Position paper on the European Green Deal

June 2020

- **We welcome the Green Deal initiative** which is an essential initiative to reduce the risks related to climate change.
- **A Green Recovery.** In the light of the current COVID-19 crisis, we welcome the willingness of the European Commission to enshrine the Green Deal in the recovery strategy, integrating appropriate sustainability objectives in upcoming measures to revive the European economy. By triggering innovation and investment in future areas of growth, Europe will in the long term emerge strengthened from the crisis. Here, ICT solutions can play a crucial role by decoupling economic growth from growth in greenhouse gas (GHG) emissions.
- **We support a clear pathway towards climate neutrality in 2050.** We agree the interim targets for 2030 should be specified, reassuring to be right on track towards climate neutrality in 2050. Telecoms and the ICT sector overall are crucial stakeholders in this context, with a strong potential to leverage sustainability of Europe's economy.
- **We are committed.** Telecoms have a long-standing commitment to sustainability and have established a broad variety of relevant measures with regard to the European Commission's objectives. This refers to topics such as energy and material efficiency, green finance, sustainable corporate governance, circular economy and transparency. Beyond our achievements, we are keen to further discuss the role the mobile sector can play in the green transition. In any case, policy initiatives should build on established good practices and the industry's experience, which ensures policies match with market realities and thus are effective.
- **We are part of the solution.** ICT has a crucial role as an enabler for the whole economy in the green transition. Compared to the climate footprint of other industries, the ICT sector's climate footprint is relatively small at only 1.4% of global GHG emissions (and the mobile sector at 0.4% of GHG emissions).[1]
- **We provide technical guidance.** We are eager to share our expertise with policymakers and other stakeholders. Our established good practices can serve as guidance to reach the declared objectives
- **We need to move jointly.** Only if all relevant stakeholders contribute to the Green Deal, can we achieve its ambitious targets. Accordingly, policymakers should encourage stakeholders to take responsibility, while new regulations should cover all relevant market players and value chains.
- **We need political support.** A policy framework that allows for innovation and ensures investment friendly conditions for telecoms and ICT will leverage the full potential of digital for the sake of sustainability. Accordingly, any new obligations need to be proportionate.

1. Networks and ICT solutions as an enabler

- **Digital is a driving force of climate neutrality**. Through its enabling effect for the whole economy, there is broad agreement that GHG savings through the use of ICT are higher

[1] https://www.gsma.com/betterfuture/climate-faqs

than the ICT sector's footprint. A recent study by the GSMA calculated the use of mobile technology enabled a sglobal reduction in GHG emissions of around 2,135 million tonnes CO_2e in 2018[2], reflecting an enabling effect resulting in ten times more GHG savings than ICT's climate footprint. Smart connected technologies are a key enabler for a low carbon economy, and as such, ambitious climate targets for the whole economy and society require a push for ICT and digitisation.

- **Strong telecoms networks are the basis for digitisation for good**. Various services and solutions provided by telecom operators facilitate the deployment of the Internet of Things (IoT) and the realisation of the Gigabit Society. Fibre networks allow the transfer of increasingly high traffic volumes, building the backbone of data-intense green societies. The positive enabling effect is not limited to new or future network technologies, already existing networks have a positive enabling effect for the economy and society.
- **Beyond connectivity, telecoms operators provide a range of ICT solutions** that contribute to energy and material efficiency, e.g. smart solutions for logistics (i.e. IoT technologies embedded in vehicles to optimise route management, vehicle maintenance and driver behaviour, delivering cuts in fuel consumption of up to 30%), grids (i.e. smart meters enabling authorities and households to monitor, manage and reduce their energy use), farming (sensors giving farmers the power to measure and record data such as physical, chemical, microbial soil analysis, pest presence, satellite sensing information and data from IoT sensors such as soil moisture probes, vehicle trackers and weather stations, to produce the most profitable yield from the available land and environment under their control), homes (digitisation leading to online banking, shopping, and streaming services that reduce manufacturing and travel), cities (i.e. public transport planning. smart lighting); and work or mobility. To facilitate the strong enabling effect of ICT solutions, decision-makers should define aspirational policy targets on the digitisation of traditional sectors: from public administration to transport, from energy to education and manufacturing. Full uptake of digital technologies has the potential to boost socio-economic transformation by reducing the carbon footprint of Europe's industrial sector, e.g. of agriculture or manufacturing.

