European Standards for the 21st century


The European Parliament,


– having regard to Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (the NIS Directive),

– having regard to the report from the Commission to the European Parliament and the Council of 1 June 2016 on the implementation of Regulation (EU) No 1025/2012 from 2013 to 2015’ (COM(2016)0212),

– having regard to the Commission staff working document of 1 June 2016 entitled ‘Analysis of the implementation of Regulation (EU) No 1025/2012 from 2013 to 2015 and factsheets’ (SWD(2016)0126),

– having regard to the Commission communication of 1 June 2016 entitled ‘European standards for the 21st century’ (COM(2016)0358),

– having regard to the Commission staff working document of 1 June 2016 entitled ‘Tapping the potential of European service standards to help Europe’s consumers and businesses’ (SWD(2016)0186),

– having regard to the Commission communication of 1 June 2016 entitled ‘The annual Union work programme for European standardisation for 2017’ (COM(2016)0357),

– having regard to the Commission staff working document of 1 June 2016 entitled ‘The implementation of the actions foreseen in the 2016 Union work programme for European standardisation, including the implementing acts and mandates sent to the
European standardisation organisations’ (SWD(2016)0185),


– having regard to the Joint Initiative on Standardisation under the Single Market Strategy, as referred to in the Commission communication of 28 October 2015 entitled ‘Upgrading the Single Market: more opportunities for people and business’ (COM(2015)0550),

– having regard to its resolution of 21 October 2010 on the future of European standardisation¹,

– having regard to the opinion of the European Economic and Social Committee entitled ‘European standards for the 21st Century’,

– having regard to the opinion of the European Economic and Social Committee entitled ‘European standardisation 2016’,

– having regard to the Commission’s open source software strategy 2014-2017²,

– having regard to Rule 52 of its Rules of Procedure,

– having regard to the report of the Committee on the Internal Market and Consumer Protection and the opinions of the Committee on Industry, Research and Energy and the Committee on Transport and Tourism (A8–0213/2017),

A. whereas the European standardisation system is a central element in the delivery of the single market; whereas the Commission’s action setting out a common vision for European standardisation is a direct outcome of the Juncker Commission’s ten priorities and, in particular, the priorities relating to the Connected Digital Single Market and the Single Market Strategy;

B. whereas an open, inclusive, transparent and primarily market-driven European standardisation system based on trust and proper compliance plays a key role in responding positively to the increasing need, in European industrial, economic, social, and environmental policy and legislation, for standards capable of contributing to product safety, innovation, interoperability, sustainability and accessibility for people with disabilities, and of improving the quality of life of citizens, consumers and workers;

C. whereas an efficient European standardisation system should be based on close partnership and cooperation between industry, public authorities, standardisation bodies, and other interested parties such as the Annex III organisations recognised under Regulation (EU) No 1025/2012;

D. whereas European standards need to be developed in an open, inclusive and transparent system, based on consensus among all stakeholders, with the aim of defining strategic technical or quality requirements with which current or future products, production

¹ OJ C 70 E, 8.3.2012, p. 56.
² https://ec.europa.eu/info/european-commissions-open-source-strategy_en
processes, services or methods may comply;

E. whereas the Commission communication on ICT Standardisation Priorities for the Digital Single Market acknowledges the value of open standards, but does not provide a definition of an open standard; whereas open standards have proven important to the creation and development of the internet and of internet services that have in turn fostered innovation, societal, and economic prospects;

F. whereas the use of open source software and hardware licensing solutions should and may help European companies and administrations secure better access to digital goods and services;

G. whereas a modern and flexible European standardisation system is a useful component for an ambitious and renewed European industrial policy and for the operation of the single market; whereas standards can enhance the EU’s global competitiveness, growth, fair competition and innovation, support quality, businesses, and, in particular, SMEs’ performance and the protection of consumers, workers and the environment;

