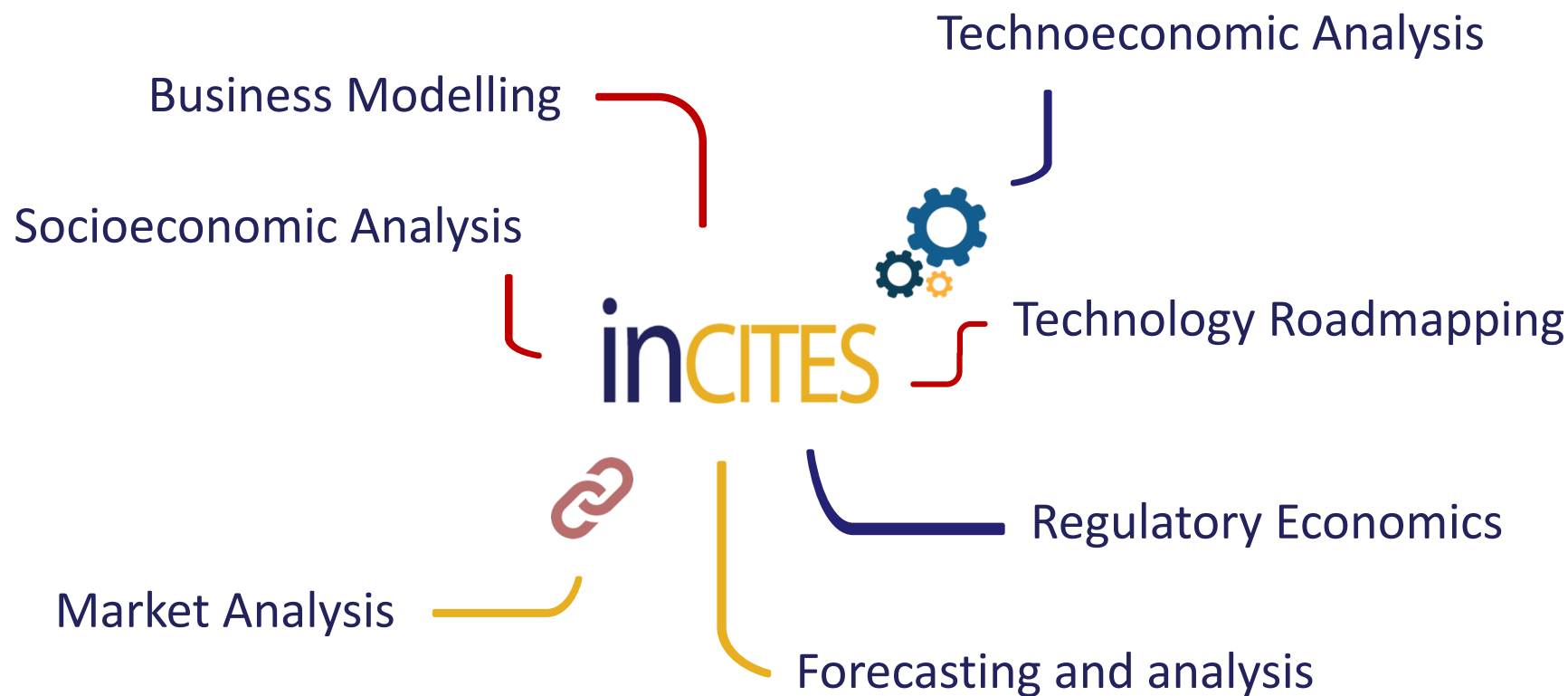


300+

users of our awarded TEN web app



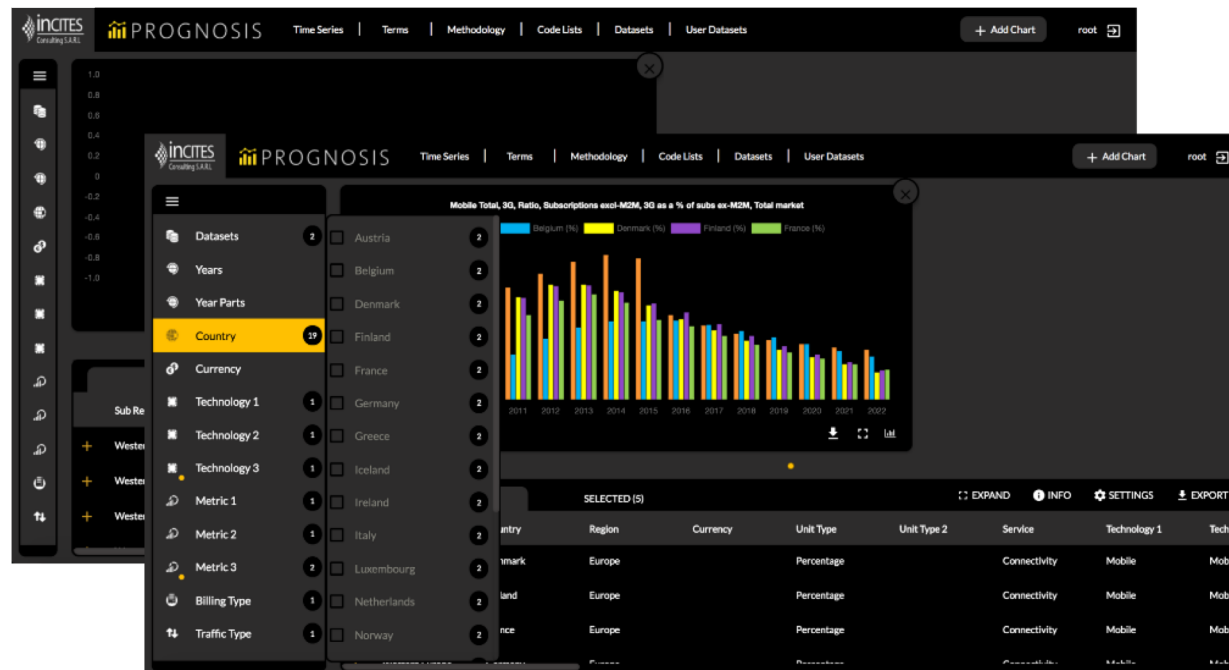
Consulting



Research



Prognosis



41 European countries



160+ KPIs



110k+ data points



22 years of coverage

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Luxembourg Business Case

Focus on niches that the required capabilities are not readily or cost effectively met by alternatives.

Facility Manager

- Rent space
- Rent facilities (lampposts, street cabinets, stadiums etc.)

Infrastructure Owner

- Datacenters
- Cloud
- ...

