

Governing the Information Society (*) Collective Action and European Interest

Jacques ARLANDIS, IDATE, Montpellier
Klaus W. GREWLICH, Collège de l'Europe, Bruges
Jean-Gustave PADIOLEAU, Maison des Sciences de l'Homme, Paris
& **Luc SOETE**, MERIT, Maastricht

At the heart of the technological revolution, information and communications technology promises to alter our economic system and market structure in a permanent way. The most tangible signs of this transformation will be the significant rise in the service industry's share of GDP, new consumption patterns which will gradually transcend national boundaries as a result of globalisation and flows of information, the unprecedented opening up of international competition in the services market, a significant modification of the corporate structure where the network spurs off with hierarchy and the emergence of new forms of social and political organisation. This diagnosis constitutes the backdrop to the report. The analysis and ensuing recommendations, presenting many original qualities, go much deeper however by examining the issue of "governing" or "steering" the Information society and by endeavouring to express views and strategies. Views are essential to those wishing to formulate a certain number of recommendations for the attention of political and economic decision-makers.

The Net-economy: emergence of a "Schumpeterian" universe ...

We have borrowed the formalisation of our analytical framework from Joseph Schumpeter's, one of the most prominent economists belonging to the "Austrian School" during the inter-war period, believing it to be the best suited to what we have termed the "Net-economy".

(*) This paper is taken from the Fondation IDATE Report, *Governing the Information Society*, published in 1999 (Hermès, Paris). It is the recommendations chapter.

The Information society will be increasingly based on a central technico-economic infrastructure: the Internet — a now widely established fact. The Internet will continue to intensify its mission of "integrating" various features which may take the form of different technological generations, but whose socio-economic equations, defining the life cycles of a number of goods and services, will long bear the stamp of the Net-economy taking root before our very eyes.

This economy displays the characteristics which summed up capitalism for Schumpeter. Breaking with, or at least in opposition to, liberalist theoreticians who put forth neo-classical equilibrium and optimum, Schumpeter attributed the system's dynamics to a conjunction of three fundamental types of "behaviour": the *entrepreneur* who seeks the source of future dominant positions in innovation, the market which, to a certain extent, stimulates the balance of supply and demand, although constantly renewed and thus unattainable, and credit which renders the entrepreneurs' initiatives solvent and market stimulation possible through the mobility of available capital.

These elements can be found in the current Net-economy, the sole difference being the Stock Market which has replaced credit as a financing institution and mechanism. If more precision is required, we would add that where Schumpeter saw forceful and dominant entrepreneurs as the source of innovation, we now see the co-existence of two types of innovation strategies and of two types of entrepreneurs: the niche for start-ups and the norm for the Goliaths. The market is perhaps no longer at the stage described by Schumpeter; "electronisation" having increased trade, and in some respects accentuated the system's dynamics, externality and even entropy.

In spite of these variants, significant in practice, Schumpeterian rhetoric remains widely applicable: the totality of the Net-economy is driven by innovation, and as much in terms of products and processes, as technical (cyber factories or shopping centres, known as "portals") and economic processes (pricing of intangible information-based goods and services, for example).

... Which generate uncertainties and tensions ...

This Schumpeterian dynamic and instability of the Net-economy, has not developed without generating certain doubts and tensions.

Where do these uncertainties come from?

First, the speed and scope of the creation of the new commercial market. E-commerce, for example, through its all-encompassing perspectives and logistic curves put forth as being purportedly irresistible, brings to mind Moore's self-fulfilling prophecy law, as if triumphing commerce was sent in to take over from technology, whose coherency, as defined by this same law, should diminish in the years to come. Anyway, what we have here are the two extremities of a value-added chain: the microprocessor and e-commerce, the most predictable and visible elements of the Net-economy. Between these two extremities, where a long line of added values are gradually unfurling, we find a stream of uncertainties, micro adjustments, unstabilising innovations, etc. Each intermediary market, equipment, networks, middleware, applications, services, is subject to the constraints and uncertainties weighing on supply and demand, whose production process will follow the road of trial and error for quite some time. Moreover, through both innovation and also forecasting strategies which combine I-go and chess, supply rationale reveals a shifting industrial geography.

