



**2016/2305(INI)**

2.3.2017

# **AMENDMENTS**

## **1 - 250**

**Draft report**  
**Michał Boni**  
(PE597.728v02-00)

Internet connectivity for growth, competitiveness and cohesion: European  
gigabit society and 5G  
(2016/2305(INI))



**Amendment 1**  
**Martina Werner**

**Motion for a resolution**  
**Citation 1 a (new)**

*Motion for a resolution*

*Amendment*

- *having regard to Article 9 of the TFEU,*

Or. en

**Amendment 2**  
**Martina Werner**

**Motion for a resolution**  
**Citation 7 a (new)**

*Motion for a resolution*

*Amendment*

- *having regard to the Commission communication of 19 April 2016 entitled 'Digitising European Industry' (COM(2016)180),*

Or. en

**Amendment 3**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Citation 9**

*Motion for a resolution*

*Amendment*

— *having regard to the annex to the Commission communication of 2 October 2013 entitled 'Regulatory Fitness and Performance (REFIT): results and next steps' (COM(2013)0685),*

*deleted*

Or. es

**Amendment 4**  
**Michał Boni**

**Motion for a resolution**  
**Citation 14 a (new)**

*Motion for a resolution*

*Amendment*

- *having regard to the Commission communication of 26 October 2016 entitled 'Space Strategy for Europe' (COM (2016)0705),*

Or. en

**Amendment 5**  
**José Blanco López**

**Motion for a resolution**  
**Citation 15 a (new)**

*Motion for a resolution*

*Amendment*

– *having regard to the European Economic and Social Committee's opinion on the Commission communication entitled 'Connectivity for a Competitive Digital Single Market – Towards a European Gigabit Society',*

Or. es

**Amendment 6**  
**Martina Werner**

**Motion for a resolution**  
**Citation 15 a (new)**

*Motion for a resolution*

*Amendment*

- *having regard to Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on*

*energy efficiency,*

Or. en

**Amendment 7**  
**Edouard Martin**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

A. whereas 5G will be an engine for innovation, bringing disruptive ***change across industries*** and creating new use cases, ***high-quality*** services and products, revenue streams and business models, ***boosting*** the competitiveness of industries and consumer satisfaction;

*Amendment*

A. whereas 5G will be an engine for innovation, bringing disruptive ***economic change*** and creating new use cases, services and products, revenue streams and business models, ***and whereas it will have to boost*** the competitiveness of industries and ***provide*** consumer satisfaction;

Or. fr

**Amendment 8**  
**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

A. whereas ***5G*** will be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and consumer satisfaction;

*Amendment*

A. whereas ***the Gigabit Society and Very High Capacity (VHC) networks*** will be an engine for innovation ***in Europe***, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and consumer satisfaction; ***whereas 5G will be a key building block of the Gigabit Society, representing the standard for the future in mobile communication technologies;***

**Amendment 9**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

A. whereas 5G will be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, ***boosting the competitiveness of industries*** and consumer satisfaction;

*Amendment*

A. whereas 5G will be an engine for innovation, bringing disruptive change across industries and creating new use cases, ***which must generate*** high-quality services and products, revenue streams and business models, ***and boost industry productivity, worker welfare*** and consumer satisfaction;

**Amendment 10**  
**Miroslav Poche**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

A. whereas 5G will be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and consumer satisfaction;

*Amendment*

A. whereas 5G will be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models ***and opportunities***, boosting the competitiveness of industries and consumer satisfaction;

**Amendment 11**  
**Martina Werner**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

A. whereas 5G will be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and consumer satisfaction;

*Amendment*

A. whereas 5G will be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and ***should meet*** consumer satisfaction;

Or. en

**Amendment 12**  
**Notis Marias**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

A. whereas 5G ***will*** be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and consumer satisfaction;

*Amendment*

A. whereas 5G ***is expected to*** be an engine for innovation, bringing disruptive change across industries and creating new use cases, high-quality services and products, revenue streams and business models, boosting the competitiveness of industries and consumer satisfaction;

Or. el

**Amendment 13**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Recital A a (new)**

*Motion for a resolution*

*Amendment*

***A a. whereas digitalisation is accelerating at great speed and at a global level, requiring investments in high quality communication networks with***

*universal coverage; in this regard, points to the need for timely availability of radio spectrum capable of meeting those demands;*

Or. en

**Amendment 14**  
**Martina Werner**

**Motion for a resolution**  
**Recital A a (new)**

*Motion for a resolution*

*Amendment*

*A a. whereas mobile and wireless connectivity for every citizen becomes increasingly important as innovative services and applications are being used on the go and whereas a future-oriented digital policy has to take this into account;*

Or. en

**Amendment 15**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Recital A b (new)**

*Motion for a resolution*

*Amendment*

*A b. whereas 5G and 5G applications will reinvent business models by means of providing very high speed connectivity, which will unlock innovation in all sectors, not least transport, energy, finance and health; in this regard, emphasises that Europe cannot afford to lag behind, as 5G will be the engine for future growth and innovation;*

Or. en



**Amendment 16**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Recital A c (new)**

*Motion for a resolution*

*Amendment*

***A c.   whereas European leadership in 5G technology is essential to economic growth and for maintaining global competitiveness, which in turn requires European coordination and planning, and whereas lagging behind means risking jobs, innovation and knowledge;***

Or. en

**Amendment 17**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Recital A d (new)**

*Motion for a resolution*

*Amendment*

***A d.   whereas the governments from South Korea, U.S and Japan have formed a consultative group in order to establish policies on frequencies for 5G, such as establishing the 28GHz band as the standard for 5G networks; stresses, in this regard, the need for European coordination and harmonisation between Member States;***

Or. en

**Amendment 18**  
**Paloma López Bermejo**

**Motion for a resolution**

## Recital B

### *Motion for a resolution*

B. whereas the architecture of 5G mobile networks will be substantially different to that of previous generations ***in order to meet the expected business and performance requirements for Very High Capacity (VHC) networks***, especially with regard to latency and reliability;

### *Amendment*

B. whereas the architecture of 5G mobile networks will be substantially different to that of previous generations, especially with regard to latency and reliability;

Or. es

## Amendment 19 Edouard Martin

### Motion for a resolution Recital B

### *Motion for a resolution*

B. whereas the architecture of 5G mobile networks will be ***substantially*** different to that of previous generations ***in order to meet the expected business and performance requirements for Very High Capacity (VHC) networks, especially with regard to*** latency and reliability;

### *Amendment*

B. whereas the architecture of 5G mobile networks will be different to that of previous generations, ***with a view to providing better outcomes in terms of*** latency and reliability;

Or. fr

## Amendment 20 Michal Boni

### Motion for a resolution Recital B

### *Motion for a resolution*

B. whereas the architecture of 5G ***mobile*** networks will be substantially different to that of previous generations in order to meet the expected business and performance requirements for Very High

### *Amendment*

B. whereas the architecture of 5G networks will be substantially different to that of previous generations in order to meet the expected business and performance requirements for Very High

Capacity (VHC) networks, especially with regard to latency and reliability;

Capacity (VHC) networks, especially with regard to latency, **coverage** and reliability;

Or. en

## **Amendment 21**

**Notis Marias**

### **Motion for a resolution**

#### **Recital B**

##### *Motion for a resolution*

B. whereas the architecture of 5G mobile networks will be substantially different to that of previous generations in order to meet the expected business and performance requirements for Very High Capacity (VHC) networks, especially with regard to latency and reliability;

##### *Amendment*

B. whereas the architecture of 5G mobile networks will be substantially different to that of previous generations, ***given that they are expected to provide the most comprehensive means of achieving the digital single market*** in order to meet the expected business and performance requirements for Very High Capacity (VHC) networks, especially with regard to latency and reliability;

Or. el

## **Amendment 22**

**Martina Werner**

### **Motion for a resolution**

#### **Recital B a (new)**

##### *Motion for a resolution*

***B a. whereas the 5G architecture will lead to an increased convergence between mobile and fixed networks, whereas, therefore, the deployment of VHC fixed networks will contribute to the backhaul needs of a dense 5G wireless network as close as possible to the end-user;***

##### *Amendment*

Or. en

**Amendment 23**

**Lieve Wierinck, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Recital B a (new)**

*Motion for a resolution*

*Amendment*

***B a. whereas policy actions related to the Gigabit Society and 5G should be demand-driven, based on sound analysis of the current and future needs of consumers and businesses;***

Or. en

**Amendment 24**

**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Recital B b (new)**

*Motion for a resolution*

*Amendment*

***B b. whereas a technology neutral approach will ensure that an optimal combination of the best technologies is deployed to deliver the Gigabit Society to European users across regions and sectors;***

Or. en

**Amendment 25**

**Martina Werner**

**Motion for a resolution**

**Recital C**

*Motion for a resolution*

*Amendment*

**C. whereas the future of European society and the European economy will**

**C. whereas the future of European society and the European economy will**

strongly rely on 5G infrastructure, the impact of which will go far beyond existing wireless access networks, with the aim of providing high-quality and faster communication services available everywhere and at all times;

strongly rely on 5G infrastructure, the impact of which will go far beyond existing wireless access networks, with the aim of providing high-quality and faster communication services, ***which are affordable for all and*** available everywhere and at all times;

Or. en

**Amendment 26**  
**Michał Boni**

**Motion for a resolution**  
**Recital C a (new)**

*Motion for a resolution*

*Amendment*

***C a. Whereas maintaining and strengthening an investment friendly regulatory environment will enable network modernisation to VHC to speed up the deployment of 5G and allow better end-user performance of various technologies;***

Or. en

**Amendment 27**  
**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**  
**Recital C a (new)**

*Motion for a resolution*

*Amendment*

***C a. whereas the development of the Gigabit Society and VHC-networks is a necessity for the transition to a modern, data-driven economy for Europe by enabling, inter alia, the Internet of Things and cloud computing;***

Or. en

**Amendment 28**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Recital D**

*Motion for a resolution*

D. whereas the **5G networks** rollout ***will be conducted mainly through commercial investments and will be receptive to an investment-friendly regulatory environment***; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

*Amendment*

D. whereas the rollout ***of 5G networks requires long-term planning***; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

Or. es

**Amendment 29**  
**Michel Reimon**  
on behalf of the Verts/ALE Group

**Motion for a resolution**  
**Recital D**

*Motion for a resolution*

D. whereas the 5G networks rollout will be conducted mainly through ***commercial*** investments and will ***be receptive to an investment-friendly regulatory environment***; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, ***as currently proposed in the European Electronic Communications Code, is*** of crucial importance;

*Amendment*

D. whereas the 5G networks rollout will be conducted mainly through ***private*** investments and will ***require regulatory certainty to promote investment and competition***; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development ***are*** of crucial importance;

**Amendment 30**  
**Miapetra Kumpula-Natri**

**Motion for a resolution**  
**Recital D**

*Motion for a resolution*

D. whereas the 5G networks rollout will be conducted mainly through **commercial** investments and will **be receptive to an investment-friendly** regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum **harmonisation** and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

*Amendment*

D. whereas the 5G networks rollout will be conducted mainly through **private** investments and will **require a pro-competitive** regulatory environment **to promote investments**; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum **harmonization on global level** and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

**Amendment 31**  
**Patrizia Toia**

**Motion for a resolution**  
**Recital D**

*Motion for a resolution*

D. whereas the 5G networks rollout will be conducted mainly through commercial investments and will **be receptive to an** investment-friendly regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications

*Amendment*

D. whereas the 5G networks rollout will be conducted mainly through commercial **and private** investments and will **need a safe and** investment-friendly regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells **and** for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications

Code, is of crucial importance;

Code, is of crucial importance;

Or. it

**Amendment 32**  
**Martina Werner**

**Motion for a resolution**  
**Recital D**

*Motion for a resolution*

D. whereas the 5G networks rollout will be conducted mainly through **commercial** investments and will **be receptive to an investment-friendly** regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

*Amendment*

D. whereas the 5G networks rollout will be conducted mainly through **private** investments and will **require a pro-competitive** regulatory environment **to promote investments**; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

Or. en

**Amendment 33**  
**Edouard Martin**

**Motion for a resolution**  
**Recital D**

*Motion for a resolution*

D. whereas the 5G networks **rollout** will be conducted mainly through **commercial** investments and will be receptive to **an investment-friendly** regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network

*Amendment*

D. whereas the **rollout of 5G** networks will be conducted mainly through **private** investments and will be receptive to **a private-investment-friendly** regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently



development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

proposed in the European Electronic Communications Code, is of crucial importance;

