Opinion of the European Economic and Social Committee on the 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions — A Digital Single Market Strategy for Europe'

(COM(2015) 192 final)

(2016/C 071/11)

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On 12 May 2015 the European Commission decided to consult the European Economic and Social Committee, under Article 304 of the Treaty on the Functioning of the European Union, on the:

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Single Market Strategy for Europe

(COM(2015) 192 final).

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 24 November 2015.

At its 512th plenary session, held on 9 and 10 December 2015 (meeting of 9 December), the European Economic and Social Committee adopted the following opinion by 219, with 2 votes against and 7 abstentions.

1. Conclusions and recommendations

- 1.1. The EESC supports the European Digital Single Market Strategy. However, it is concerned by a lack of political will in some Member States to open themselves up to a digital union that is both creative and innovative, rather than merely consumerist.
- 1.2. The strategy proposed by the Juncker Commission for a digital single market in Europe is an extension of existing digital strategies and programmes. Its intention is to provide a fresh impetus for implementing a long overdue EU-wide digital policy. At the same time, this is also a new focus on commerce and consumers and the measures necessary to create more commerce, more consumers and better conditions and protection for consumers.
- 1.3. In this context, our first priority is to close the skills gap. This may be as much an issue of numeracy and literacy as it is of digital skills and their responsible use. Secondly, easy use of platforms is needed to drive the market, so platform operations should not be restricted. Thirdly, there is a need for relevant applications, and so the focus on standardisation is welcome. More e-government will help to engage more citizens in digital activity. From the consumer point of view, the EESC welcomes the initiatives concerning better access for consumers and businesses to digital goods and services across Europe.
- 1.4. Some, but not all, of the initiatives detailed in Section 4.2 (Creating the right conditions for digital networks and services to flourish) relate to the networks' infrastructure and are parts of the digital agenda. These proposals are important due to the single market context and the urgency with which they will be addressed. Some of the other initiatives in this section are important for consumer rights.
- 1.5. The EESC supports the Commission in its determination to end the fragmentation of European digital policy into 28 strategies and national digital markets and merge them within a European approach, so as to guarantee a leading position for the EU in the global digital economy, a privilege that has become the preserve of third countries.
- 1.6. The EESC is convinced that the European Union, which has at its disposal excellent skills and considerable experience in certain aspects of digital technology, can still catch up. With this in mind, the EESC strongly recommends developing multidisciplinary research poles and European synergies in the European Research Area, in spheres such as cloud computing, nano-electronics, the storage and processing of big data, appliances that can be consulted or controlled remotely (connected objects) and smart services.

- 1.7. The EU will be able to make up the necessary ground if it manages, in the short term, to pool its resources in order to mobilise and coordinate efforts in both the public and private sectors of the 28 Member States, while at the same time involving all stakeholders in discussions on the Digital Single Market Strategy. The EESC endorses the Commission's pledge to launch a public consultation for each of its future actions relating to the digital single market.
- 1.8. The EESC regrets the absence of a social dimension in the digital strategy (with the exception of issues related to digital skills), as the development of business services and models will lead to profound changes in the labour market. The EESC considers it necessary to take into account not only potential benefits but also the many risks and challenges, particularly in the fields of security, work organisation and social security. Furthermore, the procedures laid down in the treaty regarding social dialogue and the horizontal social clause must take their place in the Digital Single Market Strategy (¹). The EESC believes that the social dimension, with all its implications for employment, should form the fourth pillar of the European Digital Single Market Strategy.