2. Increasing Energy efficiency

2.1. Deploying new network technologies

- The deployment of **new network technologies such as fibre and 5G** will further improve the energy efficiency of telecoms operators. Despite the current COVID-19 crisis, telecoms continue to invest in energy efficient infrastructure. In general, network load optimisation is essential to ensure a reduction in total energy consumption. Improving energy efficiency to consume less energy can be achieved through a multitude of solutions, including smart building, virtualising the core, and enhancing RAN efficiency through modernisation of legacy equipment and implementation of low-powered solutions.[3]
- To support and accelerate this ongoing effort, decision-makers should **create positive political conditions for roll-out**. We invite governments to act to improve the conditions for coverage and connectivity by improving the investment environment. This can happen through reasonable spectrum fees and siting costs as well as easier local deployment administrative procedures and favouring voluntary network sharing agreements (which will save energy), while rewarding energy efficiency in general. Contrary to this, obligations that would overall harm network deployment risk detrimental effects beyond the telecoms sector.

[2] https://www.gsma.com/newsroom/press-release/mobile-technologies-enabling-huge-carbon-reductions-in-response-to-climate-emergency/
[3] https://www.gsma.com/futurenetworks/wiki/energy-efficiency-2/

- While political support for deploying a new generation of networks is key, it is equally important the migration process and timeline from legacy to edge technologies remains driven by the operator and actual demand. This ensures the most efficient allocation of investment resources and stable connectivity. Accordingly, decision-makers should lower possible burdens for migration.

2.2. Efficiency of operations

- Overall energy consumption of electronic communications networks is **mainly driven by the amount of conveyed traffic**, resulting from services used by our customers. Most of these services are offered by third parties over the internet.
- The scenarios of future traffic volume conveyed in telecoms networks **vary greatly** depending on the source. For an explanation of reasons for variations, please refer to the GSMA's Climate FAQs[4]. While there is an increasing variety of services provided over the internet, analysts agree a main driver of traffic today and the future are streaming services.
- In any case, the **current emissions** of telecoms' and overall ICT are, in comparison to other industries, **relatively small** at only 1.4% of global carbon emissions and 4% of electricity use[5]. Figures for Europe are similar.
- Traffic volumes are **driven by the consumption of third parties' services,** telecom operators are limited in their ability to manage the amount of traffic.[6] This is primarily in the hands of users and third parties that provide their service over the internet. Therefore, policies should aim at fast-tracking the upgrading of our digital infrastructure to modern and even more resilient networks and launch a dialogue with service providers around the volume of traffic.
- The European Commission acknowledged the need for a dialogue and a holistic approach during the COVID-19 crisis when asking streaming service providers to optimise their content conveyed over telecoms' networks to avoid network congestions.
- Telecoms are **constantly improving the efficiency** of their energy consumption through optimising their processes, including the operation of networks[7]. By rolling out AI and IoT based services, telecom operators can, for instance, carry out predictive maintenance and easily detect anomalies in their networks. Beyond undertakings' sustainability objectives, improving energy efficiency is also motivated by cost savings. When defining appropriate efficiency measures, also the **impact on customers has to be considered** and decision-makers should **strive for a positive customer experience**, e.g. avoiding an overly negative impact on the quality of a service.
- Through efficiency measures, telecoms have so far succeeded in keeping the **energy consumption of their networks relatively stable**, although the traffic volume has strongly increased in the last years. According to data from European operators, over 2010-18, data traffic increased by 1100%, while carbon emissions reduced by 40%, and electricity consumption increased by only 10%[8].
- Telecom's **data centres serve as crucial infrastructure for networks as well as ICT services**, such as cloud services. Also, in this area, significant efforts have **constantly improved energy efficiency** with a recent study exploring global electricity use in data centres showing that while computing output from data centres went up six-fold from 2010 to 2018 electricity use increased only 6%[9].