Or. fr

**Amendment 34**  
**Notis Marias**

**Motion for a resolution**  
**Recital A**

*Motion for a resolution*

D. ***whereas*** the 5G networks rollout will be conducted mainly through commercial investments and will be receptive to an investment-friendly regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

*Amendment*

D. ***noting that*** the 5G networks rollout will be conducted mainly through commercial investments and will be receptive to an investment-friendly regulatory environment; whereas the streamlining of administrative conditions, for example for the deployment of small cells for strict and timely spectrum harmonisation and VHC network development, as currently proposed in the European Electronic Communications Code, is of crucial importance;

Or. el

**Amendment 35**  
**Michał Boni, Pilar del Castillo Vera**

**Motion for a resolution**  
**Recital D a (new)**

*Motion for a resolution*

***D a. whereas the provisions of a European Electronic Communications Code shall aim at incentivising investment in new network elements in a competitive manner;***

*Amendment*

Or. en

**Amendment 36**  
**Notis Marias**

**Motion for a resolution**  
**Recital E**

*Motion for a resolution*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

*Amendment*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, ***policies and rules that are tailored to future developments, investment and innovation***, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

Or. el

**Amendment 37**  
**Martina Werner**

**Motion for a resolution**  
**Recital E**

*Motion for a resolution*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

*Amendment*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe ***and make it a reality for all EU citizens***;

Or. en

**Amendment 38**  
**José Blanco López**

**Motion for a resolution**  
**Recital E**

*Motion for a resolution*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

*Amendment*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, ***Member State coordination***, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

Or. es

**Amendment 39**

**Paloma López Bermejo**

**Motion for a resolution**

**Recital E**

*Motion for a resolution*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

*Amendment*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders ***including the social partners***, and adequate investments in order to fulfil all conditions within the required timeframe;

Or. es

**Amendment 40**

**Miroslav Poche**

**Motion for a resolution**

**Recital E**

*Motion for a resolution*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders and adequate investments in order to fulfil all conditions within the required timeframe;

*Amendment*

E. whereas the implementation of 5G and the gigabit society requires an explicit timetable, cooperation with all stakeholders, ***the establishment of the appropriate regulatory framework*** and adequate investments in order to fulfil all conditions within the required timeframe;

**Amendment 41**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Recital E a (new)**

*Motion for a resolution*

*Amendment*

*Ea. whereas the economic and social benefits of the digital transformation will only be made possible by guaranteeing the large-scale rollout and adoption of VHC networks (i.e. electronic communications networks that consist wholly of optical fibre elements at least up to the distribution point at the serving location, or which are capable of delivering, under usual peak-time conditions, similar network performance in terms of available down- and uplink bandwidth, resilience, error-related parameters, latency and variation, etc.) in both rural and urban areas and across all sectors of society, which will mean bridging the deep digital divide that currently exists;*

Or. es

**Amendment 42**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Recital E a (new)**

*Motion for a resolution*

*Amendment*

*E a. Whereas as public initiatives, such as the Commission's 2013 Public-Private-partnership initiative, backed by 700 million euro of public funding to enable 5G in Europe by 2020, need to be complemented by a competitive market with future-proof access regulation and*

*spectrum coordination, which will spur innovation and necessary private infrastructure investments;*

Or. en

**Amendment 43**  
**Nadine Morano, Anne Sander**

**Motion for a resolution**  
**Recital E a (new)**

*Motion for a resolution*

*Amendment*

*Ea. whereas the deployment of 5G must be carried out in a manner that complements, and not at the expense of, other projects that are geared towards boosting connectivity in the most rural and remote parts of Europe;*

Or. fr

**Amendment 44**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 1**

*Motion for a resolution*

*Amendment*

1. **Welcomes** the Commission's proposal to draw up a 5G Action Plan aimed at making the EU a world leader in the deployment of standardised 5G networks from 2020 to 2025;

1. **Notes** the Commission's proposal to draw up a 5G Action Plan aimed at making the EU a world leader in the deployment of standardised 5G networks from 2020 to 2025;

Or. el

**Amendment 45**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 1**

*Motion for a resolution*

1. Welcomes the Commission's proposal to draw up a 5G Action Plan aimed at making the EU a world leader in the deployment of standardised 5G networks from 2020 to 2025;

*Amendment*

1. Welcomes the Commission's proposal to draw up a 5G Action Plan aimed at making the EU a world leader in the deployment of standardised 5G networks from 2020 to 2025; ***takes the view that it is crucial for there to be adequate coordination among the Member States so as to prevent the same kinds of delays in the rollout of 5G that were experienced with 4G, which resulted in the fact that today 4G coverage stands at 86% and just 36% in rural areas;***

Or. es

**Amendment 46**  
**Carlos Zorrinho, Michal Boni**

**Motion for a resolution**  
**Paragraph 1**

*Motion for a resolution*

1. Welcomes the Commission's proposal to draw up a 5G Action Plan aimed at making the EU a world leader in the deployment of standardised 5G networks from 2020 to 2025;

*Amendment*

1. Welcomes the Commission's proposal to draw up a 5G Action Plan aimed at making the EU a world leader in the deployment of standardised 5G networks from 2020 to 2025; ***as part of a larger developed strategy of a European Gigabit Society technologically more competitive and inclusive;***

Or. en

**Amendment 47**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 1 a (new)**

*Motion for a resolution*

*Amendment*

***1a. Emphasises that the 5G PPP is currently one of the world's most cutting-edge initiatives involving 5G and the new applications deriving from it; takes the view that although fostering synergies in R&D and industrial development is positive, given the impact that the rollout of 5G will have on society, it would be right for membership of the PPP to be opened up to consumer and civil society representatives as well;***

Or. fr

**Amendment 48**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 1 a (new)**

*Motion for a resolution*

*Amendment*

***1 a. Stresses that an ambitious and forward-looking timeline for spectrum allocation within the Union is of utmost importance if Europe is to be in the lead regarding the development of 5G technology, welcomes, in this regard, the actions proposed by the Commission in the communication entitled 5G for Europe: An Action Plan, and considers these actions a minimum requirement for a successful launch of 5G in the Union;***

Or. en

**Amendment 49**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society **targets** of attaining network speeds of 100Mbps for all European consumers and, in the long term, **of between 1Gbps and 100Gbps** for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. Welcomes **and endorses** the gigabit society **medium-term objectives** of attaining network speeds of 100Mbps, **upgradable to Giga**, for all European consumers and **at least 1Gbps, increasing** in the long term **to** 100Gbps, for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

Or. en

**Amendment 50**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools; **However, emphasises that 5G applications and other future data demanding services will require speeds above 1 Gigabit per second for consumers; therefore, points to the need for higher targets in both the short and long term, and corresponding policies, not least with regards to the fact that 5G services will require uninterrupted coverage both within and between rural and urban areas;**

Or. en



**Amendment 51**  
**Miapetra Kumpula-Natri**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. Welcomes the ***direction of the*** gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as ***main providers of public services***, digitally intensive businesses, major transport hubs, financial institutions and schools; ***nevertheless calls for other priorities such as strong fixed backhaul infrastructure, effective competition and end-user satisfaction to be also recognized as of paramount importance since download speeds alone will not be sufficient to meet the future connectivity demand of the Gigabit Societ***

Or. en

**Amendment 52**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as ***main providers of public services***, digitally intensive businesses, major transport hubs, financial institutions and schools; ***nevertheless calls for other priorities such as strong, high-***

*quality fixed backhaul infrastructure, effective competition and end-user satisfaction to be also recognized as of paramount importance since download speeds alone will not be sufficient to meet the future connectivity demand of the Gigabit Society;*

Or. en

**Amendment 53**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions *and schools*;

*Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers *and public service providers*, such as digitally intensive businesses, major transport hubs, financial institutions, *schools and health centres; regrets, however, the lack of practical action to implement those targets, which rely almost completely on private investment*;

Or. es

**Amendment 54**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of

*Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of

100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools; ***notes that those targets imply major public and private investment;***

Or. fr

## **Amendment 55**

**Carlos Zorrinho, Michal Boni**

### **Motion for a resolution**

#### **Paragraph 2**

##### *Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

##### *Amendment*

2. Welcomes the gigabit society targets ***ensuring high-quality experiences and*** of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

Or. en

## **Amendment 56**

**Michel Reimon**

on behalf of the Verts/ALE Group

### **Motion for a resolution**

#### **Paragraph 2**

##### *Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and

##### *Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and

100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions **and schools**;

100Gbps for the main socio-economic drivers, such as **public sector, education, research**, digitally intensive businesses, major transport hubs, financial institutions;

Or. en

**Amendment 57**  
**Victor Negrescu**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions, **hospitals** and schools;

Or. en

**Amendment 58**  
**Aldo Patriciello**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, **in the long term, of** between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. Welcomes the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

Or. it

**Amendment 59**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 2**

*Motion for a resolution*

2. **Welcomes** the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

*Amendment*

2. **Notes** the gigabit society targets of attaining network speeds of 100Mbps for all European consumers and, in the long term, of between 1Gbps and 100Gbps for the main socio-economic drivers, such as digitally intensive businesses, major transport hubs, financial institutions and schools;

Or. el

**Amendment 60**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 2 a (new)**

*Motion for a resolution*

**2 a. Reminds, that the 2020 Digital Agenda connectivity targets still need to be completed: as by mid-2015 the universal availability at 30 Mbps was a reality for 71% of homes across the EU, but only 11% of homes across the EU had subscriptions at 100 Mbps instead of 50% foreseen for 2020;**

Or. en

**Amendment 61**  
**Krišjānis Kariņš**

**Motion for a resolution**

**Paragraph 2 a (new)**

*Motion for a resolution*

*Amendment*

**2 a. 2.new.b** *Believes that Europe will benefit from further transformation toward digital economy. Digital in the form of wider coverage, connectivity and faster speeds contributing 40% to total GDP growth till 2020 and increasing 13 times faster than total GDP;*

Or. en

**Amendment 62**

**Michał Boni**

**Motion for a resolution**

**Paragraph 2 a (new)**

*Motion for a resolution*

*Amendment*

**2 a.** *Stresses the need to ensure that a maximum of EU citizens can benefit from gigabit society connectivity, including those situated in remote areas;*

Or. en

**Amendment 63**

**Martina Werner**

**Motion for a resolution**

**Paragraph 2 b (new)**

*Motion for a resolution*

*Amendment*

**2 b.** *Highlights, that rural broadband coverage remains considerably lower than total coverage; points out that the divide is particularly evident when it comes to NGA technologies (27.8% coverage in rural areas compared to 70.9% total coverage);*

**Amendment 64**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 2 c (new)**

*Motion for a resolution*

*Amendment*

**2 c. Notes that further improvement in coverage of the fourth generation of mobile networks/LTE is still needed as the European Union lacks behind the U.S., Korea and Japan in this regard and that the 5G Action plan should be the opportunity to learn from the mistakes of the 4G roll-out;**

**Amendment 65**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 3**

*Motion for a resolution*

*Amendment*

3. Points out that 5G systems will need to be able to operate over a very wide frequency range: from less than 1GHz **up** to 100GHz **and with a maximum potential of** up to 300GHz; notes that frequencies of 3-6GHz and **above** 10GHz **should deliver extreme data rates and extreme capacity in dense areas;**

3. Points out that 5G systems will need to be able to operate over a very wide frequency range: from less than 1GHz to 100GHz, **and even** up to 300GHz; notes that frequencies of 3-6GHz and **up to** 10GHz **are particularly promising, especially in dense areas; points out, further, that choices will need to be made as regards which spectrum bands to use, as some are already in use (Wi-Fi, satellite, radar systems, etc.), or it will need to be established that shared usage is a possibility;**

**Amendment 66**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 3**

*Motion for a resolution*

3. Points out that 5G **systems** will need to be able to operate over a very wide frequency range: from less than 1GHz up to 100GHz and with a maximum potential of up to 300GHz; notes that frequencies of 3-6GHz and above **10GHz** should deliver extreme data rates and extreme capacity in dense areas;

*Amendment*

3. Points out that 5G **radio access** will need to be able to operate over a very wide frequency range: from less than 1GHz up to 100GHz and **including backhaul** with a maximum potential of up to 300GHz; notes that frequencies of 3-6GHz and above **6GHz** should deliver extreme data rates and extreme capacity in dense areas; **acknowledges that 5G systems in high frequency bands require a very dense network infrastructure based on small cells access to sites;**