Neutral Host Operator

- Provide wholesale access
- Smart pipe
- Optimize performance
- Partnerships

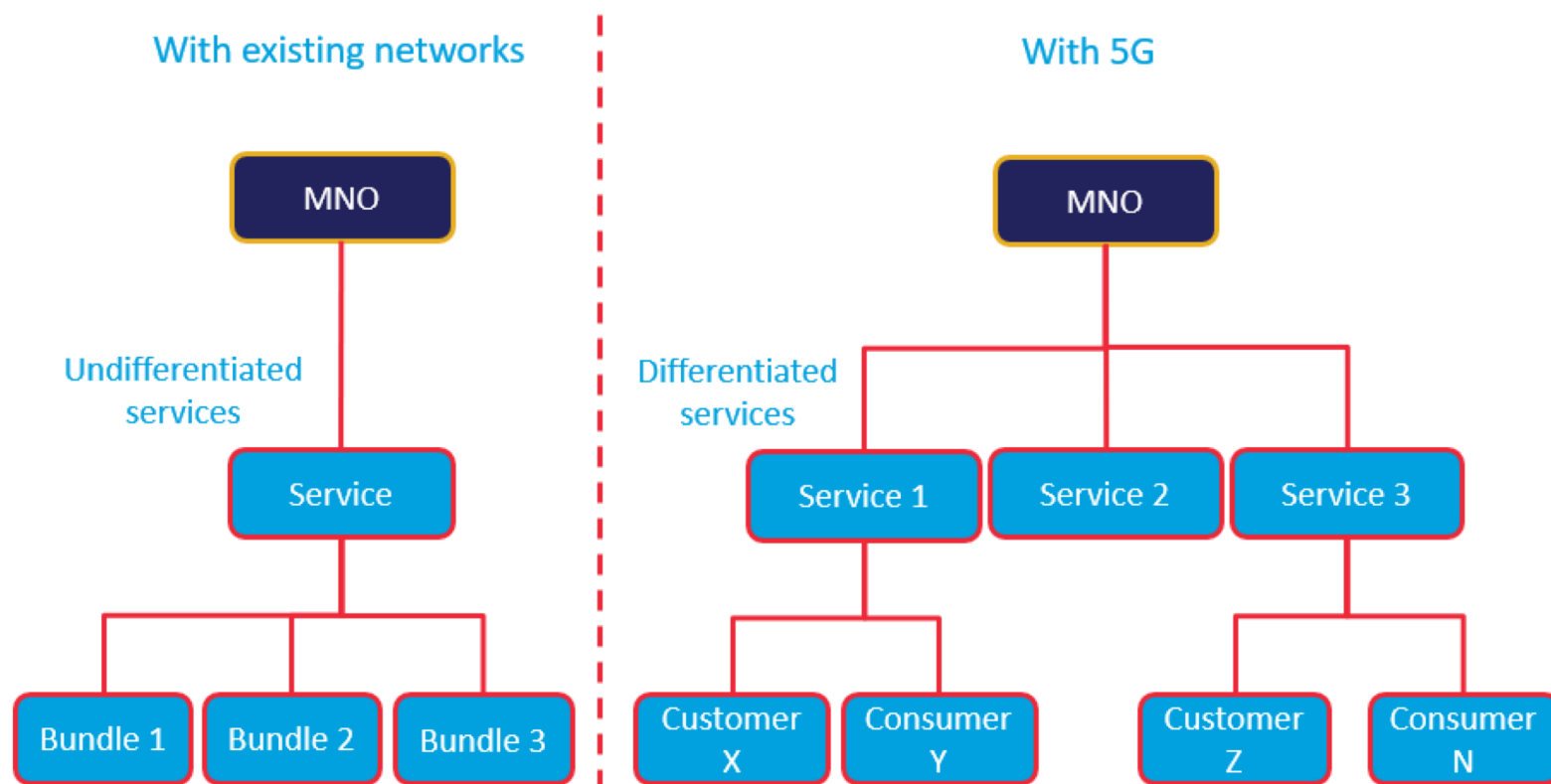
Service / Content Provider

- Differentiation
- Tailor-made personalized services
- Meet clients requirements