H. whereas two different standards development systems coexist in Europe, namely one based on the national delegation principle as implemented by the European Committee for Standardisation (CEN) and the European Committee for Electrotechnical Standardisation (CENELEC), and another based on the paid membership of stakeholders as developed by the European Telecommunications Standards Institute (ETSI); whereas there is a need to evaluate the standards development systems relating to Regulation (EU) No 1025/2012 with a view to identifying existing challenges and good practices;

I. whereas Regulation (EU) No 1025/2012 has brought improvements to the standardisation process by integrating, for the first time, societal stakeholders and SMEs under the legal basis of the European standardisation system;

J. whereas ICT standards, which are predominantly developed at a global level, make it possible to develop interoperable solutions for complementary products and for the various parts of a particular product, which is particularly important for the development of the ‘internet of things’ (IoT); whereas fragmentation of standards and proprietary or semi-closed solutions hinder the growth and take-up of IoT, and it is therefore necessary to develop a strategic approach to ICT standardisation in order to ensure a successful response to the needs of the forthcoming decade, thereby allowing the EU to maintain a leading role in the global standardisation system;

K. whereas the publication of documents and data fulfils governmental responsibilities and transparency goals, including accountability, reproducibility, sustainability, and reliability of governmental action; whereas when documents or data are published it must be on the basis of open and standardised formats, so as to avoid ‘lock-in’ situations where a software product or a vendor might no longer be commercially available, and so that independent entities are able to implement those formats under diverse development and business models, including open source, in such a way as to ensure the continuity of government and administrative processes;

L. whereas the transport sector has been at the forefront of the development and deployment of standards that are necessary for the creation of the Single European
Transport Area;

General considerations

1. Welcomes the overarching Commission standardisation package, which, alongside the ICT Standards Communication and the Joint Initiative on Standardisation, aims at setting out a coherent and simple European standardisation policy with a view to preserving its many successful elements, improving its shortcomings and striking the right balance between the European, national and international dimensions; stresses that any future review of the European standardisation system (ESS) should build on the strengths of the existing system, which constitute a solid basis for improvement, refraining from any radical changes that would undermine its core values;

2. Acknowledges the specificity and importance of the ESS from the viewpoint of all stakeholders, including industry, SMEs, consumers and workers, and calls on the Commission to ensure that the European system continues to exist and that it maintains sufficient resources to fulfil the objectives of Regulation (EU) No 1025/2012, thus contributing inter alia to interoperability, legal certainty and the application of appropriate safeguards, for business and consumers and for the free movement of information technology; calls on the Commission to guarantee a sustainable budget for the ESS in the revision of the multiannual financial framework (MFF);

3. Welcomes the Standards Market Relevance Roundtable (SMARRT) under the Joint Initiative on Standardisation, which enables dialogue between the Commission and industry, with full transparency for stakeholders as regards agenda items of the Committee of Standards;

4. Notes that standards are a voluntary, market-driven tool providing technical requirements and guidance the use of which facilitates compliance of goods and services with European legislation and supports European policies when they are developed in an accountable, transparent and inclusive way; stresses, however, that standards cannot be seen as EU law, since legislation and policies regarding the level of consumer, health, safety, environment and data protection and the level of social inclusion are determined by the legislator;

5. Recognises the role of open, standardised formats for transparency duty of governments, administration, and the European institutions; calls on the Member States to try applying common standards with regard to digital administration, focusing in particular on judicial bodies and local authorities; stresses that open standards are essential to the further development of open government data and smart cities policies, and that documents and data must therefore be published in open, standardised formats that can be easily implemented, so that the reuse of data is facilitated; highlights the role of public procurement and open standards solutions in avoiding vendor lock-in;

6. Believes strongly that open data remains an essential element, particularly in the transport sector, for reaping all the benefits of the Digital Single Market, such as the promotion and development of multimodal transport; stresses, therefore, that more legal certainty, mainly in terms of ownership and responsibility, is required; calls on the Commission accordingly to publish, without further delay, a roadmap for the development of standards aimed at the harmonisation of publicly funded transport data and programming interfaces in order to boost data-intensive innovations and the
 provision of new transport services;