2. Introduction

- 2.1. The EESC understands the term 'digital single market' (DSM) to mean the transfer to the internet of transactions and activities from the existing EU internal market. In part, this has already happened, but the initiatives outlined by the Commission are designed to achieve the full digital potential. The market activities and transactions involve the production of goods and the provision of services followed by intermediation, distribution and consumption. Transactions between consumers (C), businesses (B) and public authorities (G) reflect both the influence of social networks and the trend towards a sharing society. The role of public authorities in the DSM is that of a service provider.
- 2.2. The benefits of the transfer of business processes are well understood: greater integration in the value chain, acceleration of processes from design to delivery, improved customer interfaces (especially in the context of social networks) and greater competitiveness overall. As the transition continues, it will open the way for the internet of Things and the 4th Industrial Revolution.
- 2.3. The unique characteristic of the internal market is that it is transnational by design and is therefore well-adapted in principle to exploit the internet. However, it still faces some challenges of its own in terms of adapting rules, laws and regulations to the digital environment. There are shortfalls in digital readiness in each of the 'B', 'G' and 'C' communities, shortcomings with the technological infrastructure of the DSM and potential issues of dominance by large platforms.
- 2.4. In parallel with the DSM project, the Commission is running its Digital Agenda. This deals with valid concerns about the EU's lack of presence in the global hardware and software industries, but these concerns are peripheral to the DSM. According to the Commission, the prize for completing the DSM is very large in terms of GDP and employment and everything needing to be done is within the present capacity of the EU and Member States.
- 2.5. The failure to complete the single market in services has profound implications for the development of the DSM. The service sector is the dominant sector in Member State economies. Service provision is increasingly driven by internet transactions; progress with the DSM strategy could, in itself, facilitate the single market in services.
- 2.6. Rules, regulations and laws developed for the paper-based transactions and the early decades of e-commerce have become obstacles to the achievement of the DSM. The EESC welcomes the legislative programme proposed and the ambitious timetable that has been set:
- legislative proposals for simple and effective cross-border contract rules for consumers and businesses;
- review of the Consumer Protection Cooperation Regulation;
- measures in the area of parcel delivery;

⁽¹) EESC opinion on the Effects of computerisation on the services sector and employment in relation to industrial change (OJ C 13, 15.1.2016, p. 161).

- a wide-ranging review to prepare legislative proposals to tackle unjustified geo-blocking;
- competition sector inquiry into e-commerce, relating to the online trade of goods and the online provision of services;
- legislative proposals for a reform of the copyright regime;
- legislative proposals to reduce the administrative burden on businesses arising from different VAT regimes;
- initiatives on data ownership, free flow of data (e.g. between cloud providers) and on a European Cloud;
- review of the e-Privacy Directive.
- 2.7. While the legislative programme outlined in Section 2.6 above is clear cut, the actions envisaged to enhance internet awareness, competence and readiness in the three communities, 'B', 'G' and 'C', are much less clear:
- digital skills and expertise, particularly for many sections of EU citizens, are far from adequate, as are the Commission's proposals in this respect. The EESC regrets that the Commission is not giving the necessary priority to this critical success factor for the DSM and the European information society;
- adoption of a Priority ICT Standards Plan and extending the European Interoperability Framework for public services;
- new e-Government Action Plan including an initiative on the 'Once-Only' principle and an initiative on building up the interconnection of business registers.

Taken together these initiatives will affect citizens, SMEs, government and private sector services and sectoral applications central to DSM achievement. These proposals seem to lack precision and urgency. The EESC will closely follow the development of these initiatives which are all under the control of the EU and the Member States.

- 2.8. A number of vital infrastructure initiatives are proposed:
- review of the Satellite and Cable Directive:
- legislative proposals to reform the current telecoms rules;
- review of the Audiovisual Media Services Directive;
- establishment of a cyber-security contractual public-private partnership.

Telecoms and cyber security are the obvious priorities but clarification of audiovisual delivery rules for cable satellite and broadband is also pressing.

- 2.9. Platforms drive the DSM. Most members of the 'C', 'B' and 'G' communities use them every day. They are accessible, easy to use, and often free. Their further development is indispensable, but there are concerns:
- they facilitate disruptive applications that challenge sectors and established firms. Customers benefit, but established firms question their legality;
- many platforms hold dominant positions that raise questions about the potential abuse of dominance;

most large platforms are domiciled outside the EU, but there is an EU platform industry and it needs a level playing field
to survive and thrive.

For these reasons the EESC welcomes the Enquiry: Comprehensive analysis of the role of platforms in the market including illegal content on the internet. For the DSM to succeed platforms must flourish and so law enforcement should not otherwise restrict platforms' room for manoeuvre.

2.10. Given the above analysis, the EESC views the Community programmes outlined in Section 2.7 above as the probable Achilles heel of the strategy and would express 'caveats' in respect of platforms.