No killer application – No massive deployments are expected – 5G islets

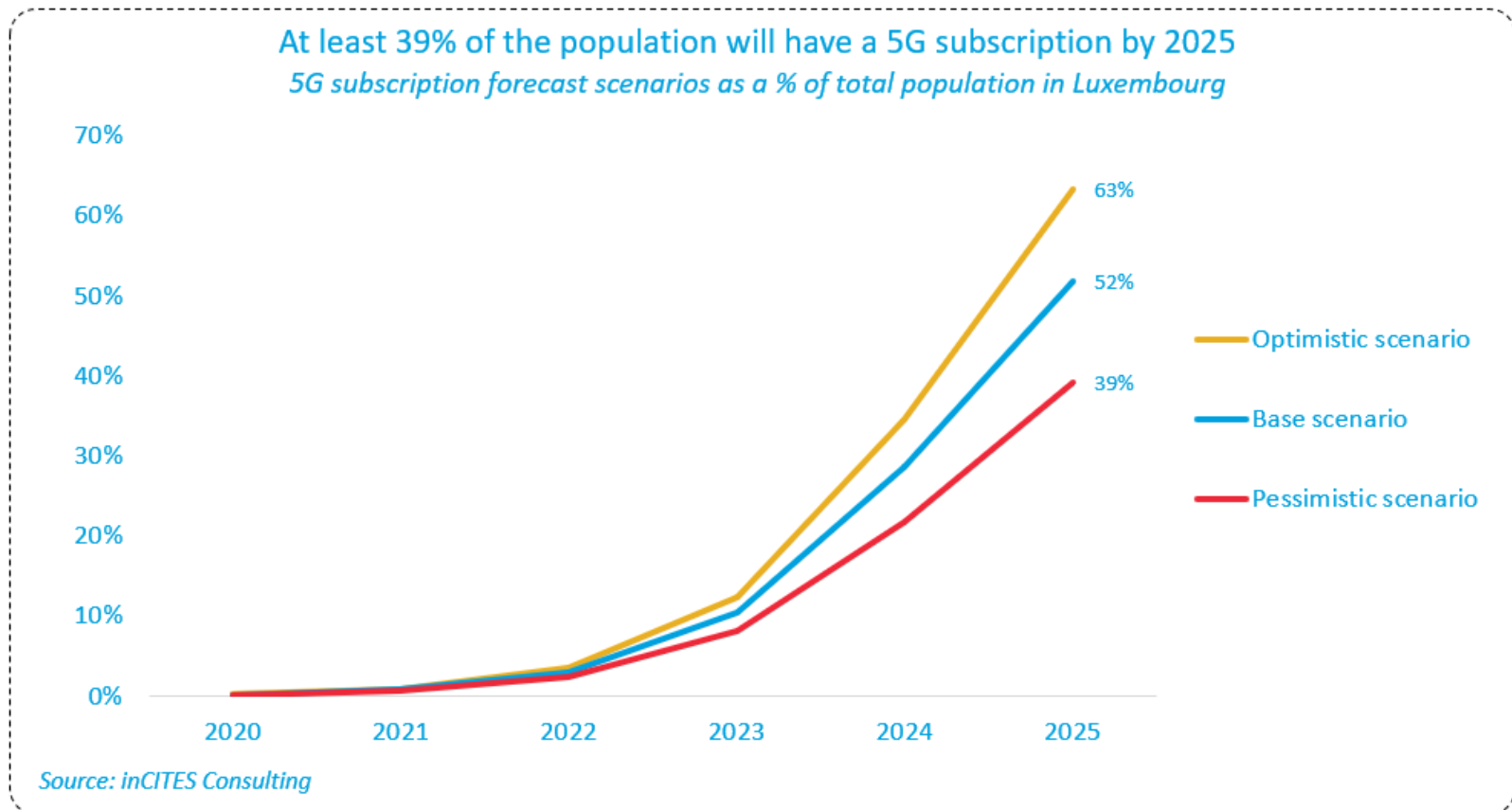
5G Business Model

- Service provisioning will enable various new business models in the 5G era