7. Stresses that the current system of accreditation of testing institutions does not always guarantee that the products and services on the market voluntarily applying European standards are compliant with those standards; regrets that the Joint Initiative on Standardisation (JIS) and the Annual Union Work Programme for European standardisation (AUWP) pay no attention to the accreditation of testing institutions and standards, and calls on the Commission to take this aspect into account when proposing new initiatives;

8. Is of the opinion that open standards must be based on openness of the standardisation process and development and availability of standards for implementation and use, in accordance with Regulation (EU) No 1025/2012 and the WTO principles; acknowledges the Commission’s intention, as expressed in the roadmap on Standard Essential Patents, to clarify issues related to FRAND and SEPs licensing; encourages the Commission, together with the European standardisation organisations (ESOs) and the open source communities, to explore suitable ways of working together;

9. Stresses that the European standardisation system must contribute to European innovation, enhance the Union’s competitiveness, strengthen Europe’s place in international trade and benefit the welfare of its citizens; deems it important, therefore, that Europe should uphold its key role in the international standardisation system, and stresses the importance of promoting European standards at a global level when negotiating trade agreements with third countries; underlines that the European standardisation system can also benefit from partnership agreements established by ESOs with standardisation organisations from third countries, and notes that Articles 13 and 14 of Regulation (EU) No 1025/2012 already envisage the involvement of numerous Standards Developing Organisations (SDOs) for public procurement in the ICT field; recommends that the ESOs consider closer cooperation with third-country National Standardisation Bodies (NSBs), including Companion Standardisation Bodies, where possibilities exist for close alignment; encourages the Commission, Member States and ESOs to continue to work towards the creation of global standards, whilst also paying attention to the regional context and the relevance of the standard when getting involved in standardisation work;

10. Stresses that international cooperation on standards helps ensure transparency, efficiency and coherence, and creates a competition-friendly context for the industrial sector, a good example being the United Nations Economic Commission for Europe (UNECE) World Forum for Harmonisation of Vehicle Regulations (WP.29), which was set up for the ICT sector;

11. Stresses that standards which are adopted by international organisations are usually developed outside the scope of Regulation (EU) No 1025/2012, and recommends the ESOs to endorse them only after an internal approval process involving representation of stakeholders, such as Annex III organisations, especially for harmonised standards supporting the implementation of European legislation;

12. Is of the opinion that the ESOs should in all circumstances develop inclusive, sustainable, safe and high-quality standards with fair access for and treatment of all stakeholders as well as minimised impact on the environment and adequate protection of personal data and privacy;
13. Considers Commission and Member State involvement with EU industry to be a crucial means of facilitating the adoption of global standards with a European stamp in the definition and rolling out of 5G technologies;

14. Regrets the fact that differences between national standards, such as those in the freight and logistics sector, remain a barrier to the internal market, and therefore calls on the Commission and the ESOs to develop appropriate standards for harmonising conditions at national level whenever deemed necessary, with a view to removing any possible barriers to the internal market; underlines the need to seek a cross-modal harmonisation of standards in this respect;

15. Points out, moreover, that in addition to preventing market fragmentation, standardisation can contribute significantly to reducing administrative burdens and transport costs for all businesses (e.g. via e-documents) and for SMEs in particular, and can facilitate the proper enforcement of EU legislation (e.g. via digital tachographs or electronic toll systems);

16. Notes that Regulation (EU) No 1025/2012 has improved the inclusiveness of the ESS, enabling SMEs, consumers, workers and environmental organisations to participate actively in the standardisation process, and encourages continuing in this direction so that all are adequately represented and can participate in the standardisation system and, therefore, exploit to the full the benefits derived from standardisation; calls on the Commission, ESOs and NSBs to identify the best ways to achieve this objective and to address the challenges, including lack of awareness, facing further involvement;

17. Welcomes the efforts made by ETSI to provide easy access for European SMEs, as well as its long-term strategy for 2016-2021 for addressing specifically cross-sectoral collaboration;