Or. en

**Amendment 67**  
**Michel Reimon**  
on behalf of the Verts/ALE Group

**Motion for a resolution**  
**Paragraph 3**

*Motion for a resolution*

3. Points out that 5G systems will need to be able to operate over a very wide frequency range: from less than 1GHz up to 100GHz and with a maximum potential of up to 300GHz; notes that frequencies of 3-6GHz and above 10GHz should deliver extreme data rates and extreme capacity in dense areas;

*Amendment*

3. Points out that 5G systems will need to be able to operate over a very wide frequency range: from less than 1GHz up to 100GHz and with a maximum potential of up to 300GHz; notes that frequencies of 3-6GHz and above 10GHz should deliver extreme data rates and extreme capacity in dense areas; **Stresses that download speeds alone will not be sufficient to meet the future connectivity demand of the Gigabit Society, future network performance requiring an improvement in**



*terms of available down- and uplink bandwidth, resilience, error-related parameters, latency and its variation;*

Or. en

**Amendment 68**  
**Victor Negrescu**

**Motion for a resolution**  
**Paragraph 3**

*Motion for a resolution*

3. Points out that 5G systems will need to be able to operate over a very wide frequency range: from less than 1GHz up to 100GHz and with a maximum potential of up to 300GHz; notes that frequencies of 3-6GHz and above 10GHz should deliver extreme data rates and extreme capacity in dense areas;

*Amendment*

3. *Notes that the 802.11 ac wireless networking standard, on which the fifth generation wireless broadband technology is based, was developed by the IEEE Standard Association process, providing high wireless speeds on the 5Ghz band;* Points out that 5G systems will need to be able to operate over a very wide frequency range: from less than 1GHz up to 100GHz and with a maximum potential of up to 300GHz; notes that frequencies of 3-6GHz and above 10GHz should deliver extreme data rates and extreme capacity in dense areas;

Or. en

**Amendment 69**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 3 a (new)**

*Motion for a resolution*

*3 a. Stresses that download speeds alone will not be sufficient to meet the future connectivity demand of the Gigabit Society, therefore requiring an infrastructure objective aimed at VHC*

*Amendment*

*networks, which meet the highest standards in terms of upload as well as download speeds, latency and resilience;*

Or. en

**Amendment 70**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 4**

*Motion for a resolution*

4. Stresses that a coherent *spectrum* strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

*Amendment*

4. Stresses that a coherent *European* strategy *that is as integrated as possible*, including national roadmaps *that are coordinated as regards spectrum and timetables*, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

Or. fr

**Amendment 71**  
**Krišjānis Kariņš**

**Motion for a resolution**  
**Paragraph 4**

*Motion for a resolution*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

*Amendment*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, *ubiquity*, duty cycle, reliability, etc. *and ensures a smooth transition period toward*

**Amendment 72**

**Aldo Patriciello**

**Motion for a resolution**

**Paragraph 4**

*Motion for a resolution*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

*Amendment*

4. Stresses that a coherent spectrum strategy, including national roadmaps ***that might lead to even growth in the Union***, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

**Amendment 73**

**Victor Negrescu**

**Motion for a resolution**

**Paragraph 4**

*Motion for a resolution*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

*Amendment*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, ***accessibility***, etc.;

**Amendment 74**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 4**

*Motion for a resolution*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

*Amendment*

4. Stresses that a coherent spectrum strategy, including national roadmaps, is needed in order to meet ***adequately*** the challenges of 5G, addressing human, machine-to-machine (M2M) and Internet of Things (IoT) communications at various levels: connection speed, mobility, latency, duty cycle, reliability, etc.;

Or. el

**Amendment 75**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 4 a (new)**

*Motion for a resolution*

***4 a. Stresses that, while maintaining national competence over spectrum, European coordination is a must if we are to develop our global competitiveness, and therefore encourages the Commission and the Member States to move forward with the actions proposed by the Commission in the Action Plan, most importantly the national 5G deployment roadmaps as part of the national broadband plans; in this regard, encourages the Commission, upon request from a Member State, to provide adequate assistance throughout the entire process of drawing up the roadmap;***

Or. en

**Amendment 76**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 4 b (new)**

*Motion for a resolution*

*Amendment*

**4 b.** *Underlines the importance of MVNOs as part of creating a competitive European digital market and increasing the geographical coverage of operators; points to how 5G services and the IoT will require shared spectrum use and jointly organised auctions, with the ambition of promoting Trans-European networks and structures, and the access to spectrum for over-the-top-content, which will greatly increase the number of actors on the market, thus increasing the need for a corresponding spectrum policy; notes that Trans-European networks are necessary to enable high speed 5G services without wholesale roaming costs;*

Or. en

**Amendment 77**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 5**

*Motion for a resolution*

*Amendment*

5. Points out that the **construction** of 5G wireless networks **requires flexible and** efficient use of **all** available non-contiguous parts of the spectrum, **including 700Mhz band, for widely different network deployment scenarios, with a clear emphasis on harmonising the available spectrum bands on a regional basis;**

5. Points out that the **rollout** of 5G wireless networks **will require, on the one hand, a substantial strengthening of fixed backhaul infrastructure (probably via fibre) and cell densification (preferably via the sharing of passive infrastructure), and, on the other hand,** efficient use of the available non-contiguous parts of the spectrum, **as well as a gradual migration of the spectrum band usage already in use for mobile communications (2G, 3G, 4G);**

**Amendment 78**

**Kaja Kallas, Cora van Nieuwenhuizen**

**Motion for a resolution**

**Paragraph 5**

*Motion for a resolution*

5. Points out that the construction of 5G wireless networks requires flexible and efficient use of all available non-contiguous parts of the spectrum, including 700Mhz band, for widely different network deployment scenarios, **with** a clear emphasis on harmonising the available spectrum bands **on a regional basis**;

*Amendment*

5. Points out that the construction of 5G wireless networks requires flexible and efficient use of all available non-contiguous parts of the spectrum, including 700Mhz band, for widely different network deployment scenarios, **which requires the development of innovative spectrum licensing models and** a clear emphasis on harmonising the available spectrum bands **for 5G at EU and global level**;

**Amendment 79**

**Notis Marias**

**Motion for a resolution**

**Paragraph 5**

*Motion for a resolution*

5. Points out that the construction of 5G wireless networks requires flexible and efficient use of all available non-contiguous parts of the spectrum, including 700Mhz **band**, for widely different network deployment scenarios, with a clear emphasis on harmonising the available spectrum bands on a regional basis;

*Amendment*

5. Points out that the construction of 5G wireless networks requires flexible and efficient use of all available non-contiguous parts of the spectrum, including 700Mhz **for wireless broadband services**, for widely different network deployment scenarios, with a clear emphasis on harmonising the available spectrum bands on a regional basis;

**Amendment 80**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 5**

*Motion for a resolution*

5. Points out that the construction of 5G wireless networks requires flexible and efficient use of all available non-contiguous parts of the spectrum, including 700Mhz band, for widely different network deployment scenarios, with a clear emphasis on harmonising the available spectrum bands on a regional basis;

*Amendment*

5. Points out that the construction of 5G wireless networks requires ***access to VHC backhaul and*** flexible and efficient use of all available non-contiguous parts of the spectrum, including 700Mhz band, for widely different network deployment scenarios, with a clear emphasis on harmonising the available spectrum bands on a regional basis;

Or. en

**Amendment 81**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 5 a (new)**

*Motion for a resolution*

***5 a. Acknowledges the importance of licensed spectrum to ensure long-term network investment and guarantee better quality of services, by enabling steady and reliable spectrum access, while also underlining the need for better legal protection for unlicensed spectrum and various methods of sharing spectrum;***

Or. en

**Amendment 82**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 5 a (new)**

*Motion for a resolution*

*Amendment*

**5 a.** *Points to that a lack of coordination constitutes a substantial risk in terms of 5G deployment, as gaining critical mass is crucial for attracting investments and thus reaping the full benefits of 5G technology;*

Or. en

**Amendment 83**

**Michel Reimon**

on behalf of the Verts/ALE Group

**Motion for a resolution**

**Paragraph 6**

*Motion for a resolution*

6. Notes that **sector** players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, *including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC* networks;

*Amendment*

6. Notes that **all** players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology *to ensure future-proof networks based on multiple quality parameters such as speed, resilience, latency, jitter and energy efficiency; Recalls that only a regulatory policy aimed at ensuring effective competition triggering the progressive and efficient deployment by all sector players will enable to fully grasp the benefits of 5G, which could eventually allow full convergence between mobile and fixed* networks.

Or. en

**Amendment 84**

**Martina Werner**

**Motion for a resolution**



## Paragraph 6

### *Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, *including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;*

### *Amendment*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology *that will help connect all Europeans to VHC networks; notes that 5G deployment will require much more fibre in a denser wireless network;*

Or. en

## Amendment 85

Edouard Martin

### Motion for a resolution

#### Paragraph 6

### *Motion for a resolution*

6. Notes that sector players should benefit from a level playing field *and should enjoy the flexibility* to design their own networks, choosing *their* investment *model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies* that will help connect all Europeans to VHC networks;

### *Amendment*

6. Notes that sector players should benefit from a *predictable* level playing field to design their own networks, choosing investment *models* that will help connect all Europeans to VHC networks;

Or. fr

## Amendment 86

Kaja Kallas, Cora van Nieuwenhuizen

### Motion for a resolution

#### Paragraph 6

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, ***including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that*** will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, ***within a regulatory framework that drives competition and*** will help connect all Europeans to VHC networks;

Or. en

**Amendment 87**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from ***a level playing field and should enjoy*** the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that ***present and future*** sector players should benefit from ***fair conditions and regulation that can offer*** the flexibility ***required*** to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

Or. es

**Amendment 88**  
**Victor Negrescu**

**Motion for a resolution**  
**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will **help connect** all Europeans **to VHC** networks;

*Amendment*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will **provide** all Europeans **with access to very high-capacity** networks;

Or. en

**Amendment 89**

**Michal Boni**

**Motion for a resolution**

**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including **fibre-to-the-home (FTTH)**, Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including **FTTx**, Wi-Fi, **WiGig**, G.fast, 2G, cable, satellite or any other rapid development technologies, **provided** that will help connect all Europeans to VHC networks;

Or. en

**Amendment 90**

**Patrizia Toia**

**Motion for a resolution**

**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including ***fibre-to-the-home (FTTH)***, Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that ***all*** sector players, ***including new operators***, should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including ***fibre (FTTx)***, Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

Or. it

**Amendment 91**

**Evžen Tošenovský, Ashley Fox**

**Motion for a resolution**

**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology ***or combination of technologies***, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks; ***underlines that variety of technologies offering various network speeds ensures to meet individual consumers' needs;***

Or. en

**Amendment 92**

**Cora van Nieuwenhuizen, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite, ***novel 5G technologies such as Massive MIMO*** or any other rapid development technologies that will help connect all Europeans to VHC networks;

Or. en

**Amendment 93**

**David Borrelli, Dario Tamburrano**

**Motion for a resolution**

**Paragraph 6**

*Motion for a resolution*

6. Notes that sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

*Amendment*

6. Notes that ***all*** sector players should benefit from a level playing field and should enjoy the flexibility to design their own networks, choosing their investment model and the most appropriate technology, including fibre-to-the-home (FTTH), Wi-Fi, G.fast, 2G, cable, satellite or any other rapid development technologies that will help connect all Europeans to VHC networks;

Or. en

**Amendment 94**

**Paloma López Bermejo**

**Motion for a resolution**

**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure ***that will support*** the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), ***online gaming*** and so forth) ***and provide agile, elastic and highly personalised services that will improve every citizen's life;***

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure, ***and of*** the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), and so forth) ***that should improve the lives of all citizens, including consumers and workers, for example;***

Or. es

**Amendment 95**

**Michel Reimon**

on behalf of the Verts/ALE Group

**Motion for a resolution**

**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, ***virtual reality (VR)***, ***online gaming*** and so forth) and provide agile, elastic and highly personalised services that will improve every citizen's life;

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, ***education***, healthcare, ***research***, energy, utilities, manufacturing, transportation, the automotive industry and so forth) and provide ***affordable***, agile, elastic and highly personalised services that will improve every citizen's life;

Or. en

**Amendment 96**  
**Miapetra Kumpula-Natri**

**Motion for a resolution**  
**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, ***elastic*** and highly personalised services that ***will*** improve every citizen's life;

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic ***and societal*** sectors (public sector, ***education***, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, ***interactive, reliable*** and highly personalised services that ***should*** improve every citizen's life;