3. General comments

- 3.1. It is safe to say that the European Union has not yet made the best possible use of the significant opportunities that digital technology has to offer. This is largely due to the fact that the European market is still divided into 28 national markets.
- 3.2. However, there is little doubt that certain Member States prefer to maintain and develop their own national digital strategies rather than being open to the possibilities of a creative and innovative European Digital Union. At the same time, the French and German ministers for economic affairs have called for the creation of a common framework, led by their countries in particular.
- 3.3. Moreover, the EESC notes that the prime ministers of some Member States have written to the President of the Council to express reservations about the implementation of the strategy. They stressed: 'We should regulate only where there is clear evidence to do so, backed by the principles of smart regulation and thorough impact assessment. It is very clear that a successful digital single market will not be one that stifles innovation, investment and entrepreneurship'. The EESC shares this view as long as the interests of consumers and employees are also taken into account.
- 3.4. The Commission sees this new Digital Single Market Strategy as an extension of the 2010 Digital Agenda for Europe. The latter proposed 101 actions, 72 of which have already taken place according to the Commission, and 23 of which ought to be completed ahead of the deadline. Nevertheless, as the digital single market has not yet been set up, some of these initiatives will be included in the new strategy.
- 3.5. During his presentation of the new European Commission's political guidelines, Mr Juncker expressed the view that 'By creating a connected digital single market, we can generate up to EUR 250 billion of additional growth in Europe [...] thereby creating hundreds of thousands of new jobs'. According to the communication in question, this 'could contribute an additional EUR 415 billion to European GDP', while the two commissioners in charge of digitalisation refer to 3,8 million jobs to be generated by a digital single market.
- 3.6. The EESC feels that it is counterproductive to bombard the public with statistics, as these tend to vary considerably depending on which Commission source is providing them, yet are presented as irrefutable if somewhat unconvincing facts. Such declarations will ultimately result in people distrusting political decision-makers and remaining indifferent to the real problems.
- 3.7. To date, the Commission has never produced any evidence that its predictions in this area have materialised. The EESC requests that the present Commission take stock of its findings at the end of its term and compare these to its initial predictions.
- 3.8. The EESC considers it unrealistic to believe that the digital single market can be implemented during the Commission's current term of office, especially seeing as the relevant scientific research and impact studies supporting such claims have not been made public. The EESC feels that the Commission's projections ought to be compared with those studies that predict substantial job losses as a result of digital change (2).
- 3.9. According to the Commission, a connected digital market would allow Europe to maintain its leading position in the global digital economy, offering European companies the chance to expand their business outside of the European Union.

⁽²⁾ See footnote 1.

- 3.10. The EESC regrets that the EU's ambition, as set out in the 2000 Lisbon Strategy, of becoming the most competitive and dynamic knowledge economy in the world, capable of sustainable economic growth as well as quantitative and qualitative improvement in employment and greater social cohesion, has been scaled down quite substantially.
- 3.11. The European Union is being left behind.

The digital economy has become the preserve of the United States and Asia. The 50 or so major EU e-commerce operators are subjected to 28 different national regulatory frameworks, whereas the 6 biggest operators in the American market and the 3 giants of the Chinese market are overseen by a single regulatory framework. The image of an intra-European digital market as a factor in integration is no longer appropriate in a borderless digital world; it has not, moreover, prevented major third-country platforms from establishing monopolies or oligopolies in most EU countries.

- 3.12. The EESC continues to hope that the EU will be able to make up ground and that the European Digital Single Market Strategy can give a new lease of life to the sector. This is only possible if the EU acts as a creator and not merely a consumer of digital technology. It needs to encourage a qualitative leap forward on the part of society towards the early education of young people in order to develop digital skills and promote their responsible use, eliminate the digital divide, guarantee accessibility for all citizens (including disabled people) and ensure appropriate public and private investment in teaching, professional training and research.
- 3.13. To this end, the EU needs to pool its resources to mobilise and coordinate public and private efforts in all 28 Member States. This is imperative in order not to miss the boat on the changes constantly taking place in the digital economy, such as, for example, mobile applications (which have exploded in numbers in recent years), cloud computing, big data, or the strategic challenges presented by large-scale digital service platforms, which are now the only way to access the internet. Discussions regarding the strategy for a digital single market must involve all stakeholders and take into account the protection and the fundamental rights of citizens, consumers, workers and persons with disabilities in the aim of establishing a more inclusive society.
- 3.14. The EESC cannot help but note the total absence of any social dimension in the Digital Single Market Strategy. The effects of digitalisation upon employment and the challenges that these represent are largely ignored. Meanwhile, the ongoing development of services and business models is leading to major changes in the labour market, with significant repercussions for the nature of the work and the structure of businesses. There is a risk that collective agreements will break down. With this in mind, the procedures anticipated in the Treaty concerning social dialogue as well as the horizontal social clause must take their place in the Digital Single Market Strategy. In its opinion on the effects of digitalisation upon the service sector and employment in the context of industrial change (CCMI/136), the EESC formulated a series of recommendations to make sure that changes to the digital sector do not affect the efficiency of the existing systems of vocational education, job protection, social security and taxation. The EESC believes that the social dimension, with all its implications for employment, should form the fourth pillar of the European Digital Single Market Strategy.
- 3.15. Big data is another area in which the EU has the opportunity to assert itself, as the technical standards which could be used to organise the collection and processing of data still need to be devised. With this in mind, the various national regulations should be brought together within a coherent European framework which, based around a smart data processing policy, would be characterised by a balanced combination of economic interests and the protection of private life, in various spheres including medicine, public health, personal services, agri-food, etc.
- 3.16. The European Union has plenty of experience of discussions between Member States about technical standards, and can draw upon this to create a European data policy based on a high-quality legal framework, as well as overseeing rules relating to the protection of private data (see SWIFT), in order to make sure that they are not imposed by other stakeholders.
- 3.17. Moreover, the EESC notes that the digital sector is also characterised by a significant gender imbalance, and that the vast majority of IT professionals are men. Given the many unfilled vacancies in the ICT sector, the EU and Member States should encourage more women to actively consider a digital career.