5G Forecasting

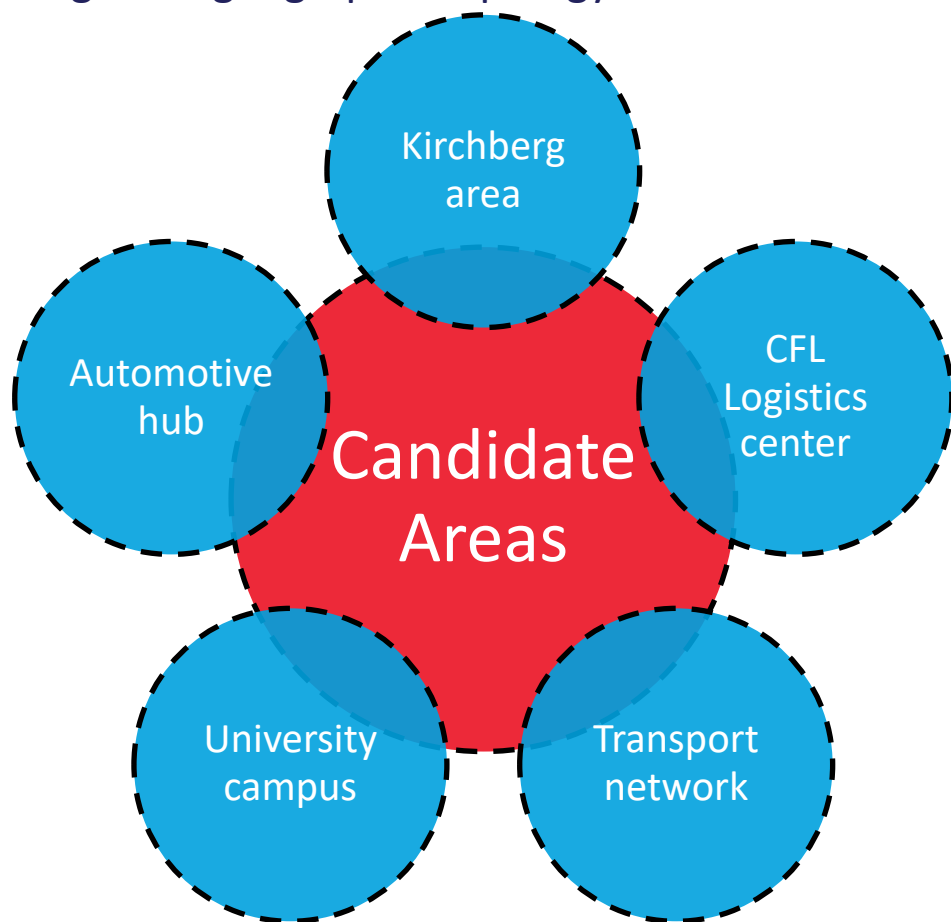
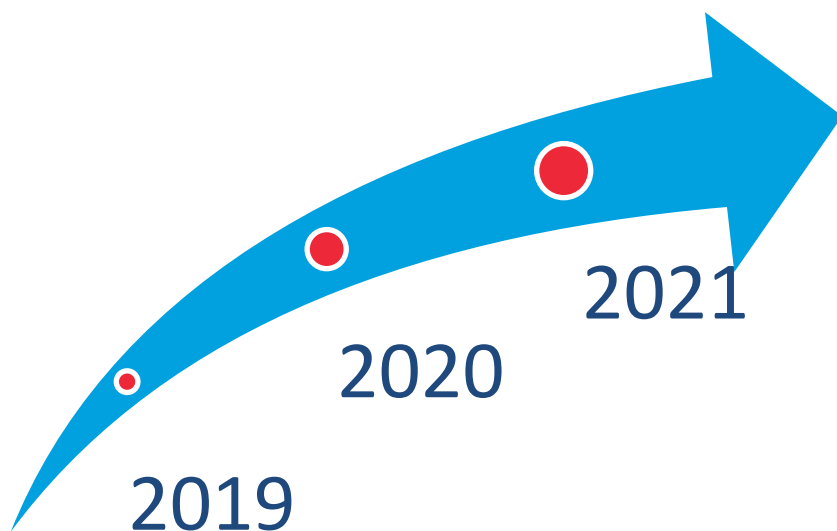
- Luxembourg needs to leverage its strong digital assets to realise the potential of 5G