Or. en

**Amendment 97**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, ***elastic*** and highly personalised

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, ***audiovisual***, virtual reality (VR), online gaming and so forth) and provide agile, ***interactive, reliable*** and

services that **will** improve every citizen's life;

highly personalised services that **should** improve every citizen's life;

Or. en

**Amendment 98**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G **is more than an evolution of mobile broadband and that it** will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve every citizen's life;

*Amendment*

7. Believes that 5G will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and **should** provide agile, elastic and highly personalised services that will improve every citizen's life;

Or. fr

**Amendment 99**  
**Victor Negrescu**

**Motion for a resolution**  
**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of



processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve *every* citizen's life;

processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve *everyday* citizen's life *and work*;

Or. en

**Amendment 100**  
**Henna Virkkunen**

**Motion for a resolution**  
**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve every citizen's life;

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, *education, converged media content delivery*, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve every citizen's life;

Or. en

**Amendment 101**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 7**

*Motion for a resolution*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve every citizen's life;

*Amendment*

7. Believes that 5G is more than an evolution of mobile broadband and that it will be a key enabler of the future digital world as the next generation of ubiquitous ultra-high broadband infrastructure that will support the transformation of processes in all economic sectors (public sector, healthcare, energy, utilities, manufacturing, transportation, the automotive industry, virtual reality (VR), online gaming and so forth) and provide agile, elastic and highly personalised services that will improve every citizen's life; ***it is also expected to promote inclusive growth in rural and urban areas;***

Or. el

**Amendment 102**

**Cora van Nieuwenhuizen, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Paragraph 7 a (new)**

*Motion for a resolution*

*Amendment*

***7 a. Emphasizes that technology neutrality should be a fundamental principle in the construction of the Gigabit Society; stresses that a 'one size fits all' technology approach should be avoided because each region and sector is unique; calls on all relevant actors to assess the appropriateness of different technologies and infrastructures in their specific situations and geographical locations; underlines that FTTH and 5G mobile communications must be complemented by technologies like satellite communications and high-speed Wi-Fi;***

Or. en

**Amendment 103**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 7 a (new)**

*Motion for a resolution*

*Amendment*

**7 a. Notes that the European fragmentation in the roll-out of 4G, still visible in the major differences between Member States as illustrated by the 2015 Digital Economy and Society Index (DESI), has resulted in a lack of digital competitiveness vis-à-vis the U.S, China, Japan, South Korea and emerging economies; in this regard, underlines that while Europe is progressing in terms of digital development, the pace is slowing down, which constitutes a long-term risk to necessary investments and to the attractiveness of the European business environment;**

Or. en

**Amendment 104**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 7 a (new)**

*Motion for a resolution*

*Amendment*

**7 a. Reminds that the ultimate winners of the introduction of 5G should be the end-users and that any decision made in the roll-out of 5G technologies should always stay oriented towards this ultimate purpose offering affordable, trustworthy and high-quality services;**

Or. en

**Amendment 105**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 7 a (new)**

*Motion for a resolution*

*Amendment*

**7 a. Notes that public and private sector investment bring a multiplier effect across the economy and it is likely to create up to 2.3 million jobs directly and indirectly in the 28 member states when 5G will be fully deployed;**

Or. en

**Amendment 106**  
**Henna Virkkunen**

**Motion for a resolution**  
**Paragraph 7 a (new)**

*Motion for a resolution*

*Amendment*

**7 a. Notes that the deployment of 5G technologies in Europe is expected to have benefits that extend far beyond the mobile industry, as well as trickle-down effects amounting to €141.8 billion annually by 2025;**

Or. en

**Amendment 107**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 7 b (new)**

*Motion for a resolution*

*Amendment*

**7 b. Stresses that the success of a rapid EU wide 5G roll-out depends on the development of demand driven new business models; highlights, that there is a myriad of initiatives contributing to the requirements clarification for 5G, which makes it difficult for vertical industries to contribute to the process; stresses, therefore, that vertical industries need to be actively engaged in the requirements process in an efficient manner;**

Or. en

**Amendment 108**

**Cora van Nieuwenhuizen, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Paragraph 7 b (new)**

*Motion for a resolution*

*Amendment*

**7 b. Stresses that fair competition and a level playing field for market participants are key necessities for the deployment of the Gigabit Society by market participants; believes that the principle of 'same services, same risk, same rules' should apply in this respect;**

Or. en

**Amendment 109**

**Martina Werner**

**Motion for a resolution**

**Paragraph 7 c (new)**

*Motion for a resolution*

*Amendment*

**7 c. Believes that the Commission and Member States together with all relevant stakeholders should consider measures on how to incentivize advanced trials and test**

*beds in order to accelerate innovation in 5G applications;*

Or. en

**Amendment 110**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that ***5G should be instrumental in tackling*** the digital divide and ***in improving internet take-up, especially in rural and*** remote areas;

*Amendment*

8. Notes that ***in rolling out 5G, stakeholders must ensure that they do not repeat some of the mistakes made in the past, by undertaking not to widen*** the digital divide ***between urban and/or densely populated areas, and rural and/or*** remote areas;

Or. fr

**Amendment 111**  
**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that ***5G should be instrumental in tackling*** the digital divide and ***in*** improving internet take-up, especially in rural and remote areas;

*Amendment*

8. Notes that ***the Gigabit Society should tackle*** the digital divide and improving internet take-up, especially in rural and remote areas; ***stresses that satellite technologies have the potential to bring high-speed connectivity to such remote and rural areas;***

Or. en

**Amendment 112**

**José Blanco López**

**Motion for a resolution**

**Paragraph 8**

*Motion for a resolution*

8. *Notes* that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas;

*Amendment*

8. ***Emphasises*** that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas; ***takes the view that the economic and social benefits of 5G will only be fully realised if high-speed networks are rolled out throughout the EU, in both urban and rural areas, and across all sectors of society, without excluding those who are most vulnerable; in that regard, takes the view that public investment is vital in order to prevent new digital divides opening up in the deployment of 5G;***

Or. es

**Amendment 113**

**Paloma López Bermejo**

**Motion for a resolution**

**Paragraph 8**

*Motion for a resolution*

8. ***Notes that 5G should be instrumental in tackling*** the digital divide and ***in improving*** internet take-up, especially in rural and remote areas;

*Amendment*

8. ***Emphasises that the development of 5G should tackle*** the digital divide and ***improve*** internet take-up, especially in rural and remote areas; ***notes, however, that the current Action Plan could widen the digital divide by restricting the 2025 target for extending cellular and fibre rollout to urban areas and transport routes included in the Trans-European Transport Networks;***

Or. es

**Amendment 114**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas;

*Amendment*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas; *stresses that in rural and remote areas it is essential to boost private investments in 5G roll-out and the VHC backhaul and to combine them with public investments in a smart way, where there are market failures, to tackle the digital divide;*

Or. en

**Amendment 115**  
**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas;

*Amendment*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas; *notes that continued investment is still needed in rolling out existing technologies in rural areas as many remote and less-populated regions do not experience the benefits of increased connectivity and the digital economy;*

Or. en

**Amendment 116**  
**Victor Negrescu**



**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas;

*Amendment*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas;  
***Considers that work on reducing technical disparities in terms of connectivity between regions and improving access for people with low income should also be dealt with;***

Or. en

**Amendment 117**  
**Henna Virkkunen**

**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas;

*Amendment*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up, especially in rural and remote areas  
***making use of all available technologies;***

Or. en

**Amendment 118**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 8**

*Motion for a resolution*

8. Notes that 5G should be instrumental in tackling the digital divide and in improving internet take-up,

*Amendment*

8. Notes that 5G should be instrumental in tackling the digital divide ***immediately*** and in improving internet

especially in rural and remote areas;

take-up, especially in rural and remote areas;

Or. el

**Amendment 119**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 8 a (new)**

*Motion for a resolution*

*Amendment*

**8 a. Points to the fact that while the digital divide is present between cities and rural areas, it is also highly present between Member States; stresses, in this regard, the importance of a competitive legislative framework and initiatives which encourage investments in infrastructure, increases the diversity of actors and strengthens European coordination;**

Or. en

**Amendment 120**  
**Olle Ludvigsson**

**Motion for a resolution**  
**Paragraph 8 a (new)**

*Motion for a resolution*

*Amendment*

**8 a. Points out that 5G will be the cornerstone in realising the vision of the Networked Society and will increase the possibilities to live, study and work in the European Union, which is a prerequisite for people and companies to fully benefit from the digital revolution;**

Or. en

**Amendment 121**  
**Michał Boni, Carlos Zorrinho**

**Motion for a resolution**  
**Paragraph 8 a (new)**

*Motion for a resolution*

*Amendment*

**8 a. Considers that facilitating deployments of 5G small cells consistent with the WiFi4EU regulation will contribute to reduce the digital and technological divide and increase 5G service availability to all citizens;**

Or. en

**Amendment 122**  
**Lefteris Christoforou**

**Motion for a resolution**  
**Paragraph 8 a (new)**

*Motion for a resolution*

*Amendment*

**8a. Stresses that Internet access is a human right that must be guaranteed for all European citizens.**

Or. el

**Amendment 123**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 8 b (new)**

*Motion for a resolution*

*Amendment*

**8 b. Stresses that Europe has to keep pace with technological developments and opportunities, which are provided by more efficient ICT technologies to support the**

*socio-economic development in today's underdeveloped regions;*

Or. en

**Amendment 124**

**Michał Boni**

**Motion for a resolution**

**Paragraph 8 c (new)**

*Motion for a resolution*

*Amendment*

**8 c. Stresses that in order to benefit from the full service potential of the technological mobile standard 5G, a dense fibre network is the indispensable backhaul infrastructure;**

Or. en

**Amendment 125**

**Lefteris Christoforou**

**Motion for a resolution**

**Paragraph 9**

*Motion for a resolution*

*Amendment*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes *that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes, *however, that Internet access for small and isolated countries and island areas is unfortunately expensive and leaves a lot to be desired in terms of quality and speed; recommends therefore that EU funding be earmarked for free and unrestricted Internet access in remote and island areas;*

Or. el

**Amendment 126**  
**Michał Boni, Carlos Zorrinho**

**Motion for a resolution**  
**Paragraph 9**

*Motion for a resolution*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

*Amendment*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that ***the unserved access needs are still present and*** access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands; ***Overcoming this expectation can't be left to the market alone but requires a policy framework with specific priorities to overcome the obstacles;***

Or. en

**Amendment 127**  
**Michel Reimon**  
on behalf of the Verts/ALE Group

**Motion for a resolution**  
**Paragraph 9**

*Motion for a resolution*

9. ***Welcomes*** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

*Amendment*

9. ***Notes*** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme ***and expresses confidence that with the right policy approach such initiatives could become a driver for uptake of digital services and improving citizens life;*** notes that access speeds are increasing ***but so is the demand,*** and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

Or. en

**Amendment 128**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 9**

*Motion for a resolution*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

*Amendment*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands; ***takes the view that it is vital for this initiative to make it possible for people to connect to the internet free of charge and with the same digital identity throughout the EU;***

Or. es

**Amendment 129**  
**Carlos Zorrinho, Michal Boni**

**Motion for a resolution**  
**Paragraph 9**

*Motion for a resolution*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

*Amendment*

9. Welcomes the WiFi4EU initiative to promote free ***and universal*** internet in local communities by means of an EU-funded scheme ***and implemented by the Member States, promoting inclusiveness, geographic balance and quality of experience for users;*** notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

Or. en

**Amendment 130**  
**Jean-Luc Schaffhauser**

**Motion for a resolution**  
**Paragraph 9**

*Motion for a resolution*

9. **Welcomes** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

*Amendment*

9. **Notes** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; **notes that the Swedish Parliament has issued a negative reasoned opinion on whether this is compatible with the subsidiarity principle**; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

Or. fr

**Amendment 131**  
**Miroslav Poche**

**Motion for a resolution**  
**Paragraph 9**

*Motion for a resolution*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

*Amendment*

9. Welcomes the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme, **which will significantly improve internet access for everyone**; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

Or. cs

## **Amendment 132**

**Ashley Fox, Evžen Tošenovský**

### **Motion for a resolution**

#### **Paragraph 9**

##### *Motion for a resolution*

9. **Welcomes** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

##### *Amendment*

9. **Notes** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

Or. en

## **Amendment 133**

**Notis Marias**

### **Motion for a resolution**

#### **Paragraph 9**

##### *Motion for a resolution*

9. **Welcomes** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

##### *Amendment*

9. **Notes** the WiFi4EU initiative to promote free internet in local communities by means of an EU-funded scheme; notes that access speeds are increasing, and that as usage across multiple wireless devices grows, WLAN will need to match end-to-end connectivity demands;