18. Acknowledges that the delivery speed of standards has improved, and recalls the importance of striking the right balance between the need to ensure timely development and the need for standards to be of high quality;

19. Is of the opinion that, complementarily to the existing best practices to be found among the standardisation communities, increasing public awareness of proposed standards, proper and early involvement of all relevant stakeholders, and improvement in the quality of standardisation requests can further increase the transparency and accountability of the standardisation system;

20. Calls on the Commission, in addition, to pay attention to and provide assistance for candidate countries’ efforts to harmonise their standards with European standards in order to minimise existing bottlenecks;

**ICT standards**

21. Welcomes the communication on the ICT standardisation priorities setting out a strategic approach to standardisation for ICT technologies, but calls on the Commission clearly to identify the alignment between this communication and the ICT Rolling Plan, the package ‘Standards for the 21st Century’ and the Annual Work Programme;

22. Notes that the recent convergence of technologies and the digitisation of society, businesses and public services are blurring the traditional separation between general
and ICT standardisation; considers that ICT standardisation should be part of a European digital strategy to create economies of scale, budget savings and improved competitiveness and innovation for European companies, and to increase the cross-sectoral and cross-border interoperability of goods and services through the faster definition, in an open and competitive fashion, of voluntary standards that are easily implemented by SMEs;

23. Stresses the need for greater cooperation within the ICT standardisation community, in particular between ESOs, and calls on the ESOs to prepare a common annual work programme identifying cross-cutting areas of common interest;

24. Stresses that open, voluntary, inclusive and consensus-oriented standardisation processes have been effective insofar as they constitute a driver of innovation, interconnectivity and deployment of technologies, and recalls that it is also important to ensure proper investment and expertise in, and development of, cutting-edge technologies, and to support SMEs;

25. Urges the Commission to request the ESOs to contribute to high-quality interoperable and open standards in order to tackle fragmentation and encourage their wide adoption, and to acknowledge the existing ecosystem and diverse business models that support the development of digital technologies, since this will contribute to the social, economic and environmental sustainability of ICT value chains and confirm commitment to the public interest of ensuring privacy and data protection;

26. Stresses the imperative need to adapt ICT standardisation policy to market and policy developments, since this will lead to achieving important European policy goals requiring interoperability, such as accessibility, security, e-business, e-government, e-health and transport; recommends that the Commission and ESOs prioritise standards in the area of 5G, cloud computing, IoT, data and cybersecurity domains, as well as in that of vertical domains, such as ‘connected and automatic driving and intelligent transport systems’, ‘smart cities’, ‘smart energy’, ‘advance manufacturing’ and ‘smart living environments’;

27. Stresses the need to create an open, interoperable ICT ecosystem based on the five ICT priority standards, encouraging competition in value creation upon which innovation can flourish; believes that:

- 5G standards should allow a real generation shift in terms of capacity, reliability and latency, enabling 5G to cope with the expected increase in traffic and the different requirements of the services that will be built on top of it;

- cybersecurity standards should enable security-by-design and comply with privacy-by-design principles, support resilience of networks and risk management, and be able to cope with the rapid rise in cyberthreats to all ICT developments;

- cloud standards should converge so as to allow interoperability in all aspects of the cloud, thus enabling portability;

- data standards should support cross-sectorial interdisciplinary data flows, thus achieving better interoperability of data and metadata, including semantification, and contribute to the development of a big-data reference architecture;
IoT standards should tackle the current fragmentation without hampering innovation in a sector that is developing very fast;

28. Recognises that efficient 5G communication networks depend critically on common standards to ensure interoperability and security, but recalls that the development of a very high capacity network is the backbone of a reliable 5G network;

29. Notes that in order to succeed, a data-driven economy depends on a wider ICT ecosystem, including highly educated experts as well as skilled people, in order to terminate the digital divide and digital exclusion;

30. Encourages the Commission to compile statistics with a view to better evaluating the impact of digitisation and ICT on transport and tourism;

