Public Consultation on a set of European Digital Principles

Dynamic Spectrum Alliance (DSA) response

The DSA\(^1\) respectfully submits its comments in response to the Public Consultation on a set of European Digital Principles.

Wi-Fi plays a central role in connectivity in Europe, accounting for over half of total traffic (fixed and mobile) transferred over the Internet and generating enormous economic value. Due to the widespread lockdowns, the Covid-19 health crisis has increased time spent on fixed broadband inside our homes. This has further underscored the importance of highquality broadband connectivity to every home and the importance of Wi-Fi, which is the primary way our devices connect to the broadband networks. During the Covid-19 lockdowns, we have safely continued working, shopping, learning, entertaining, socializing and communicating with our doctors and administrations. This trend will continue once the epidemic is over. The unprecedented increase in data traffic during the pandemic has also exposed the limits of existing Wi-Fi networks, which had not seen any new licence-exempt spectrum released since 2004.

As also outlined in the introduction to the European Commission’s public consultation on a set of European Digital Principles, “Digital infrastructure and rapid connectivity can bring new opportunities by enabling people to reach out beyond specific territories, social positions or community groups, and open new possibilities to learn, have fun, work, explore and fulfill one’s ambitions”. Out of eight European Digital Principles, object of the consultation and set out in the European Commission’s Digital Compass Communication, Wi-Fi connectivity is instrumental in upholding at least four of them (universal access to internet services, universal digital education and skills for people to take an active part in society and in democratic processes, accessible and human-centric digital public services and administration, access to digital health services), to the extent these activities will mostly or significantly happen inside our homes, schools or business via a Wi-Fi connection. **Wi-Fi can also play a key role in Europe’s green transition**, providing improved efficiency thereby reducing the carbon footprint of this technology. A combination of fibre and Wi-Fi 6E (designed to operate in the 6 GHz band) and Wi-Fi 7 (the new standard in the pipeline) is the greenest solution for indoor connectivity. These enhanced Wi-Fi generations will also enable reduction of CO2 emissions in other sectors (e.g. remote working and learning, and telemedicine can drastically reduce traffic and greenhouse gas emissions). In this sense, Wi-Fi will also be critical in upholding the

\(^1\) The DSA is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more efficient utilization of spectrum, fostering innovation and affordable connectivity for all. Our membership spans multinationals, small- and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing. A full list of DSA members is available on the DSA’s website at [www.dynamicspectrumalliance.org/members](http://www.dynamicspectrumalliance.org/members).
European Digital Principle ‘access to digital devices, systems, devices and services that respect the climate and environment’.

We are at a pivotal moment for the future of Wi-Fi: in order for Europeans to fully benefit from their digital citizenship, there is an urgent need to **ensure additional spectrum for Wi-Fi 6E and Wi-Fi 7**.

The EU has made a very positive first step in this direction. Recognizing the scarcity of spectrum for Wi-Fi, the EC recently adopted a draft Decision to open up the lower 6GHz frequency band (5945-6425 MHz)\(^1\). This decision sets the ground for Europe to improve its wireless connectivity and benefit from Wi-Fi 6E, but there is further work to be done if Europe wants to benefit from the next generations of Wi-Fi and ensure high-quality indoors connectivity to support next generation applications (AR/VR, holographic internet, manufacturing) requiring very low latency, in line with the 2030 Digital Compass ambitions. Making enough spectrum available for Wi-Fi 7 should be an immediate priority for the EU, especially considering prominent economies and digital pioneers around the world such as the US, Brazil and South Korea are leading the way, having already the full 6 GHz band (5925-7125 MHz) for Wi-Fi.

The work stemming from the Digital Compass Communication is a key opportunity for Europe to ensure that Wi-Fi continues to be one of the most critical building blocks of our digital economy and society in the next decade, together with 5G and fibre technologies.

In this sense, the **joint interinstitutional solemn declaration of the European Commission, the European Parliament and the Council** should fully reflect the role played by Wi-Fi, together with 5G and fibre, in **upholding the key principles** set out in the Digital Compass Communication and **unleashing the full potential of digital and green technologies**.

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\(^{1}\) COMMISSION IMPLEMENTING DECISION (EU) 2021/1067 of 17 June 2021 on the harmonised use of radio spectrum in the 5 945-6 425 MHz frequency band for the implementation of wireless access systems including radio local area networks (WAS/RLANs).