- 3.18. In its report 'Golden growth: Restoring the lustre of the European economic model', the World Bank divided the European Union into six blocks in order to highlight, based on digital indicators, the considerable differences between Member States when it comes to the deployment of digital technology, skills and applications, as well as e-commerce. The EESC calls on the Commission to take these differences into full consideration when establishing priority actions in its work plan.
- 3.19. Finally, the EESC takes note of the Commission's declaration, according to which aside from EU funding of around 21,4 billion the European Fund for Strategic Investments is designed to support a wide range of digital projects, while the European Investment Bank and the European Investment Fund offer significant possibilities for additional funding. The EESC welcomes the fact that the Commission will work with the EIB, project promoters and Member States to make sure that all available funds are used, but wonders why those EU funds that have been allocated to Member States remain largely under-utilised. The EESC calls for this issue to be analysed in order to guarantee effective and efficient utilisation in the future.

4. Specific comments

- 4.1. Better access for consumers and businesses to digital goods and services across Europe
- 4.1.1. Legislative proposals for simple and effective cross-border contract rules for consumers and businesses

This is an ambitious initiative, but welcome if it is feasible. Even so, cross-border commerce, 'e' or otherwise, will remain challenging for SMEs and private individuals because of language and cultural issues. Fair and simple standard contract text in all EU languages will remove one important obstacle, but others will remain such as concerns about the security of e-commerce, cross-border or otherwise. In this context, the cyber-security initiative is welcome.

The EESC expects that when the Digital Single Market Strategy for Europe is implemented, all the proposals will ensure a high level of protection for consumers and will not lead to a reduction in the level of protection currently in place, in any of the Member States.

There is a residual concern amongst social partners that cross-border e-commerce can disrupt existing national businesses. This concern highlights the need to include the social dimension in the strategy.

4.1.2. Review of the Consumer Protection Cooperation Regulation

Clearly effective cooperation is the sine qua non of seamless cross-border consumer protection. Procedures for timely compensation and redress are likely to be key for the acceptance of cross-border e-commerce.

Every effort should be made to reduce the regulatory burden on SMEs.

The EESC thinks the Commission should:

- ensure that consumers can access lawfully-available content on fair and reasonable terms across borders;
- review the extent to which consumers are discriminated against online on the basis of the country they live in and the economic and consumer consequences of this, and propose the necessary steps to address any discrimination;
- review the implementation and enforcement of consumer rights, set out how consumer rights apply to digital products and ensure that consumers and businesses understand their rights and have confidence that they will be enforced.

4.1.3. Measures in the area of parcel delivery

Rapid response parcel delivery is the key to customer satisfaction in domestic e-commerce markets and is working well. It is logical that cross-border e-commerce should be similarly supported, although the Committee notes that major international parcel services already operate in Europe.

4.1.4. A wide-ranging review to prepare legislative proposals to tackle unjustified geo-blocking (3)

This applies to both e-commerce and audiovisual services. In e-commerce, searches for goods and services rarely give results outside the searcher's geographical area. At the other end of the scale, the provision of EU-wide results could be overwhelming.