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[4] https://www.gsma.com/betterfuture/climate-faqs
[5] https://www.gsma.com/betterfuture/climate-faqs
[6] Including legal restrictions based on e.g. net neutrality.
[7] https://www.gsma.com/futurenetworks/network-economics/case-studies/
[8] https://www.gsma.com/newsroom/press-release/covid-19-network-traffic-surge-isnt-impacting-environment-confirm-telecom-operators/
[9] https://science.sciencemag.org/content/367/6481/984

- While we are committed to continuing our efforts, new potential obligations need to be **proportionate and avoid detrimental effects on other strategic objectives** such as the EU's efforts to strengthen European Cloud services.

3. Avoiding climate footprints

- **The ICT and mobile industry is committed to decarbonisation and in February 2020 agreed a pathway to net-zero carbon emissions by 2050**[10]. Already, 29 operator groups representing 30% of global mobile connections are committed to the Science Based Targets for GHG emission reduction. For Europe, these include BT, Deutsche Telekom, Elisa, KPN, Magyar Telekom, Orange, Proximus, Swisscom, Tele2, Telefónica, Telekom Austria, Telenor, Telia and Vodafone. Telecom Italia has set a target to be carbon-neutral by 2030.[11]
- **As telecom operators mainly rely on electricity to power their networks, they can relatively easily switch to renewables** to lower their carbon footprint. Seven European operators are members of the RE100 campaign, committed to switching to 100% renewable electricity: BT, DT, KPN, Proximus, Swisscom, Telefonica, and Vodafone. This is done through a mix of Power Purchase Agreements (PPAs), Guarantees of Origin (bundled and unbundled) and self-generation.
- Buying green electricity with associated Guarantees of Origin (GO) and additional unbundled GOs where needed, are particularly crucial with regard to **decreasing the carbon footprint in the shorter term**, but especially PPAs are getting more and more important in the mid and long term.
- The demand for PPAs will increase over the years in the EU and right policy actions will be required to be able to meet that demand.
- Measures to improve energy efficiency and a circular economy are highly important but require a longer-term perspective and are not sufficient to reach carbon neutrality.
- Therefore, for those Scope 1 and 2 emissions that cannot be avoided, carbon offsets are the only remaining option. Currently, these measures are already used by quite a lot of telecoms with regard to their emissions.
- Concerning **emissions that are largely out of an undertaking's control** (Scope 3), there is the responsibility of each player along the value chain to contribute to climate targets.
- As such, **ambitious interim targets for 2030** require a **mix of efficiency measures, renewables and (if unavoidable) offsets** for own emissions (Scope 1, 2). Emissions **up- and downstream value chain should be directly addressed** by including all relevant stakeholders.

4. Funding as a lever

- Considering the ambitious objectives of the Green Deal, **enough funding is a precondition** for success. Accordingly, we welcome the European Commission's ambition to significantly invest dual green and digital transition in its economic recovery plan.
- Financial means should first of all be used to **activate key areas that subsequently enable the economy's sustainability**. As such, digital infrastructure and green ICT solutions that are enablers for a green digitisation should be consistent, such as ensuring sufficient funding for new network technologies or cloud services in order to appropriately

[10] https://www.gsma.com/newsroom/press-release/ict-industry-agrees-landmark-science-based-pathway-to-reach-net-zero-emissions/
For a company, reaching net zero emissions means achieving a state in which the activities within the value chain of a company result in no net impact on the climate from greenhouse gas emissions.
[11] https://www.telecomitalia.com/en/sustainability/actions-dialogue/lettera-AD-stakeholder-TIM.html

assist other sectors in their green transition. Further improving connectivity and digitisation would equally contribute to the economy's overall recovery.