31. Is aware of the growing number of platforms, groups, meetings and channels relating to ICT standards; calls on the Commission to rationalise the number of platforms and coordination mechanisms dealing with standardisation and involve standardisation organisations in new initiatives, in order to avoid duplication of efforts for stakeholders; stresses the need to better coordinate ICT standards and standardisation priorities among the different organisations, and urges the Commission to promptly inform stakeholders about the stage reached in ongoing initiatives in relation to ICT standards;

32. Stresses that digitisation is proceeding at a rapid pace and is a major driver of the economy; underlines the importance of effective digitisation of vertical industries in order to benefit SMEs, and especially consumers, at European, national, regional and local level, and the need to represent their concerns appropriately in the framework of international ICT standardisation;

33. Supports the Commission’s intention to explore initiatives such as a trusted IoT label and certification system, which can help foster trust in the levels of privacy and end-to-end security of an IoT device by providing measurable and comparable ratings on the possible risks associated with the operation and use of an IoT device or service; believes that these should be developed where relevant and where IoT devices could have an impact on relevant infrastructure on the basis of the requirements spelled out in the NIS Directive, which should serve as a basis for defining security requirements; notes that any such label must be able to adapt to future technology changes and take account of global standards where appropriate;

34. Calls on the Commission to take the lead in promoting intersectoral, cross-lingual standards and in supporting privacy-friendly, reliable and secure services;

35. To that effect, supports the definition of specific and measurable minimum requirements that take into account the long-term sustainability and reliability of IoT devices or services as well as industry-standard computer security and sustainability standards; such a list should encompass, for example, the commitment to making updates available for a minimum timeframe after purchasing, the commitment of a manufacturer or provider to a timeframe within which it will provide an update after the discovery and notification of a vulnerability; to this end, the Commission should evaluate the possibility of industry self-regulation, taking into account the speed with which standards and technologies evolve in the ICT sector, and the diversity of development and business models, including open source, start-ups, and SMEs;
36. Takes note of the cybersecurity concerns and the specificities of the threats in the transport sector; urges the Commission to address these specificities when adopting its recommendations on cybersecurity standards which are expected by the end of 2017, as a first step towards a comprehensive strategy on cybersecurity in the transport sector;

37. Notes that ICT standardisation will be beneficial for the development of transport- and tourism-related services and multimodal transport solutions; calls on the Commission, acting together with the ESOs, to attach greater importance to this development when implementing its priority action plan for ICT standardisation, and in particular to explore the potential role of standardisation in supporting the technological changes and new business models emerging in the tourism sector; calls on the Commission to take swift action to promote the development of integrated smart ticketing and information services and new mobility concepts such as Mobility-as-a-Service;

38. Notes that with the increased use of the internet, online banking, social networking and e-health initiatives, people are having growing security and privacy concerns, and that ICT standards need to reflect the principles of the protection of individuals with regard to the processing of personal data and the free movement of such data;

39. Calls on the Commission to include the digital integration of manufacturing as an ICT standardisation priority, and encourages the development of open standards for the communication protocol and data formats for the digital integration of manufacturing equipment in order to ensure full interoperability between machines and devices;

40. Acknowledges some concerns in particular as regards ICT and standard essential patents (SEPs), and recognises that a robust, fair and reasonable IPR policy will encourage investment and innovation and facilitate the take-up of the digital single market and of new technologies, in particular as regards the deployment of 5G and IoT devices, as they rely heavily on standardisation; stresses that it is essential to maintain a balanced standardisation framework and efficient licensing practices for SEPs based on the FRAND (fair, reasonable and non-discriminatory practices) methodology and addressing the legitimate concerns of both licensors and licensees of SEPs, while ensuring that the standardisation process offers a level playing field where companies of all sizes, including SMEs, can collaborate in a mutually beneficial manner; encourages the Commission’s efforts to ensure that interoperability between digital components can be achieved through different types of licensing solutions and business models;