In fact, the searcher can set the search engine to any required geographical area. One problem is that customers from a different geographical area may be subject to discriminatory pricing, as the recent Disneyland Paris case has shown. The EESC would support actions to ensure that cross-border commerce is conducted on a level playing field, so that consumers are protected. Another problem is that in some cases, cross-border access to websites is simply denied.

Audiovisual blocking has two dimensions: restricting external access from travelling nationals who have a right to access services domestically and restricting external access to non-nationals whose access claims are based on EU citizenship. In the former case, the EESC recommends the introduction of digital identities to facilitate access. In the latter case, the EESC is aware that most geo-blocking is caused either by rights restrictions or by commercial concerns. A streamlined rights framework would be helpful but care must be taken not to disrupt business models linked to advertising and market access.

4.1.5. Competition sector inquiry into e-commerce, relating to the online trade of goods and the online provision of services

The EESC welcomes market surveillance by competition authorities and a strict regime of sanctions against the abuse of dominant positions. Nevertheless, at the same time, the EESC notes that technology and the digital economy have been driven forward by large companies to the benefit of the economy and society at large. Therefore the EESC strongly recommends that the enquiries envisaged be based strictly on the established principles of commercial and competition law.

4.1.6. Legislative proposals for a reform of the copyright regime

The EESC supports these proposals so long as the various commercial business models remain viable and the rights of intellectual property owners are respected.

4.1.7. Review of the Satellite and Cable Directive

This directive concerns the coordination of certain rules concerning copyright and rules related to copyright applicable to satellite broadcasting and cable retransmission. The Committee agrees that it is necessary to review the directive both in the context of the legislative proposals anticipated in paragraph 4.1.6, and also to reflect the profound changes taking place in these industries.

4.1.8. Legislative proposals to reduce the administrative burden on businesses arising from different VAT regimes

Digital technology taxation is a key factor for the success of the Digital Single Market Strategy, as it is obvious that European and national tax laws are not suited to the realities of the digital economy and lead to tax evasion and unfair competition. The EESC agrees with the Commission's approach on VAT (i.e. focusing on the location where the customer is based rather than the place where the service provider is established) as well as the direct taxation principle, which ensures that profit is taxed in the place where value is generated. The EESC also supports the Commission in its efforts to cut the red tape imposed upon businesses as a result of disparities between VAT regimes. With regard to point (iv), a simpler solution might be to extend the exemption to intra-EU transactions.

⁽³⁾ Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market (OJ L 376, 27.12.2006, p. 36).

4.2. Creating the right conditions for digital networks and services to flourish

4.2.1. Legislative proposals to reform the current telecoms rules

The obvious difference between Europe, Asia and the United States in the telecoms domain is the fragmentation of the European market. In order to create organisations with the scale of investment and research capacity required to compete globally, any review should also consider the capacity of the tier 1 and tier 2 internet communications service providers in view of the exponential growth of digital traffic. The review should also seek to achieve a balanced solution to the issue of net neutrality. To the extent that audiovisual media is and will be delivered over the internet, telecoms operators must have the freedom to meet user expectations in terms of the quality and speed of delivery.

With regard to the Commission's proposals, the Committee welcomes the continued emphasis on consumer protection, together with the drive to reduce fragmentation and increase harmonisation.

4.2.2. Review of the Audiovisual Media Services Directive

There are clearly major disparities between the regulation of licenced broadcasters and un-regulated service providers. The lines are further blurred by the retransmission of regulated broadcasts on broadband and the plethora of websites distributing Video on Demand (VOD), the armies of bloggers in the news space and the digital dimension now attached to most newsprint.

Nevertheless, the Committee doubts that it is desirable to attempt to regulate all services on a uniform basis. Linear broadcasting needs to adhere to standards because of public service obligations and because viewer choice is limited. Access to broadband websites is under the control of the viewer, as is parental control. Given the speed of change in the industry, a review will be timely and changes will be needed, but a balance must be achieved.

4.2.3. Comprehensive analysis of the role of platforms in the market including illegal content on the internet

It is clear that the EU digital agenda relies heavily on and is driven forward by platforms, as is also the case in other regions of the world. The success of the major platforms has given them a dominant position, and that position must not be abused. However, the EESC cautions the Commission that it should not inhibit the operations of these companies just because they are both big and successful. To do so runs the risk of putting obstacles in the way of developing the digital single market in Europe.

That being said, the five action points proposed by the Commission are reasonable and sensible. They have the potential to enhance the utility of platforms in the digital single market. It is essential that the Commission should adopt a balanced approach and not disregard the legitimate commercial interests of the platforms.