5. Green finance/ Taxonomy and investment

- Any discussion and policy in the scope of the Green Deal requires clear terms and definitions. To ensure these are properly defined, **all relevant stakeholders should have the opportunity to share** their specific view. Thus, decision-makers consultation process needs to be inclusive and transparent.
- The Green Taxonomy builds the basis for a range of areas in the scope of the Green Deal. This also includes the area of **Green Finance**, where the crucial role of **deploying the new network technologies 5G and Fibre to the Home** need to be strongly reflected across the various chapters. Investments in the respective deployments should be supported accordingly.
- Finally, it is essential the EU, public bodies, institutions, citizens and businesses rely on common standards and principles to assess carbon emission reduction.

6. Circular Economy

- In the area of the Circular Economy, telecoms have already been active for many years already, running a broad variety of good practices. Many of these policies include recycling and refurbishing of devices, using labels and providing transparency and reducing waste (with some measures being direct and others indirect).
- Telecom operators take these actions for a variety of reasons and incentives, such as corporate responsibility, cost-savings or competitive advantages. The Green Deal should **build on these good practices.** The Green Deal should also **leave room for voluntary measures and competition** for best ideas.
- In case of regulatory measures, objectives should be defined while leaving flexibility on how to concretely reach them. Self- or co-regulation should also be considered which can be an equally or even more effective instrument, which one can see for instance with the climate targets of some telecom operators based on the Science Based Target methodology, developed in a cooperation between the ITU, the GSMA and GeSI. There, decision-makers have the important role to remind all relevant market players to take responsibility.
- However, in areas where individual companies are highly dependent on the contribution of other market players, e.g. up- or downstream value chains, **clear rules and obligations appear necessary**, covering all relevant parts of the value chain. This applies to several of the measures proposed in the scope of the Circular Economy, such as related to detailed transparency requirements where for instance traders require information from the upstream value chain such as producers.
- Accordingly, in areas of interdependencies decision-makers should **refrain from introducing consumer law that only addresses traders**. Balanced and more effective solutions need to target the actual source of the problem (e.g. addressing the producer concerning eco-design requirements) in the first place. In situations of shared responsibilities, the broader value chain needs to be addressed (e.g. granting the trader specific rights towards suppliers, including producers).
- Considering global value chains of products, the EU should particularly with regard to the Circular Economy **address their green ambitions in international trade negotiations**. This does not only help European companies to comply with new obligation but also export EU's green ambitions globally.

7. Governance

- Generally, **policy initiatives** should **give incentives precedence** to sanctions in order to reach specific policy objectives. Decision making should be **inclusive**, benefitting from the significant degree of expertise e.g. in the telecoms sector.
- Where possible, policy initiatives should **build on good practices**, including self-regulation, and leave **flexibility** on how to reach defined objectives. For example, in the scope of the **corporate governance framework:** Considering the heterogeneity in the way undertakings are organised and governed, any such policy initiative needs to **leave flexibility** to undertakings and **avoid bureaucracy**. Measures could incorporate **incentives** to include sustainability criteria and performance targets into corporate strategies and board remuneration.
- In areas of high interdependence of various market players, **binding rules and standardisation** is required. Policies need to be defined in a comprehensive way, ensuring a **balanced approach that addresses all** relevant stakeholders.
- To ensure **legal certainty and planning security** for undertakings, policymakers should define a stable long-term framework and perspective, avoiding short term disruptive moves.
- We support better and proportionate reporting to improve **comparability** between undertakings, **transparency** on Europe's current climate footprint and to **avoid greenwashing**. These aspects are closely related to ongoing assessments e.g. around non-financial reporting or taxonomy rules.
- We support **transparent disclosure of relevant and comparable environmental data** e.g. in the scope of the non-financial reporting directive, building on the recommendations formulated by CDP and TCFD.

About the GSMA

The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with almost 400 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces the industry-leading MWC events held annually in Barcelona, Los Angeles and Shanghai, as well as the Mobile 360 Series of regional conferences.

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