41. Urges the Commission to clarify without delay the core elements of an equitable, effective and enforceable licensing methodology structured around the FRAND principles, taking into account the interests both of rightholders and of implementers of standards that include SEPs, a fair return on investment and the wide availability of technologies developed in a sustainable open standardisation process; invites the Commission to take note of the CJEU judgment C-170/13 (Huawei v. ZTE), which strikes a balance between SEP holders and standard implementers with a view to overcoming patent infringements and ensuring the efficient settlement of disputes; invites the Commission, furthermore, to improve the definition relating to information on patent scope and to address the issues related to information asymmetries between SMEs and large companies, increase the transparency of standard essential patent declarations, and improve the quality of information on the relation of SEPs to products; is of the opinion that any compensation to the developers of SEPs needs to be based on fair, proportionate and non-discriminatory terms, as well as transparent, reasonable,
predictable and sustainable royalty rates, except where developers decide to provide the standard available without financial compensation; recognises, however, that diverse business models, such as royalty-free licensing and open source software implementation, exist and accordingly legislation and discussion should continue to recognise the use of all models on a basis including the rights of all market sectors and IPR holders;

42. Notes the need for an evidence-based approach in monitoring and further developing the licensing framework in order to ensure a dynamic ecosystem that creates added value and jobs;

43. Calls on the Commission to publish biannual reports evidencing actual cases of: (a) unlicensed SEP use (i.e. infringements) lasting for 18 months or more; and (b) issues regarding access to standards due to systematic non-compliance with FRAND commitments;

44. Calls on the Commission to close the debate on the ‘perceived need’ of a science cloud and to take immediate action, in close concert with Member States, on the European Open Science Cloud, which should seamlessly integrate existing networks, data and high-performance computing systems and e-infrastructure services across scientific fields, within a framework of shared policies and ICT standards;

European standards for the 21st century

45. Welcomes the Commission’s standardisation package ‘Standards for the 21st Century’, and takes the view that the standardisation system should be made more transparent, open and inclusive with a view to fully integrating the concerns of citizens, consumers and SMEs;

46. Regrets that it was not consulted prior to the adoption of the package, and urges the European institutions to align the different initiatives into a single strategic, holistic work programme avoiding duplication of actions and policies; stresses that the relevant committee of the European Parliament can play an important role in the public scrutiny of harmonised standards mandated by the Commission;

47. Calls for greater reinforcement, coherence and improvement in the accuracy of the AUWP;

48. Stresses that the next AUWP needs specifically to address actions to improve coordination between the ICT and non-ICT standards regimes, contribute to the improvement of the rules of the different NSBs, and advance the inclusiveness of ESOs by paying greater attention to the role of the stakeholders listed in Article 5;

49. Stresses the importance of the interinstitutional dialogue for the preparation of the AUWP, and encourages efforts to involve, prior to the adoption of the AUWP, all relevant stakeholders in an Annual Standardisation Forum to discuss new fields, existing challenges and necessary improvements of the standardisation process;

50. Encourages Member States to invest in national standardisation strategies which will also help and encourage the public sector, standardisation bodies, societal stakeholders, SMEs and academia at national level to develop and implement individual standardisation action plans;
51. Welcomes the JIS, and recommends that Parliament also be invited to participate in and contribute to it, underlining that the rules of such public-private partnerships need to be respected by all stakeholders, including EU institutions; calls on the Commission to take a leading role in the implementation of the key actions and recommendations of the JIS and to report back to Parliament by the end of 2017 on the progress achieved;

52. Welcomes the commitment, made in the context of the JIS, to develop a study on the economic and social impact, including information on policies, risks and outcomes as regards the quality of life, social and employee-related aspects, of standards and their use; invites the Commission to base this study on quantitative and qualitative data, and to analyse both the business models of the standardisation process and the different financial models – including opportunities and challenges – for making access to harmonised standards easily available;

53. Underlines that standardisation is increasingly recognised as an important contributor to research and development, and that it plays an important role in bridging the gap between research and the market, fosters the dissemination and exploitation of research results, and creates a basis for further innovation;

