

Opinion of the Committee of the Regions on the Internet of Things and reuse of Public Sector Information

(2010/C 175/09)

THE COMMITTEE OF THE REGIONS

- welcomes the Commission's initiative to review the application of the Re-use of Public Sector Information (PSI) Directive and promote the action plan for the Internet of Things (IoT), as they have the potential to become valuable assets for citizens, businesses and administrations and could help to create jobs and improve the quality of public services;
- emphasises the significance of and the need for common rules and practices governing the re-use and exploitation of public sector information to ensure that the same basic conditions are applied to all players in the European information market, conditions for re-using such information are more transparent, and distortions of the internal market are eliminated;
- advocates encouraging the development of laboratories in Europe with combined funding from universities and private companies, in order to amplify the impact of IT research activities in Europe;
- proposes that special attention be given to the Future of the Internet, which might evolve into a combination of the Internet of Things and high-quality content and services using Web 2.0 technology as an enabling platform. Its new pattern will redefine the place and role of pervasive networks in people's lives and economic growth which may lead to major social changes.

Rapporteur:	Dumitru Enache (RO/EPP), Mayor of Stejaru
Reference documents:	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Internet of Things — An action plan for Europe
	COM(2009) 278 final
	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Re-use of Public Sector Information – Review of Directive 2003/98/EC
	COM(2009) 212 final

I. POLICY RECOMMENDATIONS

THE COMMITTEE OF THE REGIONS

1. welcomes the Commission's initiative to review the application of the Re-use of Public Sector Information (PSI) Directive and promote the action plan for the Internet of Things (IoT), as they have the potential to become valuable assets for citizens, businesses and administrations and could help to create jobs and improve the quality of public services;
2. stresses the importance of re-using public sector information for both commercial and non-commercial purposes, and investing in research to support specific activities and the development of future applications to enhance the value of the IoT domain;
3. stresses the importance of local and regional authorities in accordance with the i2010 strategy for a European information society, as they represent the engine of economic growth at local level and generate, use and own many digital information products and services; for this reason, local and regional authorities (LRAs) should be fully and effectively involved in the governance and development of IoT;
4. points out that, at local and regional level, the Internet of Things can boost the quality of life and social and economic activity of citizens, stimulate regional development and local businesses and provide more efficient, tailor-made public services to citizens. There are several ways in which regions and cities can help to ensure this potential is fully reached; LRAs are amongst the main beneficiaries of the IoT governance principles, and are key drivers of development and implementation;
5. calls for the identification of suitable solutions for the collection and management of public sector information, taking into account the cultural and administrative diversity among the Member States and between local and regional bodies;
6. stresses the role of logistics needed to handle the large amount of data that will be used by the applications developed and run by the public administrations;
7. welcomes the fact that the Re-use of PSI Directive attempts to minimise the additional administrative burden placed on public bodies by the availability of such information;
8. emphasises the significance of and the need for common rules and practices governing the re-use and exploitation of public sector information to ensure that the same basic conditions are applied to all players in the European information market, conditions for re-using such information are more transparent, and distortions of the internal market are eliminated;
9. highlights the need to promote e-Inclusion, meaning an inclusive, regionally and socially equitable information society, which uses ICT within the larger scope of IoT for increased competitiveness and better public services;
10. advocates encouraging the development of laboratories in Europe with combined funding from universities and private companies, in order to amplify the impact of IT research activities in Europe;
11. stresses that the access and re-use of public sector information have the potential to boost the applications of the Internet of Things. As the main repositories and content holders of PSI, the cities and regions play a key role in facilitating the creation of IoT;

Re-use of PSI Directive

12. points out that, in order to develop a market for the re-use of PSI, it is necessary to do away with exclusive agreements by public sector bodies and private firms and to implement policies that apply licensing and charging models to facilitate and maximise the re-use of PSI (notably through the application of marginal costs); also, it is important to consider and clarify the type of mechanisms used for the production and management of public data;

13. regarding the principle of a competitive PSI market, stresses that it is essential to ensure that private service providers face the same conditions as public institutions, to enable access to public data by private users, and to clearly point out the conditions under which these data can be used for commercial purposes;

14. points out that it is essential to determine a way of measuring the economic value of the information, in an objective manner, due to the public nature of the information and its connection with the governmental institutions;

15. proposes that a distinction be made between access and re-use of public information, in full compliance with data protection rules, in order to improve the benefits for the producer of the information, who might not entirely cover his expenses when generating this information, and to minimise the number of cases when limited access is granted to public information;

LRAs - key enablers and beneficiaries of PSI use

16. calls for greater focus on raising awareness at regional at local level, owing to the lack of knowledge and/or mechanisms to identify the information available for re-use, and to help public bodies to be more transparent and promote the re-use of PSI;

17. stresses that the full potential of PSI re-use could be reached with closer involvement of local and regional authorities, which could significantly contribute to promoting PSI re-use in order to increase competitiveness and create jobs;

18. points out that it is crucial for public institutions at regional and local level to have adequate in-house capacities and sustainable financial resources for digitisation. Private-public partnerships and the development of e-learning markets do provide alternatives to finance content digitisation. Public sector information can develop self-sustaining revenue streams helping data creation and digitisation efforts. In addition, networks and interactive communities are also important because they allow cost reductions, for example in the case of open software development;

Internet of Things

19. stresses that the development of IT is a crucial issue for our societies and Europe's single market, provided that the EU commits sufficient economic resources to innovation, basic research and R&D and political resources to governance for the future of the Internet;