Or. el

## **Amendment 134**

**Cora van Nieuwenhuizen, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

### **Motion for a resolution**

#### **Paragraph 9 a (new)**



*Motion for a resolution*

*Amendment*

**9 a.** ***Calls on the European Commission to pay special attention to indoor coverage in its 5G Action Plan, considering that a large part of 5G applications will be used inside homes and offices; recalls the poor building penetration of higher frequency networks; recommends the assessment of additional technologies to ensure good indoor coverage, such as Massive MIMO, indoor repeaters and WiGig high speed Wi-Fi applications;***

Or. en

**Amendment 135**

**Michel Reimon**

on behalf of the Verts/ALE Group

**Motion for a resolution**

**Paragraph 10**

*Motion for a resolution*

10. Stresses that the development of 5G technologies is a cornerstone for transforming the ICT network infrastructure towards all-encompassing smart connectivity: smart cars, smart grids, smart cities, smart factories and beyond; believes that ultrafast broadband and intelligent, efficient network features that achieve near-instantaneous connectivity between people, human-to-machine and connected machines will come to redefine end user connectivity, which will be enabled by **radio access** network paradigms such as mesh networks, dynamic network slicing and softwarisation technologies;

*Amendment*

10. Stresses that the development of 5G technologies is a cornerstone for transforming the ICT network infrastructure towards all-encompassing smart connectivity: smart cars, smart grids, smart cities, smart factories, **smart governments** and beyond; believes that ultrafast broadband and intelligent, efficient network features that achieve near-instantaneous connectivity between people, human-to-machine and connected machines will come to redefine end user connectivity, which will be enabled by network paradigms such as mesh **networks**, **hybrid** networks, dynamic network slicing and softwarisation technologies;

Or. en

**Amendment 136**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 10**

*Motion for a resolution*

10. Stresses that the development of 5G technologies is a cornerstone for transforming the ICT network infrastructure towards all-encompassing smart connectivity: smart cars, smart grids, smart cities, smart factories and beyond; believes that ultrafast broadband and intelligent, efficient network features that achieve near-instantaneous connectivity between people, human-to-machine and connected machines will come to redefine end user connectivity, which will be enabled by radio access network paradigms such as mesh networks, dynamic network slicing and softwarisation technologies;

*Amendment*

10. Stresses that the development of 5G technologies is a cornerstone for transforming the ICT network infrastructure towards all-encompassing smart connectivity: smart cars, smart grids, smart cities, smart factories and beyond; believes that ultrafast broadband and intelligent, efficient network features that achieve near-instantaneous connectivity between people, human-to-machine and connected machines will come to redefine end user connectivity, which will be enabled by radio access network paradigms such as mesh networks, dynamic network slicing and softwarisation technologies; ***emphasises that the latter must not in any way erode the rights and freedoms of the end user, and that the concept of network ‘slices’ will need to be considered in the light of EU rules on net neutrality;***

Or. fr

**Amendment 137**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 10 a (new)**

*Motion for a resolution*

***10 a. Underlines that high energy performance targeting reduced network energy consumption is a critical requirement of 5G; emphasises that this element is crucial to reduce operational costs, to facilitate network connectivity in rural and remote areas and to provide***

*Amendment*

*network access in a sustainable and resource efficient way;*

Or. en

**Amendment 138**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 10 a (new)**

*Motion for a resolution*

*Amendment*

**10 a. Stresses that 5G deployment requires significant upgrade of fixed and densification of mobile networks in line with Gigabit Society targets, especially in solutions for e-health;**

Or. en

**Amendment 139**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 11**

*Motion for a resolution*

*Amendment*

11. Believes that 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

11. Believes that ***the promises that*** 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users ***are great in theory***;

Or. fr

**Amendment 140**  
**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

## Paragraph 11

### *Motion for a resolution*

11. Believes that 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

### *Amendment*

11. Believes that 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users; ***highlights that 5G can offer solutions to important societal challenges through its ability to significantly cut the energy use of mobile devices and through its transformative potential of sectors like health and transport;***

Or. en

## Amendment 141

**Michel Reimon**

on behalf of the Verts/ALE Group

### **Motion for a resolution**

#### **Paragraph 11**

### *Motion for a resolution*

11. Believes that 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

### *Amendment*

11. Believes that 5G will enable new ***affordable and*** high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

Or. en

## Amendment 142

**Martina Werner**

### **Motion for a resolution**

#### **Paragraph 11**

### *Motion for a resolution*

11. Believes that 5G ***will*** enable new

### *Amendment*

11. Believes that 5G ***should*** enable new

high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

Or. en

**Amendment 143**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 11**

*Motion for a resolution*

11. ***Believes*** that 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

*Amendment*

11. ***Expects*** that 5G will enable new high-quality services, connect new industries and ultimately improve the customer experience for increasingly sophisticated and demanding digital users;

Or. el

**Amendment 144**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 12**

*Motion for a resolution*

12. Considers that the development ***and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting*** an end to digital illiteracy – a cause of digital divide and exclusion;

*Amendment*

12. Considers that the development ***of the new digital society requires major investment in education to ensure that digital skills can be acquired and honed from the earliest stages of schooling so that citizens are not only capable of using digital technologies but also understanding the implications as regards the exercise of their fundamental rights, to ensure that citizens are highly skilled when they enter the labour market, and to put*** an end to digital illiteracy – a cause of digital divide and exclusion;

**Amendment 145**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 12**

*Motion for a resolution*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: ***training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;***

*Amendment*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: ***to give citizens (and future citizens) the tools they need to take control of their digital existence, putting an end to digital illiteracy, which is a cause of digital divide and exclusion, and to train a highly skilled workforce that is capable of retaining and creating jobs in the field of technology;***

Or. fr

**Amendment 146**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 12**

*Motion for a resolution*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;

*Amendment*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion, ***as evidenced by a large age and gender gap; highlights the importance of the social partners and of public administration in developing digital skills, by means of both***

*vocational and on-the-job training;*

Or. es

**Amendment 147**

**Martina Werner**

**Motion for a resolution**

**Paragraph 12**

*Motion for a resolution*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;

*Amendment*

12. Considers that the development and improvement of digital skills should take place through major investment in education - *including vocational, entrepreneurial and further training as well as retraining* - with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;

Or. en

**Amendment 148**

**Olle Ludvigsson**

**Motion for a resolution**

**Paragraph 12**

*Motion for a resolution*

12. *Considers* that the development and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;

*Amendment*

12. *Underlines that Europe faces a digital gap in terms of skills;* considers that the development and improvement of digital skills *is crucial and* should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;

**Amendment 149**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 12**

*Motion for a resolution*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs and putting an end to digital illiteracy – a cause of digital divide and exclusion;

*Amendment*

12. Considers that the development and improvement of digital skills should take place through major investment in education with two main objectives: training a highly skilled workforce able to retain and create technological jobs, ***especially in countries with high unemployment levels***, and putting an end to digital illiteracy – a cause of digital divide and exclusion;

Or. el

**Amendment 150**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 12 a (new)**

*Motion for a resolution*

***12 a. Considers that the Union should establish and make available 5G skills development curricula in partnership with the EIT Digital; Emphasis towards Start-ups and SMEs in order for those to utilise the benefits of 5G deployment;***

Or. en

**Amendment 151**  
**Patrizia Toia**



**Motion for a resolution**  
**Paragraph 12 a (new)**

*Motion for a resolution*

*Amendment*

**12a. Stresses that the development of 5G networks will foster rapid technological changes permitting the full deployment of the digital sector, smart technology, the Internet of Things and advanced manufacturing systems;**

Or. it

**Amendment 152**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 12 a (new)**

*Motion for a resolution*

*Amendment*

**12 a. Emphasises the importance of 5G for enabling European global leadership in providing high-end research infrastructure, which can make Europe the centre for excellent research;**

Or. en

**Amendment 153**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 13**

*Motion for a resolution*

*Amendment*

**13. Welcomes the Commission initiative to reinforce the Investment Plan for Europe within financing instruments (EFSI, CEF) earmarked to finance strategic objectives for gigabit connectivity until 2025;**

**13. Calls on the Commission to look at all available instruments with a view to boosting the investment earmarked to finance strategic objectives for gigabit connectivity until 2025, including making the Member States' deficit targets more flexible; takes the view that there is a need**

*to prioritise the investment with the highest impact on society in terms of bridging the digital divide, and in boosting productivity and quality employment;*

Or. es

**Amendment 154**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 13**

*Motion for a resolution*

13. **Welcomes** the Commission initiative to reinforce the Investment Plan for Europe within financing instruments (EFSD, CEF) earmarked to finance strategic objectives for gigabit connectivity until 2025;

*Amendment*

13. **Notes** the Commission initiative to reinforce the Investment Plan for Europe within financing instruments (EFSD, CEF) earmarked to finance strategic objectives for gigabit connectivity until 2025;

Or. el

**Amendment 155**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 13**

*Motion for a resolution*

13. Welcomes the Commission initiative to reinforce the Investment Plan for Europe within financing instruments (EFSD, CEF) earmarked to finance strategic objectives for gigabit connectivity until 2025;

*Amendment*

13. Welcomes the Commission initiative to reinforce the Investment Plan for Europe within financing instruments (EFSD, CEF) earmarked to finance strategic objectives for gigabit connectivity until 2025; ***takes the view that it is vital to make full use of the potential of existing funds and step up the synergies between them, and to boost private investment and public-private partnerships such as the 5G PPP;***

**Amendment 156**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 13 a (new)**

*Motion for a resolution*

*Amendment*

***13 a. Emphasises that all decisions related to the Digital Single Market, including spectrum allocation, connectivity targets and 5G deployment must be formulated based on future needs and how the market is expected to develop over the next 10-15 years; stresses, in this regard, that a successful 5G deployment will be key to economic competitiveness, which can only be achieved through far-sighted European legislation and policy coordination;***

Or. en

**Amendment 157**  
**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**  
**Paragraph 13 a (new)**

*Motion for a resolution*

*Amendment*

***13 a. Stresses that policies on the Gigabit Society and 5G should be proportionate, frequently revised and in accordance with the 'Innovation Principle', so that potential effects on innovation will be part of the impact assessment;***

Or. en

**Amendment 158**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 14**

*Motion for a resolution*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

*Amendment*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027; ***Points out that, according to the Commission, an investment of EUR 500 billion will be required over the next decade to hit the connectivity targets, although it also estimates that there is an investment shortfall of EUR 155 billion; takes the view, therefore, that top priority needs to be given to ensuring there is sufficient investment for the deployment of digital infrastructure, as that deployment is imperative in order to enable citizens and businesses to reap the benefits of the development of 5G technology;***

Or. es

**Amendment 159**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 14**

*Motion for a resolution*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

*Amendment*

14. Calls on the Commission to ensure, maintain and develop ***long-term*** financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027 ***and particularly the next RTD&I Framework;***

Or. en

**Amendment 160**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 14**

*Motion for a resolution*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

*Amendment*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027, ***with specific objectives for that timeframe;***

Or. es

**Amendment 161**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 14**

*Motion for a resolution*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

*Amendment*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027 ***and in line with the needs of the EU Member States;***

Or. el

**Amendment 162**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 14**

*Motion for a resolution*

*Amendment*

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

14. Calls on the Commission to ensure, maintain and develop financing for the 5G Action Plan ***and the network modernisation*** at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

Or. en

#### **Amendment 163**

**Ashley Fox, Evžen Tošenovský**

#### **Motion for a resolution Paragraph 14**

##### *Motion for a resolution*

14. Calls on the Commission to ***ensure***, maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

##### *Amendment*

14. Calls on the Commission to maintain and develop financing for the 5G Action Plan at the appropriate level within the horizon of the next Multiannual Financial Framework 2020-2027;

Or. en

#### **Amendment 164**

**Paloma López Bermejo**

#### **Motion for a resolution Paragraph 15**

##### *Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of ***investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs;***

##### *Amendment*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of ***forms of investment;***

Or. es

**Amendment 165**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 15**

*Motion for a resolution*

15. Believes that the best path towards the gigabit society *lies in a technology-inclusive approach supported by a broad range of* investment models such as public-private or co-investments; notes that co-investment *in* very high capacity networks can help to pool resources, enable different *flexible* frameworks and lower deployment costs;