54. Calls on the Commission to adopt policies that remove excessive barriers in innovative sectors, with a view to incentivising investment in research and development and in EU standardisation; notes that vertical industries should work out their own roadmaps for standardisation, relying on industry-led processes which, if guided by a strong will to reach common standards, would have the capacity to become worldwide standards; believes that EU standardisation bodies should play a special role in this process;

55. Urges the parties to the JIS to ensure that research and innovation are better aligned with standard-setting priorities;

56. Considers that open knowledge and licenses are the best instruments for boosting innovation and technology development; encourages research institutions receiving EU funds to use open patents and licenses in order to secure a greater role in standard-setting;

57. Supports actions aimed at improving the synergy between standardisation and research communities and in promoting standards at an early stage in research projects; encourages national standardisation bodies to promote standardisation to researchers and the innovation community, including relevant government organisations and funding agencies, and recommends that a specific standardisation chapter be developed under Horizon 2020;

58. Urges the Commission to encourage the ESOs to ensure that market-relevant services standards reflect the increased servitisation of the economy and are developed with the aims of ensuring the safety and quality of services and of prioritising areas with the highest detriment to consumers, while not encroaching on existing national regulatory requirements, in particular provisions on labour law or collective agreements and bargaining; recognises, furthermore, that service standards often respond to national specificities and that their development is related to the needs of the market, the interests of consumers and the public interest; stresses that the development of European services standards should contribute to the functioning of the internal market for services while increasing transparency, quality and competitiveness and promoting
competition, innovation, and consumer protection;

59. Points out that the standardisation process in Europe must include standards that improve barrier-free accessibility to transport and transport services for people with disabilities and older people;

60. Is of the opinion that the fast-changing modern world, with its increased technical complexity, leads to the development of increasing numbers of standards and platforms for processing specifications which do not correspond to the standardisation bodies recognised under Regulation (EU) No 1025/2012, and that there are now greater demands when it comes to the involvement of SMEs and microenterprises; stresses the importance of supporting measures to improve SMEs’ access to means of developing and using standards;

61. Underlines the importance of interconnecting platforms and databases at European level, enabling better interoperability of networks and systems;

62. Believes that ICT standardisation involves not only the setting of product requirements, but also the development of innovative technologies;

63. Stresses that uniform (technical) arrangements help to reduce development, production and certification costs, and avoid the duplication of tasks;

64. Stresses that demographic ageing in Europe requires systematic incorporation of the needs of older persons and persons with disabilities, and other vulnerable members of society, in the development of standards, which are a suitable tool to help achieve an active and healthy society in Europe and to increase the accessibility of products and services for people;

65. Points out that innovation in the transport and tourism sectors provides enormous opportunities and has a positive impact on both society and EU businesses, especially SMEs and start-ups, and insists on the need to develop new standards, where possible by pursuing a cross-domain approach, and to uphold standardisation in order to ensure the proper implementation of EU initiatives in the field of digitisation, such as Cooperative Intelligent Transport Systems (C-ITS), and the development of transport applications within the EU Satellite Navigation Systems (Galileo and EGNOS);

**European Standardisation Organisations**

66. Welcomes the role played by the ESOs, but encourages further initiatives to improve their openness, accessibility and transparency, and recommends that their work be guided by European interests;

67. Recognises that the national delegation principle is fundamental for the European system, but warns that there are differences in terms of resources, technical expertise and stakeholder involvement at national level, and recommends that the work of the national delegations needs to be complemented;

68. Recognises the importance of timely delivery of standards, as well as references being cited in the *Official Journal of the European Union* (OJ) in cases of harmonised standards; is aware of the decreasing citation of references of standards in the OJ, and calls on the Commission to investigate and address the reasons for this and remove
unnecessary obstacles; recommends, in this regard, greater involvement of Commission experts and the New Approach Consultants in the standardisation process, and calls on the Commission to develop, in conjunction with the ESOs, evaluation guidelines for standardisation so as to help the different departments within the Commission, the ESOs and the New Approach Consultants evaluate standards in a coherent manner;

69. Repeats that transparent and accessible appeal mechanisms build trust in the ESOs and in the standard-setting processes;