Secondly, the capacity or incapacity of the social body to absorb this wave of innovation at the rate at which it is offered. We have been able to discern, since the first industrial revolutions, that the rate at which one or several societies adopt a new technological paradigm is invariably slower than the rate of development of the technological innovation itself. Hence, social appropriation and acceptance favourable to the products and services of the Net-economy reflect socio-economic behaviour which is marked by a certain resistance to change: change in the consumer norm, which translates into a slowly evolving spending pattern; the user value of these products and services which gradually "appreciate in value" (progression from the futile to the useful, then from the useful to the indispensable). This "usefulness" equally depends on socio-organisational phenomena, in business and at home, in public and private life, which each possess their own inertia. In an environment which pushes them inexorably toward change, consumers, and more generally speaking, potential customers, implicitly demand varied forms of security and trust.

Thirdly, from the macro-economic environment, bearer of precarious adjustments. Globalisation, which is in fact the exacerbation of the interdependence of economic zones, both geographically and practically speaking, is both a weakening factor and a factor of coherency: when it leads to the same grids of analysis and the same means of procedure

being applied in widely disparate localities, coherency is at work and when all players are subject to the same constraints despite great differences in economic weight, weakening can be noted. Translation of these lines of conduct into sectorial policy, regulatory actions or support policy, will remain subject to caution when assessing their impact and their legitimacy.

All in all, while new, unexplored territories are constantly being unveiled, those, which have already been claimed, remain the target of a desire to conquer and are accompanied by a healthy share of instability. The continuous flow of innovation, which includes both economic and social innovation, will open up onto new territories whose existence, although as yet unimagined, is beginning to be felt. What may be termed non-metaphorically the seventh continent or the first cyber continent, is a geographical territory that will remain unstable for a long time to come.

How do the tensions express themselves?

Tensions arise essentially from the players' desire to dispel uncertainty. One might say that there where doubt subsists, tensions invariably exist. Without reiterating the preceding points, we will specify those economic elements which have already been deemed indispensable by the majority of players.

Tensions and conflicts are exacerbated in a concrete manner each time the control of a scarce (or relatively scarce) resource is at stake: customers, patents, public aptitude or support when applicable.

In terms of market control, industrial players in the Net-economy are experimenting with highly conflictual "lock-in" strategies. In this race for a captive market, what economists term the logic of monopolistic competition, supply somewhat brushes aside the issue of long-term solvency in favour of a demand which must be captured as quickly as possible. This gives birth to the sale or trade of market shares, which, in certain cases, are as virtual as the goods, and services being offered.

With respect to patents and know-how, and more generally intellectual property, tensions are expressed through raids on developing assets. Merger strategies, buyouts, in short everything that falls under the heading of external growth, seems to be accelerating in order to consolidate dominant positions which will not gain their full worth until some years hence and which, therefore, are not yet truly acquired nor absolutely certain.

... Thus calling for specific governing and regulating mechanisms

Current or future trade transactions take place in a turbulent marketplace. The constant stream of innovations, the Schumpeterian dynamic of financial capitalism and of a network economy of complementary externalities, the "globalisation" of the interdependence of various players whose interests are both multiple and often conflicting, invariably lead to disparate representations of the regulation of e-commerce and the Internet. These intertwine the problems of content and containers; projects of social or political transformation interfere with more prosaic sectorial arrangements requiring practical co-ordination.

A new form of managing time and space as imparted by technology (eradication of distance, instantaneousness, storage of possibly overlapping data, etc.) places trade in a category where expectations and demands for proof of trust and security are linked to co-ordination and shared equally by all partners of the Net-economy. The idea of designating a "trust arbitrator" who would be respected by both sellers and buyers and who would defend a value system based on the notions of free choice, positive discrimination and public utility, has already been evoked. For the most part, and in spite of divergence, the business sector, in addition to being aware of the demand for co-ordination, already expects, foresees or participates in regulatory enterprises. What is at stake is not the rejection of the principle of regulatory action, but rather the definition of satisfactory rules of conduct and minimisation of risks.

National and regional legitimacy (i.e. the European Union) will certainly be shaken up, but will remain a point of reference

There are a certain number of reasons to challenge the legitimacy of the idea that nation states should be sole regulators of the Information society.