*Amendment*

15. Believes that the best path towards the gigabit society *is to promote competition by enabling all players to invest, including in* investment models such as public-private or co-investments; notes that *besides* co-investment *other forms of collaborative investment and long-term commercial access arrangements for* very high capacity networks can help to pool resources, enable different *risk-sharing* frameworks and lower deployment costs;

Or. en

**Amendment 166**  
**Michel Reimon**  
on behalf of the Verts/ALE Group

**Motion for a resolution**  
**Paragraph 15**

*Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a *technology-inclusive* approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs;

*Amendment*

15. Believes that the best path towards the gigabit society lies in a *performance-oriented and technology-neutral* approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can, *if applied in a manner which promotes the achievement of effective competition*, help to pool resources enable different flexible frameworks and lower deployment costs *and looks forward for a framework that*

*will provide a truly competitive market;*

Or. en

**Amendment 167**

**Jean-Luc Schaffhauser**

**Motion for a resolution**

**Paragraph 15**

*Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs;

*Amendment*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs; ***takes the view, however, that in general, public-private partnerships ultimately come at an exorbitant cost to the public purse when compared with public contracting;***

Or. fr

**Amendment 168**

**David Borrelli, Dario Tamburrano**

**Motion for a resolution**

**Paragraph 15**

*Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment

*Amendment*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks, ***if applied in a manner which promotes the achievement of effective competition***



costs;

*among all actors*, can help to pool resources, enable different flexible frameworks and lower deployment costs;

Or. en

#### **Amendment 169**

**Evžen Tošenovský, Ashley Fox**

#### **Motion for a resolution**

##### **Paragraph 15**

###### *Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs;

###### *Amendment*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment *and similar voluntary decisions on investment* in very high capacity networks *or commercial wholesale access* can help to pool resources, enable different flexible frameworks and lower deployment costs;

Or. en

#### **Amendment 170**

**Patrizia Toia**

#### **Motion for a resolution**

##### **Paragraph 15**

###### *Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a *broad* range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment

###### *Amendment*

15. Believes that the best path towards the gigabit society lies in a technology-inclusive approach supported by a *diverse* range of investment models such as public-private or co-investments *so as to promote competition between all operators*; notes that co-investment in very high capacity networks can help to pool resources, enable

costs;

different flexible frameworks and lower deployment costs;

Or. it

#### **Amendment 171**

**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

#### **Motion for a resolution**

##### **Paragraph 15**

###### *Motion for a resolution*

15. Believes that the best path towards the gigabit society lies in a ***technology-inclusive*** approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs;

###### *Amendment*

15. Believes that the best path towards the gigabit society lies in a ***technology neutral*** approach supported by a broad range of investment models such as public-private or co-investments; notes that co-investment in very high capacity networks can help to pool resources, enable different flexible frameworks and lower deployment costs;

Or. en

#### **Amendment 172**

**Gunnar Hökmark**

#### **Motion for a resolution**

##### **Paragraph 15 a (new)**

###### *Motion for a resolution*

###### *Amendment*

***15 a. Stresses that intensive investments in infrastructure, which is crucial in order to maintain and develop global competitiveness, can only be achieved through competition and an access regulation capable of opening up the market to new actors, incentivising shared investments as well as shared nets by other means, such as MVNO, leasing and trading;***

**Amendment 173**  
**Olle Ludvigsson**

**Motion for a resolution**  
**Paragraph 15 a (new)**

*Motion for a resolution*

*Amendment*

***15 a. Points out that other countries and regions are progressing quickly in the development of 5G; stresses the need for the European Union, Member States and all the relevant actors to take their responsibility and working together to ensure not being left behind in the global race;***

Or. en

**Amendment 174**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 15 a (new)**

*Motion for a resolution*

*Amendment*

***15 a. Notes that the development of the Gigabit Society requires pro-competitive and clearer rules to drive investment, innovation and to preserve affordability and end-users' choice;***

Or. en

**Amendment 175**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 15 a (new)**

*Motion for a resolution*

*Amendment*

**15 a.** *Calls on the Commission to consider adapting the 'state aid rules in relation to the rapid deployment of broadband networks' so that they reflect the new connectivity targets;*

Or. en

**Amendment 176**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 16**

*Motion for a resolution*

16. Stresses that *commercial* investments should be supported by a *policy and regulatory environment tailored to predictability and the certainty of return on investments, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;*

*Amendment*

16. Stresses that *private* investments should be supported by a *predictable* regulatory *framework that can guarantee* return on *investment within a reasonable timeframe, and provide consumer protection;*

Or. fr

**Amendment 177**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 16**

*Motion for a resolution*

16. Stresses that commercial investments should be supported by a policy and regulatory environment tailored to *predictability and the certainty of return on investments, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;*

*Amendment*

16. Stresses that commercial investments should be supported by a policy and regulatory environment tailored to *public investment targets, bearing in mind that it is the public authorities that are responsible for ensuring that the ICT infrastructure required to access digitalisation services in Europe is*

*available to all;*

Or. es

**Amendment 178**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 16**

*Motion for a resolution*

16. Stresses that ***commercial*** investments should be supported by ***a*** policy and regulatory environment tailored to predictability ***and the certainty of return on investments***, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

*Amendment*

16. Stresses that ***private*** investments should be supported by ***an infrastructure-oriented*** policy and regulatory environment tailored to predictability, ***clarity and aimed at promoting competition to the benefit of the end-users***, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

Or. en

**Amendment 179**  
**David Borrelli, Dario Tamburrano**

**Motion for a resolution**  
**Paragraph 16**

*Motion for a resolution*

16. Stresses that ***commercial*** investments should be supported by a policy and regulatory environment tailored to predictability and ***the certainty of return on investments***, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

*Amendment*

16. Stresses that ***private*** investments should be supported by a policy and regulatory environment tailored to predictability and ***certainty and aimed at promoting effective competition to the benefit of end-users***, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

Or. en

**Amendment 180**

**Michel Reimon**

on behalf of the Verts/ALE Group

**Motion for a resolution**

**Paragraph 16**

*Motion for a resolution*

16. Stresses that commercial investments should be supported by *a* policy and regulatory environment tailored to predictability and the certainty of return on investments, *and should not be delayed by overly ambitious public schemes that may impede 5G rollout;*

*Amendment*

16. Stresses that commercial investments should be supported by *an infrastructure-oriented* policy and *a pro-competitive* regulatory environment tailored to predictability and the certainty of return on investments;

Or. en

**Amendment 181**

**Kaja Kallas, Cora van Nieuwenhuizen**

**Motion for a resolution**

**Paragraph 16**

*Motion for a resolution*

16. Stresses that *commercial* investments should be supported by a policy and regulatory environment tailored to predictability and *the certainty of return on investments*, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

*Amendment*

16. Stresses that *private* investments should be supported by a policy and regulatory environment tailored to predictability and *legal* certainty, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

Or. en

**Amendment 182**

**Jean-Luc Schaffhauser**

**Motion for a resolution**

**Paragraph 16**

*Motion for a resolution*

*Amendment*

16. Stresses that commercial investments should be supported by a policy and regulatory environment tailored to predictability and the certainty of return on investments, and should not be delayed by overly ambitious public schemes that may impede 5G rollout;

16. Stresses that commercial investments should be supported by a policy and regulatory environment tailored to predictability and the certainty of return on investments, and should not be delayed by overly ambitious public schemes that may impede 5G rollout; *takes the view that each Member State should have the opportunity – in view of its history and economic and administrative traditions – to choose between a public service or one that is subject to competition in order to ensure equal access to quality internet connectivity;*

Or. fr

**Amendment 183**

**Cora van Nieuwenhuizen, Lieve Wierinck, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Paragraph 16 a (new)**

*Motion for a resolution*

*Amendment*

*16 a. Underlines the importance of cooperation between academia, research institutions, the private sector and the public sector on research & development concerning 5G mobile communications; points to the 5G PPP as a positive example in this regard and encourages the European Commission to continue involving all relevant sectors in the process;*

Or. en

**Amendment 184**

**Olle Ludvigsson**

**Motion for a resolution**

**Paragraph 16 a (new)**

*Motion for a resolution*

*Amendment*

**16 a. Stresses that in order to facilitate the adoption of 5G technologies, the European Commission and Member States must encourage and incentivise cross-sector innovation as well as ensuring that policies and rules are future-oriented, pro-investment and pro-innovation;**

Or. en

**Amendment 185**  
**Michał Boni**

**Motion for a resolution**  
**Paragraph 16 a (new)**

*Motion for a resolution*

*Amendment*

**16 a. Points out that monitoring user requirements, capabilities of viable technologies, and focusing on the connectivity chain that is likely to have the highest societal return on investment, is needed;**

Or. en

**Amendment 186**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 17**

*Motion for a resolution*

*Amendment*

17. Calls on the Member States to implement the 5G Action Plan fully through coherent and timely action in regions and cities that encourages and incentivises cross-sector innovation and fosters an economic industry-wide

17. Calls on the Member States to implement the 5G Action Plan fully through coherent, **inclusive** and timely action in regions and cities that encourages and incentivises cross-sector innovation and fosters an economic industry-wide



cooperative framework;

cooperative framework;

Or. es

#### **Amendment 187**

**Notis Marias**

#### **Motion for a resolution**

##### **Paragraph 17**

###### *Motion for a resolution*

17. Calls on the Member States to implement the 5G Action Plan fully through coherent and timely action in regions and cities *that encourages and incentivises* cross-sector innovation and *fosters* an economic industry-wide cooperative framework;

###### *Amendment*

17. Calls on the Member States to implement the 5G Action Plan fully through coherent and timely action in regions and cities *in order to encourage and incentivise* cross-sector innovation and *foster* an economic industry-wide cooperative framework;

Or. el

#### **Amendment 188**

**Gunnar Hökmark**

#### **Motion for a resolution**

##### **Paragraph 17 a (new)**

###### *Motion for a resolution*

###### *Amendment*

*17 a. Highlights the importance of license durations long enough to provide investors with predictability and return on investments; in this regard, believes that the minimum license durations should not be less than 25 years; underlines that requirements on how to use frequencies must leave room for innovation and new business models, allowing for access to new actors under commercial agreements;*

Or. en

**Amendment 189**

**Michał Boni, Pilar del Castillo Vera**

**Motion for a resolution**

**Paragraph 17 a (new)**

*Motion for a resolution*

*Amendment*

**17 a. Calls on the Member States to consider the 5G Action Plan as a guiding vision for the adoption of the Electronic Communications Code (ECC), in particular as regards cooperation in spectrum management and investment in network infrastructure;**

Or. en

**Amendment 190**

**Nadine Morano, Anne Sander**

**Motion for a resolution**

**Paragraph 17 a (new)**

*Motion for a resolution*

*Amendment*

**17a. Maintains that sub-state stakeholders such as regions and cities must be fully involved in the deployment of 5G;**

Or. fr

**Amendment 191**

**José Blanco López**

**Motion for a resolution**

**Paragraph 18**

*Motion for a resolution*

*Amendment*

18. Calls on the Commission to take the lead in promoting inter-sectoral, cross-

18. Calls on the Commission to take the lead in promoting inter-sectoral, cross-

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lingual 5G interoperability and supporting **privacy-friendly**, reliable, secure services and to consider economic and geographic national circumstances as an integral part of a common strategy;

lingual 5G interoperability and supporting reliable, secure services **that ensure respect for privacy and fundamental rights**, and to consider economic and geographic national circumstances as an integral part of a common strategy **for the EU as a whole**;

Or. es

**Amendment 192**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 18**

*Motion for a resolution*

18. Calls on the Commission to take the lead in promoting inter-sectoral, cross-lingual 5G interoperability and supporting privacy-friendly, reliable, secure services and to consider economic and geographic national circumstances as an integral part of a common strategy;

*Amendment*

18. Calls on the Commission to take the lead in promoting inter-sectoral, cross-lingual 5G **and cross - border** interoperability and supporting privacy-friendly, reliable, secure **services as industry and society at large becomes increasingly more dependent on digital infrastructure for its business and** services and to consider economic and geographic national circumstances as an integral part of a common strategy;

Or. en

**Amendment 193**  
**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**  
**Paragraph 18**

*Motion for a resolution*

18. Calls on the Commission to take the lead in promoting inter-sectoral, cross-lingual 5G interoperability and supporting privacy-friendly, reliable, secure services

*Amendment*

18. Calls on the Commission **and Member States** to take the lead in promoting inter-sectoral, cross-lingual 5G interoperability and supporting privacy-

and to consider economic and geographic national circumstances as an integral part of a common strategy;

friendly, reliable, secure services and to consider economic and geographic national circumstances as an integral part of a common strategy;