20. notes that the development of interactive platforms, such as Web 2.0, has become more useful nowadays due to their complex functions of information sharing and advanced interoperability between a large number of networks, providing options for creation or supply of content, either by individuals or through cooperative or collective formats; in this context, fast development of mass storage technologies is vital for public administrations' databases, which will contain the descriptions of the objects identified by their Internet address;

21. proposes that special attention be given to the Future of the Internet, which might evolve into a combination of the Internet of Things and high-quality content and services using Web 2.0 technology as an enabling platform. Its new pattern will redefine the place and role of pervasive networks in people's lives and economic growth which may lead to major social changes;

The governance of the Internet of Things, privacy and data security

22. stresses that the development of IoT cannot be left only to the private sector, given the deep societal changes it will bring about. Only the involvement of EU policy-makers and public authorities, including LRAs, can ensure that the use of ICT will, *inter alia*, boost economic growth, address the challenges of the aging society and stimulate the efficient use of energy;

23. highlights that the governance of IoT must be designed and exercised in a manner that is consistent with all public policy activities, as stated by the CoR in its White Paper on Multilevel Governance ⁽¹⁾ which aims to reinforce the efficiency of Community action through coordinated actions by the European Union, the Member States and LRAs, based on partnership and with a view to drawing up and implementing EU policies;

24. points out the need to successfully address a major strategic challenge like the IoT through the principles and mechanisms of multi-level governance, both vertically between 'local and regional authorities - national government and European Union' and horizontally between 'local and regional authorities - civil society', or experimenting with certain innovations at local and regional level;

25. stresses that, while building the IoT infrastructure and developing the services it carries, it will be crucial to ensure that all security requirements at every level are met to ensure optimum levels of privacy and protection of personal data and prevent any unauthorised tracking of all kinds of personal information and profiling, including shopping preferences, medical status, health records, etc.;

26. notes that providing privacy protection depends on certain factors, including the structuring of public sector bodies (the majority of which are at local level), the convergence of EU legislation, the fostering of an innovative culture among public authority officials, including through the use of a common code of ethics, and the management of ICT-based applications;

27. therefore, believes that special attention should be paid to developing guidelines and recommendations aimed at defining ICT strategies, rules, standards and common formats in order to increase data security and support privacy protection;

28. calls for extensive training for all staff, particularly aimed at specialist technicians (e.g. networks, systems, security, privacy, etc.), staff working directly with security procedures involving different methodologies and staff generally or indirectly involved in innovation and modernisation drives (e.g. teaching digital literacy to consumers);

Socio-economic implications of the Internet of Things

29. believes, as expressed in previous opinions ⁽²⁾, that local and regional authorities should participate in wide-ranging cooperation to improve interoperability in public administration and the effectiveness of public service delivery;

30. highlights that LRAs can and do take the lead in boosting Europe's competitiveness, increasing business opportunities, improving public healthcare and using ICT for greater energy efficiency by sharing technological best practices, identifying project partners and allocating funding;

31. emphasises that policies to bolster ICT will not on their own lead to stronger economic performance without the active support and participation of local and regional authorities. Civil society, LRAs and government should work together to ensure that a virtuous circle of human resource upgrading, organisational change, ICT and productivity is set in motion;

32. stresses that actions aimed at enhancing basic literacy in ICT, building high-level ICT skills, lifelong learning in ICT and enhancing the managerial and networking skills needed for the effective use of ICT are particularly relevant and belong to the core competencies of the local and regional authorities;

Research, development and innovation

33. praises the Commission for its commitment to further supporting research and technological development on IoT through FP7, beyond the current outstanding accomplishments, and endorses the use of the CIP programme as an excellent platform to promote the deployment of future IoT applications. In this regard, the local and regional scale could prove very beneficial for carrying out pilot projects, both in terms of ease of implementation and benefit/cost ratio;

34. expresses its support for a stronger role for national and regional stakeholders in developing major new European initiatives like ERA-NETs or Joint Technology Initiatives ⁽³⁾. In this respect, the process of building up research and innovation potential in order to secure a sustainable competitive advantage in Europe, and hence achieve the goals of IoT faster, can only succeed with the involvement of those cities and regional authorities that are making research and innovation a top priority for public funding;

35. calls for greater complementarity between existing policies and cooperation instruments, and for coordinated use of FP7, SF and CIP, which provide investment possibilities in line with the specific features of different research projects;

⁽¹⁾ CdR 89/2009 fin.

⁽²⁾ CdR 10/2009 fin.

⁽³⁾ CdR 83/2007 fin.

36. emphasises the need to attract high-calibre academics from outside Europe and stresses the importance of the regions as the main providers of educational services, and the increasing need to strengthen regional investment in human resources; special focus should be placed on local innovation policies, technology centres, business incubators, science parks and venture capital;

International dialogue

37. points out that, in the framework of international cooperation, the regions are particularly significant owing to supportive programming, structural and legislative framework conditions in the context of their research policies;

38. stresses that even small institutions at regional and local level can produce knowledge of worldwide interest in restricted specialist areas, especially when they participate in global networks and collaborate with knowledge-based businesses;

39. highlights, in this regard, that links and cooperation between regions both within and across countries are becoming increasingly important, especially for policies to support cluster, network and innovation ecosystems, while support for them is also evolving with a view to creating world-class 'nodes' to link to global innovation chains rather than geographically-bound clusters.

Brussels, 10 February 2010

*The President
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