The new electronic universes remain unfamiliar to them and appear difficult to control. Problems abound within already contradictory points of view. The usual answers based on the experience and know-how of national regulations have either little relevance or prove impossible to implement. All of this renders public intervention both hesitant and of doubtful efficiency.

In addition, participation in global governing is not necessarily limited to government bodies. New players with political aspirations and cross-border interests, such as multinational or transnational companies, public utilities and private conglomerates with international structures, and various non-governmental organisations all enter into the picture. These non-governmental players, interwoven on an international level, are increasingly present in terms of influence and responsibility (parallel to or in conjunction with government bodies).

The Internet, complex and unstable, with extraterritorial tendencies, rife with uncertainties and subject to ever-increasing fragmentation, calls then for the path of a varied body of regulating agencies (public-private, third parties, corporate, individual, etc.) and regulatory measures which would reduce costs and responsibilities. To our view, this justifies governance to be thought in terms of "collective action", i.e. regulations managed by groups of players, in which governments are included, but not as the key player.

This reduction, although inevitable over time, has its limits. In all aspects, nations or legitimate supra-national institutions will remain points of reference, even if the policy measures they develop will progressively meld into a larger entity that we will henceforth call "collective action". This last point is essential: public policy, in the strictest sense, will be an increasingly independent factor, amongst others, of a more global, more collective, movement — something which will noticeably alter perspectives.

From self to soft regulation: renewed collective action

Born under the heading of self-regulation, a regulatory system wherein Internet agents, rather limited in number, aligned their policy on codes of conduct known to be efficient norms of behaviour (best effort ...), the Internet will increasingly require both flexible and formalised regulation. This is the "soft regulation" doctrine to which our analysis adheres.

Collective action would be much more efficient, being able to control three fundamental problems: ambiguity, efficiency and the uncertainty of certain regulatory phenomena.

Containing ambiguity may be defined as the quest for common representations of principles and modes of regulation; the choice of the right rhetoric. The issue of efficiency is an instrumental issue: do regulatory

resources and means allow the desired objectives to be met? Uncertainty, finally, questions the advantages and drawbacks linked to or created by this or that principle or means of regulation; it deals with risk management.

This problem demands responses which the doctrine of self-regulation (as applied to the Net-economy) cannot claim to satisfy. We already see the limitations of this approach (e.g. in the Internet domain names issue). The transition toward a more visible, more coherent and predictable doctrine becomes indispensable.

If our analysis proves correct, one may therefore accept the idea that an adapted response to the challenges presented by Internet regulation is as relatively distant from its principles and methods as was the case in the telecoms industry during deregulation, and in the media at the time of content regulation.

What appears to be emerging now is the concept of soft regulation: a body of practical rules whose definition is the result of an intelligent management of compromise. Say differently, a compromise which is in line with a well established doctrine and robust in practice. According to circumstances, soft regulation would allow to put off implementing a precise regulatory framework in favour of an "under control" stance, to specify minimal rules of good conduct, or to seek a formalism which would be acceptable to all parties adhering to divergent regulatory policies or, finally, to adapt the method of managing the issue of dominant position.

A movement toward commonness of regulation which must be recognised

This attempt to forecast medium-term governing of networks and e-commerce registers and foresees the increasing acceptance, or commonness of regulatory measures, without ignoring the existence of heated debate and lack of continuity. By commonness we imply the desire and daily striving toward the notion that "it must work".

Future regulatory methods must fulfil two practical conditions: to respond to the economic players' demands when called upon and to master the pragmatic issues associated with the proposed measures, as far as possible.

This movement toward commonness appears even more legitimate, and likely to be adopted, in light of the fact that the players have interpreted

the regulatory measures as risks and are undertaking trade-offs between advantages and drawbacks or between rights and obligations.

A number of factors will oblige public authorities to monitor or to directly manage the emergence of commonness. This also implies that government, international and transnational players must integrate common acceptance into their agenda, strategies and practices, even if it implies breaking old habits or accepting the risks of regulatory innovations.

Thus, for example, we must expect it will be less a judge or regulator who is called in to arbitrate, but rather a partnership of players who will share the status of legitimacy.

In light of such a scheme, Europe must invest its efforts in global regulation... by bringing its strengths to the fore...