Or. en

#### **Amendment 194**

**Michel Reimon**

on behalf of the Verts/ALE Group

#### **Motion for a resolution**

##### **Paragraph 18 a (new)**

*Motion for a resolution*

*Amendment*

***18 a. Stresses that fact that the generational shift in the deployed networks needs to have as one of the main targets the achievement of higher resources and energy efficiency compared to the previous generation networks;***

Or. en

#### **Amendment 195**

**Paloma López Bermejo**

#### **Motion for a resolution**

##### **Paragraph 19**

*Motion for a resolution*

*Amendment*

19. Notes that each sector should work out its own roadmap for standardisation, ***relying on industry-led processes, with a strong desire to reach*** common standards that have the potential to become worldwide standards;

19. Notes that each sector should work out its own roadmap for standardisation ***geared towards establishing*** common standards that have the potential to become worldwide standards;

Or. es

**Amendment 196**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 19**

*Motion for a resolution*

19. Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards;

*Amendment*

19. ***Calls on the Commission to adopt policies that remove excessive barriers in innovative sectors, to incentivise investments in research and development and European standardization;*** Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards; ***Believes that the European standardisation bodies should play a special role in this process;***

Or. en

**Amendment 197**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 19**

*Motion for a resolution*

19. Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards;

*Amendment*

19. Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards; ***calls, in this regard, for efforts on standardisation to be stepped up with a view to ensuring that Europe plays a leading role in setting technology standards allowing for the deployment of 5G networks and services;***

Or. es

**Amendment 198**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 19**

*Motion for a resolution*

19. Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards;

*Amendment*

19. Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards; ***points out, furthermore, that in addition to this bottom-up approach, Europe must defend its place within global bodies that have a say when it comes to standardisation;***

Or. fr

**Amendment 199**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 19**

*Motion for a resolution*

19. Notes that each sector should work out its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards;

*Amendment*

19. Notes that each sector should work out ***immediately*** its own roadmap for standardisation, relying on industry-led processes, with a strong desire to reach common standards that have the potential to become worldwide standards;

Or. el

**Amendment 200**  
**Gunnar Hökmark**

**Motion for a resolution**

## Paragraph 19 a (new)

*Motion for a resolution*

*Amendment*

***19 a. Underlines the need for business models, such as MVNO, shared nets based upon granted access and commercial agreements, trading and leasing parts of nets, opening up for transeuropean nets, thereby offering customers and markets seamless nets available throughout the Union;***

Or. en

## Amendment 201

**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

### Motion for a resolution

#### Paragraph 20

*Motion for a resolution*

*Amendment*

20. ***Supports*** the development of integrated solutions and tests followed by cross-industry trials of large-scale pilots in response to demand for services in the gigabit society;

20. ***Strongly encourages increased experimentation with 5G technologies; supports the development of integrated solutions and tests followed by cross-industry trials of large-scale pilots in response to demand for services in the gigabit society; calls on the Commission and the Member States to ensure sufficient unlicensed frequency bands to stimulate experiments conducted by the industry; asks the Commission to consider setting a concrete and appealing target, such as the Euro 2020 football championship, as a framework for private sector experimentation with 5G technologies and products; points in this regard to the example of the 2018 Olympic Games with regard to South Korean 5G-endeavours;***

Or. en

**Amendment 202**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 20**

*Motion for a resolution*

20. Supports the development of integrated solutions and tests followed by cross-industry trials of large-scale pilots in response to demand for services in the gigabit society;

*Amendment*

20. Supports the *immediate* development of integrated solutions and tests followed by cross-industry trials of large-scale pilots in response to demand for services in the gigabit society;

Or. el

**Amendment 203**  
**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**  
**Paragraph 21**

*Motion for a resolution*

21. Stresses the need to *harmonise the European approach for electromagnetic fields (EMFs), in accordance with* the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines formally recognised by the WHO;

*Amendment*

21. Stresses the need to *take account of* the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines formally recognised by the WHO;

Or. en

**Amendment 204**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 21**

*Motion for a resolution*

21. Stresses the need to harmonise the European approach for electromagnetic fields (EMFs), in accordance with the International Commission on Non-Ionising

*Amendment*

21. Stresses the need to harmonise the European approach for electromagnetic fields (EMFs), in accordance with the International Commission on Non-Ionising



Radiation Protection (ICNIRP) guidelines formally recognised by the WHO;

Radiation Protection (ICNIRP) guidelines formally recognised by the WHO *in order to avoid inconsistency and fragmentation and to ensure consistent wireless networks deployment conditions on the European Digital Single Market*;

Or. en

**Amendment 205**  
**Paloma López Bermejo**

**Motion for a resolution**  
**Paragraph 21**

*Motion for a resolution*

21. Stresses the need to harmonise the European approach for electromagnetic fields (EMFs), in accordance with the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines formally recognised by the WHO;

*Amendment*

21. Stresses the need to harmonise the European approach for electromagnetic fields (EMFs), in accordance with the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines formally recognised by the WHO, *taking into account their effects on the health of citizens and workers*;

Or. es

**Amendment 206**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 22**

*Motion for a resolution*

22. Highlights that the development of the gigabit society requires *fewer and simpler* rules, *which should be* future-oriented, pro-investment, pro-innovation and *based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-*

*Amendment*

22. Highlights that the development of the gigabit society requires *clear* rules *that are* future-oriented, pro-investment *and* pro-innovation and *give consumers a wide choice of services at a reasonable price*;

*term return on investments;*

Or. fr

#### **Amendment 207**

**Paloma López Bermejo**

#### **Motion for a resolution**

##### **Paragraph 22**

###### *Motion for a resolution*

22. Highlights that the development of the gigabit society requires ***fewer and simpler*** rules, ***which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;***

###### *Amendment*

22. Highlights that the development of the gigabit society requires ***uniform*** rules ***that foster the investment and innovation required to guarantee security and access for all citizens and workers in the EU;***

Or. es

#### **Amendment 208**

**Patrizia Toia**

#### **Motion for a resolution**

##### **Paragraph 22**

###### *Motion for a resolution*

22. Highlights that the development of the gigabit society requires ***fewer and simpler*** rules, ***which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;***

###### *Amendment*

22. Highlights that the development of the gigabit society requires ***clearer*** rules ***seeking to promote effective competition in order to encourage investment and innovation and guarantee access and choice for the final user;***

Or. it

#### **Amendment 209**

**Kaja Kallas, Cora van Nieuwenhuizen**

#### **Motion for a resolution**

##### **Paragraph 22**

###### *Motion for a resolution*

22. Highlights that the development of the gigabit society requires fewer and simpler rules, which should be future-oriented, pro-investment, pro-innovation and ***based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;***

###### *Amendment*

22. Highlights that the development of the gigabit society requires fewer and simpler ***common EU*** rules, which should be future-oriented, pro-investment, pro-innovation and ***drivers of competition at both the infrastructure and the services level ;***

Or. en

#### **Amendment 210**

**Michel Reimon**

on behalf of the Verts/ALE Group

#### **Motion for a resolution**

##### **Paragraph 22**

###### *Motion for a resolution*

22. Highlights that the development of the gigabit society requires ***fewer and simpler*** rules, ***which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition;*** stresses that infrastructure-based competition ***offers*** the potential for less regulation and ***allows*** for a fair long-term return on investments;

###### *Amendment*

22. Highlights that the development of the gigabit society requires ***pro-competitive and clearer*** rules ***to drive investment, innovation and to preserve affordability and end-users' choice;*** stresses that infrastructure-based competition ***may offer*** the potential for less regulation and ***allow*** for a fair long-term return on investments ***but only in in areas where replication of the infrastructure is economically feasible;***

Or. en

**Amendment 211**  
**David Borrelli, Dario Tamburrano**

**Motion for a resolution**  
**Paragraph 22**

*Motion for a resolution*

22. Highlights that the development of the gigabit society requires ***fewer and simpler*** rules, which should be future-oriented, pro-investment, pro-innovation and ***based on an assessment of market competition***; stresses that infrastructure-based competition ***offers the potential for less regulation and allows for a fair long-term return on investments***;

*Amendment*

22. Highlights that the development of the gigabit society requires ***pro-competitive and clearer*** rules, which should be future-oriented, pro-investment, pro-innovation and ***able to preserve affordability and end-users' choice***; stresses that infrastructure-based competition ***can only apply in areas where replication of the infrastructure is economically feasible***;

Or. en

**Amendment 212**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 22**

*Motion for a resolution*

22. Highlights that the development of the gigabit society requires ***fewer and simpler*** rules, which should be future-oriented, ***pro-investment, pro-innovation and based on an assessment of market competition***; stresses that infrastructure-based competition ***offers the potential for less regulation and*** allows for a fair long-term return on investments;

*Amendment*

22. Highlights that the development of the gigabit society requires ***clear, effective and balanced*** rules, which should be future-oriented ***and pro-competitive to drive investment and innovation and preserve affordability and consumer's choice***; stresses that infrastructure-based competition allows for a fair long-term return on investments;

Or. en

**Amendment 213**  
**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**

## Paragraph 22

### *Motion for a resolution*

22. Highlights that the development of the gigabit society requires fewer and simpler rules, which should be future-oriented, pro-investment, pro-innovation and based on an assessment of **market** competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;

### *Amendment*

22. Highlights that the development of the gigabit society requires fewer and simpler rules, which should be future-oriented, **pro-competitive**, pro-investment, pro-innovation and based on an assessment of **economic bottlenecks, barriers to effective** competition **or potential consumer harm**, stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;

Or. en

## Amendment 214 Gunnar Hökmark

### Motion for a resolution Paragraph 22

### *Motion for a resolution*

22. Highlights that the development of the **gigabit society** requires fewer and simpler rules, which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;

### *Amendment*

22. Highlights that the development of the Gigabit Society requires fewer and simpler rules, which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments; **encourages Member States to simplify administrative procedure to access physical infrastructure**;

Or. en

## Amendment 215 Notis Marias

**Motion for a resolution**  
**Paragraph 22**

*Motion for a resolution*

22. Highlights that the development of the gigabit society requires ***fewer and*** simpler rules, which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;

*Amendment*

22. Highlights that the development of the gigabit society requires simpler rules, which should be future-oriented, pro-investment, pro-innovation and based on an assessment of market competition; stresses that infrastructure-based competition offers the potential for less regulation and allows for a fair long-term return on investments;

Or. el

**Amendment 216**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 22 a (new)**

*Motion for a resolution*

*Amendment*

***22 a. Underlines the need to establish an innovation-friendly environment for digital services, especially in the area of Big Data and IoT, broadening consumer choice whilst increasing trust and promoting the take-up of digital services, through efficient and streamlined rules, focusing on the needs of the users and characteristics of services, irrespectively of the kind of provider.***

Or. en

**Amendment 217**  
**José Blanco López**

**Motion for a resolution**  
**Paragraph 23**

*Motion for a resolution*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory flexibility and maximise the scope of innovation and coverage;

*Amendment*

23. Stresses that National Broadband Plans need to be revised carefully **to achieve coherent development at EU level**, target all 5G areas, maintain a multi-technology approach, support regulatory flexibility and maximise the scope of innovation and coverage, **with one of the targets being to bridge the digital divide**;

Or. es

**Amendment 218**

**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**

**Paragraph 23**

*Motion for a resolution*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory flexibility and maximise the scope of innovation and coverage;

*Amendment*

23. Stresses that National Broadband Plans need to be **reviewed and, where appropriate**, revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory flexibility and maximise the scope of innovation and coverage;

Or. en

**Amendment 219**

**David Borrelli, Dario Tamburrano**

**Motion for a resolution**

**Paragraph 23**

*Motion for a resolution*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory **flexibility** and maximise the scope of innovation and

*Amendment*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory **certainty** and maximise the scope of innovation and

coverage;

coverage;

Or. en

**Amendment 220**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 23**

*Motion for a resolution*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory *flexibility* and maximise the scope of innovation and coverage;

*Amendment*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory *certainty* and maximise the scope of innovation and coverage;

Or. en

**Amendment 221**  
**Patrizia Toia**

**Motion for a resolution**  
**Paragraph 23**

*Motion for a resolution*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory *flexibility* and maximise the scope of innovation and coverage;

*Amendment*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, maintain a multi-technology approach, support regulatory *certainty* and maximise the scope of innovation and coverage;