70. Encourages the use of new ICTs to improve the accessibility and transparency of standardisation processes, such as the CEN-CENELEC eLearning tool for SMEs; considers that the use of digital tools can facilitate stakeholders’ participation in the development of standards and provide information about upcoming, ongoing and finalised standardisation work;

Strategic recommendations

71. Calls on the Commission to enhance the synergies and coordination between the European institutions, the ESOs, the NSBs and all relevant stakeholder organisations through the Annual Standardisation Forum, whilst also recognising the international context of standards; recognises that the vast majority of standards are developed voluntarily in response to market and consumer needs, and supports this;

72. Calls for strict application of Regulation (EU) No 1025/2012 as regards recognition of Annex III organisations, and for the publication of the reports provided for in Article 24 of the regulation;

73. Urges the Commission fully to harmonise conditions for Annex III organisations and to ensure the removal of the de facto obstacles to their effective involvement in standardisation;

74. Recommends that the membership status, rights and obligations of Annex III organisations, such as the right of appeal, consultative powers, the right to an opinion before a standard is adopted, and access to technical committees and working groups be reviewed within the ESOs to assess whether they meet the requirements of Regulation (EU) No 1025/2012;

75. Calls on the ESOs to ensure that the ISO-CEN (Vienna) and IEC CENELEC (Frankfurt) agreements will not prevent or jeopardise participation in the standardisation processes of Annex III Organisations or NSBs;

76. Calls on the Commission and the Member States to promote, facilitate financing for and expedite the deployment of the necessary infrastructure, including through modernising, converting and retrofitting, for the market uptake of new technologies supported by European standards (e.g. alternative fuels infrastructure), in compliance with safety, health and environmental requirements; highlights that infrastructure is a long-term investment and that its standardisation should therefore ensure maximum interoperability and allow for future technological developments and their application;

77. Invites the Commission to work with the ESOs and the NSBs to promote easy-to-use contact points of access to standards that can provide assistance and information to the
users of standards regarding those which are available and their general specifications, and that can help them find the standards that best match their needs, as well as guidance on their implementation; recommends, furthermore, information and education campaigns at national and EU level to promote the role of standards, and encourages Member States to include relevant professional education courses on standards in their national education systems;

78. Asks the Commission to develop technology-watch activities so as to identify future ICT developments that could benefit from standardisation, to facilitate the flow and transparency of information necessary for market penetration and the operation of these technologies, and, in this connection, to promote easily accessible and user-friendly evaluation mechanisms via the internet;

79. Recommends that NSBs need to examine if it is possible to provide access to standards to the extent that the standards user can make an assessment of the relevance of the standard; strongly recommends that NSBs and ESOs, when determining the level of fees relating to standards, take into account the needs of SMEs and stakeholders who are non-commercial users;

80. Calls on the Commission to prepare a European register listing existing European standards in all official EU languages, which would also include information on the ongoing standardisation work being done by ESOs, existing standardisation mandates, progress made, and decisions containing formal objections;

81. Calls on the Commission to monitor international ICT standardisation developments and, if necessary, to support the participation and coordination of European stakeholders in leading positions within appropriate standardisation bodies, and in strategically important standardisation projects, in order to promote the European regulatory model and interests; encourages the use of the Multi-Stakeholder Platform on ICT Standardisation to bring together ESOs and international ICT standardisation bodies;

82. Encourages adoption by the EU of the Reference Architecture Model for Industry 4.0 for the digitisation of European industry;

83. Calls on the Member States to use European ICT standards in public procurement procedures in order to improve the quality of public services and foster innovative technologies; stresses, however, that the use of standards should not result in additional barriers, in particular for small businesses seeking to participate in public procurement procedures;

84. Calls on the EU institutions, the national governments and the ESOs to develop training guidelines for policymakers so as to help them overcome inconsistencies arising from the use of disparate working methods in different departments and institutions, and to create a standardisation culture and an understanding of how standards processes work and when they can be used;

85. Instructs its President to forward this resolution to the Council and the Commission.