We must not fall into the trap of short-term technico-economic arbitration, neither should we ignore it; we must not go against, but rather with socio-technical evolution — find a good middle-term. These are the challenges facing the regulators of the Internet and particularly European players.

The extent to which the Internet is currently regulated suggests that economic or social determinism does not exist and that instead, more or less vigilant players capable of finding the correct "settings" are guided by a certain vision of what is good for a society at a given period of time. Seen from this angle, a large effort to adapt must be undertaken by the whole cast of economic, social and institutional players. In order to assure their dedication to this movement, particular care must be taken during negotiations at an international level to establish equitable rules which take into account European social and economic models.

In as much as it is true that a new world information order can in no way be taken for granted, one must confront the issue of global regulation bereft of naiveté. To what point may we allow interdependence to develop in the absence of regulation or monitoring? If the issue of governing thus becomes a major theme of reflection and debate, it invariably brings to the fore questions on the current state of European construction and existing assets, whether geopolitical or economic.

Exploit Europe's proficiency for multilateral approach

The increasing use of networks and e-commerce legitimises and stimulates regulation through simple processes of interdependence and dissemination: the more fields of e-commerce extend to concrete everyday activities (sales, health, education, etc.), the larger the number of consumers there are; the larger the volume and value of the goods being traded, the higher the natural expectation of practical and ethical co-ordination practices, the more the regulations are likely to be adopted.

Hence, governing should not remain definitively a minimalist and pragmatic "default solution", which could even, in the worst case scenario, prevent the elaboration of ambitious European and international legislation. Generalised governing could, on the other hand, make possible and facilitate the eventual development of a "legal framework for international co-operation", which would be both intelligent and truly universal.

The spirit of global governing would then signify increased co-operation in the search for a "globalisation" of "governing", as much for Europe as for the rest of the world, implicating governments, economic players and citizens' bodies. Europe has a unique experience in multi-player, multi-level and multi-directional management, and is therefore in a position to generate ideas and suggestions for the move from global governing to the "definition of a frame of reference" which, if it reflects the spirit of a global law, will adhere to the pragmatism necessary for the development of international relations.

To seek, concrete forms of regulatory procedure above and beyond mere principles

Whereas the European should seek to influence the setting up of a global doctrine, they should also play a major role on key domains for the governance.

Five common general and necessary assets for the proper working (as previously defined) of The Internet, are expected from the governing body:

- co-ordination (technico-practical issues),
- reliability (expectation of precise, error-free functioning),
- security (guarantee, insurance against the risks of malfunction),
- trust (faith in respect for responsibilities and obligations),
- access (principle of universal and tailored services).

We suggest strengthening European involvement in these five "work projects", by proposing tools which compile comparative lists of the advantages and drawbacks of the options and solutions, not only in terms of cost assessment but also by addressing the issue of rights and obligations.

This action could for instance impact privacy protection (inaction, individual responsibility, corporate ethics policy, regulations).

We also propose to open the way to a real policy of mandates of authority to be vested in constituted public bodies (or their representatives). The low rate of efficiency of individual regulation is directly proportionate to the increase of unknown factors and the need for collective intervention, hence the use of mandated authority.

This practical choice to designate a portfolio of players and measures leads to the creation of innovative institutions:

- centres for monitoring and assessing performances, for instance in matters of tariffs, services and usage;
- public regulatory agencies either private or hybrid, holding the non-exclusive power of expertise or assessment, the field of their analysis being that of their activity (decisions, implementation, etc.), as started with the set up of ICANN;
- finally, regardless of the system adopted, regulatory action requires the implementation of procedures for arbitration and legal recourse in the case of a dispute or conflict concerning the regulations.

... While adapting its structural policies to the current state of affairs

European participation in the new forms of global governing will be all the more effective if it is based on an internal model, viz. the European Union, applied in the most reliable way possible to the Net-economy.

Parallel to the process of European economic integration, the Union's nations will find themselves confronted with a dramatic increase in structural changes on a global level. Among these changes, liberalisation and global deregulation, the financial capital and telecomm markets and the increased power of the intangible goods market appear destined to play a key role in the Net-economy described hitherto. Here again, our analysis strives to articulate a diagnosis and recommendations.

To re-evaluate, the strengths and weaknesses of the European development model at the dawn of the Net-economy ...