Luxembourg 5G Pilots

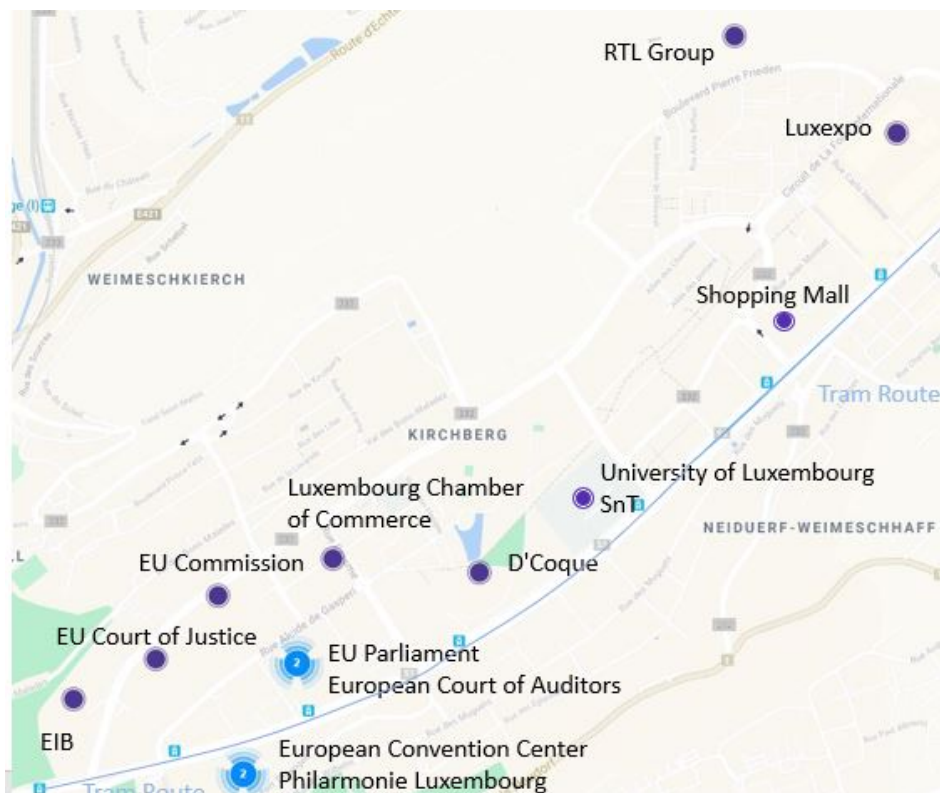
- The pilots vary both in sector coverage and geographic topology

30M€ co-funding



Luxembourg 5G Pilots - Kirchberg

- Kirchberg's great variety of stakeholders provides for testing a multitude of use cases



Luxembourg 5G Pilots - CFL

- Industrial use cases will drive 5G uptake in the medium-to-long run

Strengths

- Unique environment for logistics and IoT
- Small area for deployment
- Attract new companies in the area
- New use cases (logistics)

Weaknesses

- Limited number of stakeholders
- No residential application
- Low number of non-business users