4.2.4. Review of the e-Privacy Directive

The EESC endorses this approach to personal data protection. The EESC is not convinced that the present status of the 'right to be forgotten' is tenable in the long term because the present EU interpretation is too broad and because it is technically difficult to maintain this right within the global internet. The Committee urges the Commission to refine this 'right' to protect the vulnerable in order to ensure its global acceptance.

4.2.5. Establishment of a cybersecurity contractual public-private partnership

In the digital economy, the various stages of the value chain know no boundaries and transcend the national dimension, which contributes to the spread of cyber-crime. The EESC welcomes the fact that the digital single market strategy provides for a partnership with industry regarding cyber-security, to the extent that a culture of risk management and efficient flow of information, which has been a long time in the making, will finally take shape.

There is one characteristic of cyber-crime which the Commission has not addressed: information and communication technology offers possibilities for cyber-surveillance that risk being exploited in order to control data and personal communication at the expense of individual freedom, or could even be used to spy on states and their governments. With this in mind, the EESC considers it necessary to make arrangements to pool information and improve detection and intervention capacities at EU level.

The Commission gives no indication of the scope of the proposed partnership, the expected outputs or the partnership structure (one or many partners). The Committee also highlights the scale of market investment in cybersecurity at the present time. For both these reasons, the Committee cannot comment on this proposal until more is known.

4.3. Maximising the growth potential of the digital economy

4.3.1. Initiatives on data ownership, free flow of data (e.g. between cloud providers) and on a European Cloud

The EESC is aware of a conflict in the 'big data' environment between the security of personal data and the need to aggregate personal data sets into mega analyses for economic, social and medical purposes. The EESC urges the Commission to use the planned review to resolve this conflict.

4.3.2. Adoption of a Priority ICT Standards Plan and extending the European Interoperability Framework for public services

The EESC supports this initiative. While a degree of hardware and systems software standardisation is achieved by international committees, there is obviously a very large opportunity for standardisation and interoperability at the sectoral, application and App levels with a tremendous potential to increase the value and relevance of the digital single market.

4.3.3. New e-Government Action Plan including an initiative on the 'Once-Only' principle and an initiative on building up the interconnection of business registers.

Responsibility for e-government lies with Member States. There are leaders and laggards. Progress towards fully functioning e-government is an indispensable prerequisite for a digital single market.

4.3.4. Digital skills and expertise

The Commission does not envisage a legislative programme for digital skills and expertise, leaving the issue to the Member States. The EESC is disappointed that there are no new initiatives in this domain. As a minimum, the Committee would expect a Communication from the Commission incorporating standards and best practice. Furthermore, there needs to be an emphasis on numeracy and literacy since these are key components of the digital skill set.

The Communication envisaged by the EESC would provide a framework tailored to the different stages of life, together with overarching proposals for life-long learning. The framework should have four components: education, employment, retirement and disability:

A EDUCATION

A1 Primary schools — basic skills.

A2 Secondary schools — two streams are envisaged:

- full skill set so that pupils are equipped to live and work confidently in the information society;
- special digital skill set for students with the potential to be ITC practitioners capable of filling the industry skills gap.
 It is in this context that a greater efforts need to be made to achieve a better gender balance in information technology.

A1&2 In both primary and secondary education it is important to develop the responsible use of digital skills.

- A3 Tertiary education two streams are envisaged:
 - skills related to each vocation, embedded in teaching and examinations in curricula such as engineering, mathematics and biotechnology;
 - advanced technology education, qualifying students to fill vacancies in the technology industries.

B EMPLOYMENT

- B1 Job-related training by employers with an ongoing focus on retraining and continuous professional development to retain the currency of skills
- B2 Skills training for the unemployed to be organised by public authorities, using appropriate agencies
- C RETIREMENT
- C1 Information society skills to be universally available for those whose life and career have passed the information society by
- C2 Special programmes to assist those who become infirm to remain part of the information society

D DISABILITY

Support at every stage to bring the disabled into the information society and then keep them there, even as the disability becomes more acute

It is clear from the data in the Commission's communication that there are skills gaps at every age and in every region. The Committee believes that only a structured and controlled programme in each Member State can ensure that few, if any, citizens are excluded from the information society and the digital single market. The EESC has called repeatedly for resolute action on skills. In the context of the Digital Single Market Strategy, the time has come for the Commission to act.

Brussels, 9 December 2015.

The President of the European Economic and Social Committee Georges DASSIS