Or. it

**Amendment 222**  
**Notis Marias**

**Motion for a resolution**



## Paragraph 23

### *Motion for a resolution*

23. Stresses that National Broadband Plans need to ***be revised carefully***, target all 5G areas, maintain a multi-technology approach, support regulatory flexibility and maximise the scope of innovation and coverage;

### *Amendment*

23. Stresses that National Broadband Plans need to target all 5G areas, maintain a multi-technology approach, support regulatory flexibility and maximise the scope of innovation and coverage;

Or. el

## Amendment 223

**Michel Reimon**

on behalf of the Verts/ALE Group

### **Motion for a resolution**

#### **Paragraph 23**

### *Motion for a resolution*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, ***maintain a multi-technology approach***, support regulatory ***flexibility*** and maximise the scope of innovation and coverage;

### *Amendment*

23. Stresses that National Broadband Plans need to be revised carefully, target all 5G areas, support regulatory ***certainty*** and maximise the scope of ***competition***, innovation and coverage;

Or. en

## Amendment 224

**Gunnar Hökmark**

### **Motion for a resolution**

#### **Paragraph 23 a (new)**

### *Motion for a resolution*

### *Amendment*

***23 a. Points to the fact that 5G will fundamentally transform our economies and services, which will require speeds beyond 1 Gigabyte per second; therefore, believes that a rapid deployment of digital infrastructure should be made a priority***

*for EU and the Member States, in order to realise this ambition;*

Or. en

**Amendment 225**

**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**

**Paragraph 24**

*Motion for a resolution*

*Amendment*

**24. Calls on the Commission to assess the National Broadband Plans to identify gaps and to formulate country-specific recommendations for further action;**

*deleted*

Or. en

**Amendment 226**

**Paloma López Bermejo**

**Motion for a resolution**

**Paragraph 24**

*Motion for a resolution*

*Amendment*

24. Calls on the Commission to assess the National Broadband Plans to identify gaps and to formulate country-specific recommendations for further action;

24. Calls on the Commission to assess the National Broadband Plans to identify gaps and to formulate country-specific recommendations for further action, ***consulting public stakeholders and interested parties such as the social partners and consumers;***

Or. es

**Amendment 227**

**José Blanco López**

**Motion for a resolution**

## Paragraph 24

### *Motion for a resolution*

24. Calls on the Commission to assess the National Broadband Plans to identify gaps and to formulate country-specific recommendations for further action;

### *Amendment*

24. Calls on the Commission to assess the National Broadband Plans to identify gaps and to formulate country-specific recommendations for **remedial and/or** further action;

Or. es

## Amendment 228

José Blanco López

### Motion for a resolution

#### Paragraph 25

### *Motion for a resolution*

25. Welcomes the Commission initiative to establish the Participatory Broadband Platform to ensure the high-level engagement of public and private entities, as well as local and regional authorities;

### *Amendment*

25. Welcomes the Commission initiative to establish the Participatory Broadband Platform to ensure the high-level engagement **and cooperation** of public and private entities, as well as local and regional authorities **to boost investment, identify shortcomings, take remedial public initiatives and meet connectivity targets**;

Or. es

## Amendment 229

Notis Marias

### Motion for a resolution

#### Paragraph 25

### *Motion for a resolution*

25. **Welcomes** the Commission initiative to establish the Participatory Broadband Platform to ensure the high-level engagement of public and private entities, as well as local and regional

### *Amendment*

25. **Notes** the Commission initiative to establish the Participatory Broadband Platform to ensure the high-level engagement of public and private entities,

authorities;

as well as local and regional authorities;

Or. el

**Amendment 230**

**José Blanco López**

**Motion for a resolution**

**Paragraph 25 a (new)**

*Motion for a resolution*

*Amendment*

***25a. Welcomes the establishment and support of a network of offices responsible for matters relating to broadband at regional/national level; takes the view that those offices can play a vital role in helping local authorities, especially in small or rural areas, to benefit from the ESI Funds;***

Or. es

**Amendment 231**

**Gunnar Hökmark**

**Motion for a resolution**

**Paragraph 26**

*Motion for a resolution*

*Amendment*

26. Recalls that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

26. Recalls that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform ***both with respects to services developed towards Start-ups and SMEs and also education and awareness creation;***

Or. en

**Amendment 232**

**Cora van Nieuwenhuizen, Kaja Kallas, Angelika Mlinar, Pavel Telička, Lieve Wierinck**

**Motion for a resolution**

**Paragraph 26**

*Motion for a resolution*

26. Recalls that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

*Amendment*

26. Recalls that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME ***participation in experimentation with 5G technologies and to ensure SME*** access to the 5G Participatory Broadband Platform;

Or. en

**Amendment 233**

**Michel Reimon**

on behalf of the Verts/ALE Group

**Motion for a resolution**

**Paragraph 26**

*Motion for a resolution*

26. Recalls that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

*Amendment*

26. Recalls that SMEs would benefit greatly from ***choice and competitive*** access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

Or. en

**Amendment 234**

**Dario Tamburrano, Dario Tamburrano**

**Motion for a resolution**

**Paragraph 26**

*Motion for a resolution*

26. Recalls that SMEs would benefit

*Amendment*

26. Recalls that SMEs would benefit

greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

greatly from ***choice and competitive*** access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

Or. en

**Amendment 235**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 26**

*Motion for a resolution*

26. Recalls that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

*Amendment*

26. Recalls that SMEs would benefit greatly from ***competitive*** access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

Or. en

**Amendment 236**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 26**

*Motion for a resolution*

26. ***Recalls*** that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

*Amendment*

26. ***Notes*** that SMEs would benefit greatly from access to 5G solutions; calls on the Commission to detail its action plans to facilitate SME access to the 5G Participatory Broadband Platform;

Or. el

**Amendment 237**

**Olle Ludvigsson**

**Motion for a resolution**  
**Paragraph 26 a (new)**

*Motion for a resolution*

*Amendment*

**26 a. Points out that public institutions (such as national health services, education, local and regional authorities) can have an important role to play as early adopters of 5G solutions that can help to kick-start 5G in Europe;**

Or. en

**Amendment 238**  
**Evžen Tošenovský**

**Motion for a resolution**  
**Paragraph 27**

*Motion for a resolution*

*Amendment*

27. Supports the **Commission's proposed plan to set up spectrum harmonisation and long-term** licence durations **of at least 25 years, which will increase** the stability and certainty of investments; **notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;**

27. Supports the **enhanced** spectrum **coordination and appropriate** licence durations **aiming at** the stability and certainty of investments;

Or. en

**Amendment 239**  
**Edouard Martin**

**Motion for a resolution**  
**Paragraph 27**

*Motion for a resolution*

*Amendment*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations ***of at least 25 years***, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;

27. Supports the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process; ***to make that possible, calls for a revision of the Radio Spectrum Policy Programme, the original goal of which – for 1200 MHz of spectrum to be set aside for wireless broadband in Europe by 2015 – was met in impressive fashion thanks to a concerted and inclusive approach;***

Or. fr

**Amendment 240**  
**Martina Werner**

**Motion for a resolution**  
**Paragraph 27**

*Motion for a resolution*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations ***of at least 25 years***, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;

*Amendment*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken, ***as much as possible***, at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process; ***points out, that the competitive nature of mobile telecoms markets in the European Union should be preserved in the generation shift to 5G;***

Or. en

**Amendment 241**



**Michel Reimon**

on behalf of the Verts/ALE Group

**Motion for a resolution**

**Paragraph 27**

*Motion for a resolution*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and ***long-term licence durations of at least 25 years, which will*** increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;

*Amendment*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and ***the idea of spectrum sharing as a tool to*** increase the stability and certainty of investments ***without the lock-in effects***; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process ***in order to ensure effective competition and best conditions for users***;

Or. en

**Amendment 242**

**Ashley Fox, Evžen Tošenovský**

**Motion for a resolution**

**Paragraph 27**

*Motion for a resolution*

27. Supports ***the Commission's proposed plan to set up*** spectrum harmonisation and ***long-term licence durations of at least 25 years***, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt ***binding*** guidance on certain conditions of the assignment process;

*Amendment*

27. Supports ***EU-level initiatives to ensure greater*** spectrum ***coordination between Member States and longer-term licence durations***, which will increase the stability and certainty of investments; ***highlights that spectrum is a finite and valuable national resource and*** notes that the decisions on these issues should be taken at the same time in all Member States to adopt guidance on certain conditions of the assignment process;

Or. en

**Amendment 243**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 27**

*Motion for a resolution*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations of at least 25 years, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;

*Amendment*

27. Supports the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations of at least 25 years, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process *such as the deadlines for spectrum allocation and spectrum sharing*;

Or. en

**Amendment 244**  
**Notis Marias**

**Motion for a resolution**  
**Paragraph 27**

*Motion for a resolution*

27. *Supports* the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations of at least 25 years, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;

*Amendment*

27. *Notes* the Commission's proposed plan to set up spectrum harmonisation and long-term licence durations of at least 25 years, which will increase the stability and certainty of investments; notes that the decisions on these issues should be taken at the same time in all Member States to adopt binding guidance on certain conditions of the assignment process;

Or. el

**Amendment 245**  
**Gunnar Hökmark**

**Motion for a resolution**  
**Paragraph 27 a (new)**

*Motion for a resolution*

*Amendment*

**27 a. Stresses that a swift allocation of further spectrum, such as the 2.4 GHz and the 3.6 GHz band, as well other 5G pioneer bands, is crucial for a successful launch of 5G and for Europe to be in the lead; underlines the need for rapid action and increased coordination of these frequencies;**

Or. en

**Amendment 246**  
**Patrizia Toia**

**Motion for a resolution**  
**Paragraph 28**

*Motion for a resolution*

*Amendment*

28. Calls on the EU to coordinate efforts within the International Telecommunication Union (ITU) with a view to ensuring coherent EU policy; ***stresses that European spectrum harmonisation needs for 5G beyond 2020 should be finalised before the 2019 World Radiocommunication Conference (WRC-19);***

28. Calls on the EU to coordinate efforts within the International Telecommunication Union (ITU) with a view to ensuring coherent EU policy;

Or. it

**Amendment 247**  
**Michal Boni**

**Motion for a resolution**  
**Paragraph 28**

*Motion for a resolution*

28. Calls on the EU to coordinate efforts within the International Telecommunication Union (ITU) with a view to ensuring coherent EU policy; stresses that European spectrum harmonisation needs for 5G beyond 2020 should be finalised before the 2019 World Radiocommunication Conference (WRC-19);

*Amendment*

28. Calls on the EU to coordinate efforts within the International Telecommunication Union (ITU) with a view to ensuring coherent EU policy; stresses that European spectrum harmonisation needs for 5G beyond 2020 should be finalised before the 2019 World Radiocommunication Conference (WRC-19) ***with due protection of existing services relied upon today and in line with decisions taken at WRC-15;***

Or. en

**Amendment 248**

**Michal Boni, Pilar del Castillo Vera**

**Motion for a resolution**

**Paragraph 28 a (new)**

*Motion for a resolution*

*Amendment*

***28 a. Stresses that the definition VHC networks laid down in a European Electronic Communications Code should comply with the principle of technological neutrality provided such technologies meet the needs for quality of network services that industrial and consumer applications will require in the future;***

Or. en

**Amendment 249**

**Paloma López Bermejo**

**Motion for a resolution**

**Paragraph 29**

*Motion for a resolution*

*Amendment*

29. Recommends that the Commission

29. Recommends that the Commission

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should establish an annual progress review and draw up recommendations on the 5G Action Plan, and inform Parliament of the results;

should establish an annual progress review and draw up recommendations on the 5G Action Plan, and inform Parliament of the results; *emphasises how important it is to set targets and establish mechanisms to guarantee that the digitalisation of the economy and of society is indeed universal, with the bridging of the digital divide being a right that is guaranteed by the public authorities, making access to gigabit ICT infrastructure (i.e. cost-effective symmetrical internet connectivity offering a downlink and an uplink of at least 1 Gbps) a universal public service, with the obligations that entails;*

Or. es

**Amendment 250**  
**Nadine Morano, Anne Sander**

**Motion for a resolution**  
**Paragraph 29**

*Motion for a resolution*

29. *Recommends that* the Commission *should* establish an annual progress review and draw up recommendations on the 5G Action Plan, and inform Parliament of the results;

*Amendment*

29. *Calls on* the Commission *to* establish an annual progress review and draw up recommendations on the 5G Action Plan, and inform Parliament of the results;

Or. fr