Opportunities

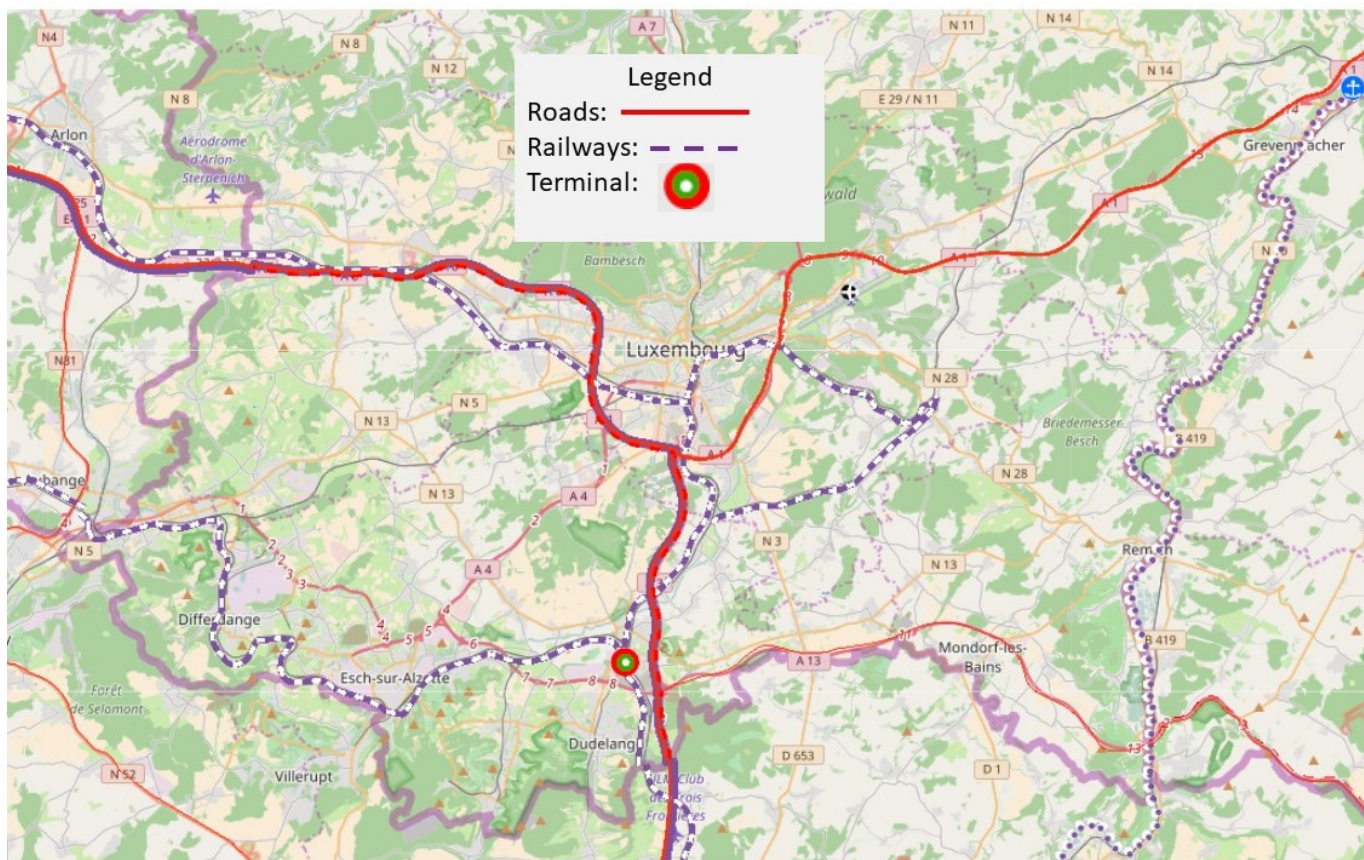
- Increased role of the verticals in the 5G value chain
- Technological advancements
- Explosive growth of logistics

Threats

- Production environment (maybe difficult to deploy without affecting everyday operation)
- Limited opportunities for future network commercialization

Luxembourg 5G Pilots - Transport

- All major transport routes to have uninterrupted 5G coverage by 2025

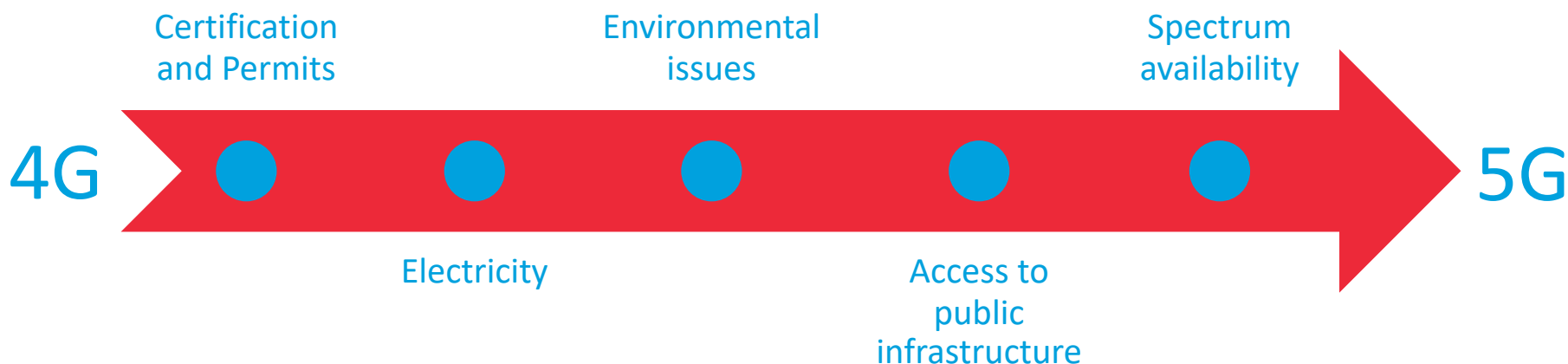


Current market status

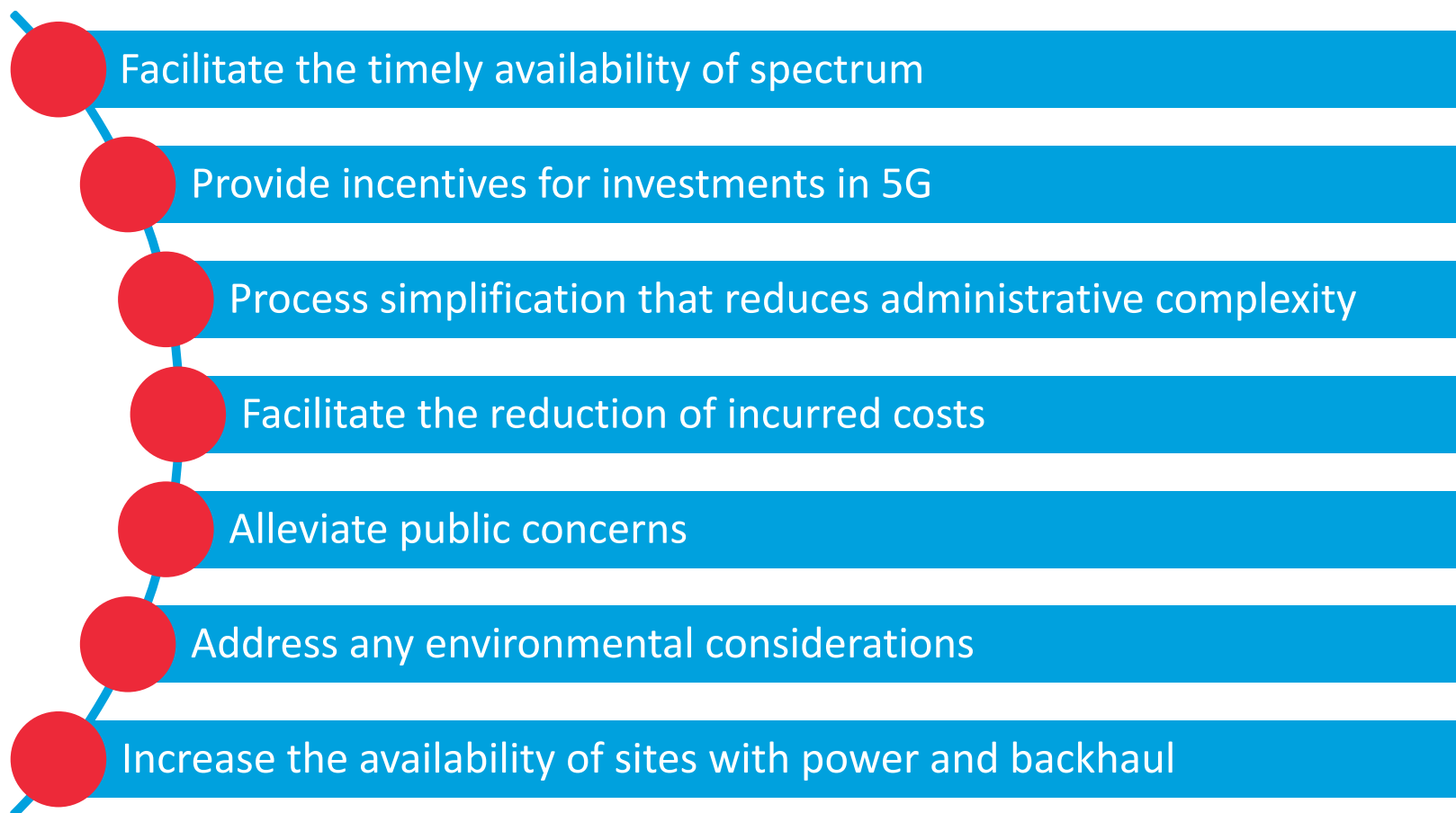
- ✓ Extensive fibre network
- ✓ State-of-the-art data centers
- ✓ Government willingness to provide incentives
- ✓ Role of satellites
- ✓ Regulatory framework

5G Deployment Barriers

- Proactive regulation will be crucial to alleviate concerns across all network phases



Recommendations

- 
- Facilitate the timely availability of spectrum
 - Provide incentives for investments in 5G
 - Process simplification that reduces administrative complexity
 - Facilitate the reduction of incurred costs
 - Alleviate public concerns
 - Address any environmental considerations
 - Increase the availability of sites with power and backhaul

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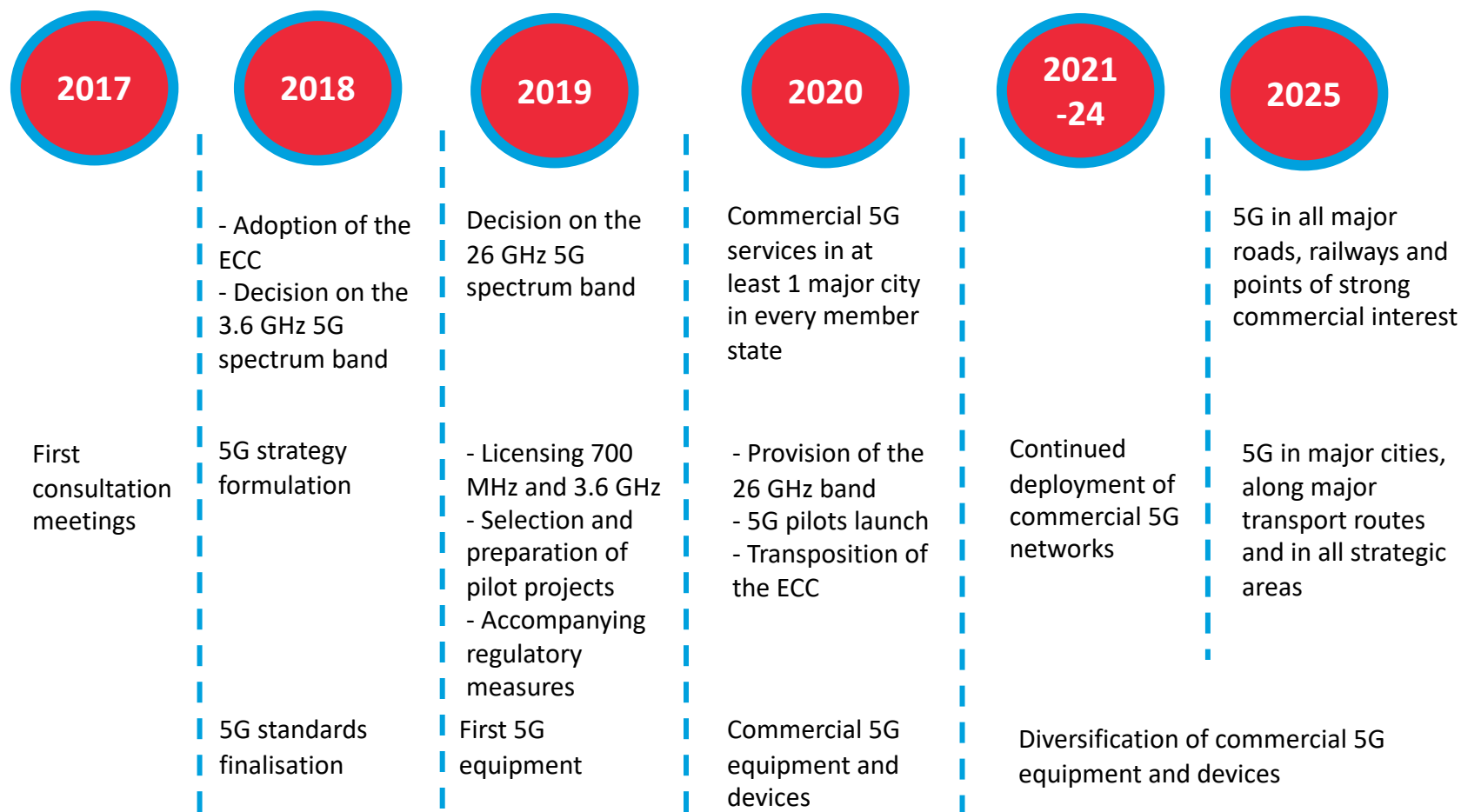
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5G strategy timelines



5G strategy details



<https://digital-luxembourg.public.lu/initiatives/5G>

Thank you!



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