If we compare the US to the EU, we realise that the repercussions of the emergence and dissemination of these information and communications technologies have differed. On the one hand, during the 90s in the US we witnessed a period of unprecedented industrial growth and increased employment, whereas in Europe these technologies appear to have had a limited impact on growth, at least in the beginning.

The question then is whether those elements of European economic integration which had positive effects in the previous decade, do not require certain modifications in order to better adapt to the future status and rate of implementation of information and communications technologies. Solving these contractions by reworking current policies or by adopting new ones, will then constitute one of the fundamental challenges being faced by European policy creation.

Globalisation raises several fundamental questions with regard to the process of integration in Europe. The Union can be characterised by the implementation of economic objectives which are being increasingly re-evaluated in light of heightened focus on integration on a global level. More particularly, when faced with the relatively modest performances in terms of economic growth and employment over the last decade in Europe, we cannot help but ask ourselves whether past economic integration procedures will not yield even poorer results, and whether these same procedures should not be subject to new policy analyses, giving birth to new policy procedures.

... And make the necessary changes to public policies in Europe

Our analysis underlines the need for a real reassessment of European growth performances in the fields of information and communications technologies: from the development of new tangible products, software and content, to the use and dissemination of information and communications technologies goods and services, by both companies and end users. The Internet does not belong to those fields which fall under the jurisdiction of political policy, nor to those which remain the prerogative of national governments. The development of information and communications technologies in Europe brings forth, in a new and poignant manner, the need to create new national and European policies based on real

arguments for subsidiarity. In accordance with the line of conduct suggested above, and without wanting to limit ourselves, we can suggest three specific policies: regulatory pro domo policies, (e-commerce, content, e-banking, new intermediaries, etc.) policies aimed at the employment market and, finally, policies on education and training.

Public intervention geared to procedure co-ordination, establishing the rules of the marketplace, certifying non-material production and internalising positive outside sources are all actions which, in light of this perspective, warrant consideration and may even prove essential, at least within the context of a high-volume and widely diversified European services' market. Public investment in these new legislative and regulatory frameworks, in the construction and/or adaptation of institutions may take different forms, but must also focus on the global governing of the Internet, some of whose principles we upheld in the previous point. It is easier to study new regulatory frameworks in such a way as to take full advantage of current structural modifications. Such is the case when the conjuncture is accompanied by appropriate investments in infrastructure, which can be either tangible (telecommunications networks, for example) or intangible (in the form of specialised training programmes or intermediary institutions with a broader role, social networks facilitating public access to new services, taking into account different cultural strata). The fragmentation which exists between deregulation and liberalisation and the political competition between European nations for a share in the Information society should be put aside as soon as possible. European "industrial" policy, in the new context of an Information society, should not come about in such a way as to protect old national champions, but rather through co-ordination — by presenting new frameworks for soft regulation and the necessary investments for the growth of information and communications technologies through the dissemination of goods and services

The second series of policy issues concerns the employment market. We must bear in mind that the trend toward a growth market, where Internet services and the budget-time needed to consume these services represents one of the new constraints on demand, may in fact help to reconstruct employment market policies based on common strategies. This would create a safety net (guaranteed revenues) while allowing for the integration of the unemployed through training programmes as part of apprenticeship procedures: either from a consumer point of view (a network which assesses the larger social systems), or from a production viewpoint (a network which offers new skills to manual labour based on needs and demands) - a combination of the two.

The third and final series of policy measures deals with education and training policy. The fact that these policies must be less focused on initial training and more on a programme of lifelong training is now widely accepted. How to implement these measures on a European level is much more difficult, however, given the incredible diversity of national educational systems and institutional configurations, and the challenge of identifying the common and divergent principles involved. The present analysis suggests the need to examine not only the different types of training necessary for production at the various stages of active life, but also at the various stages of consumption. This also signifies that we must study, on the one hand, the rate of obsolescence of knowledge and the increased access to codified information through the Internet and on the other hand, to examine culture and its evolution over time. The rigidity of cultural habits with regard to use of information and communications technologies is another major obstacle to maintaining a certain level of education. Policies must be pragmatic, realistic and must take into account the performances of the different social groups, as well as the possible barriers which prevent the use of certain technologies on the Web.

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The Internet economy, with its marked resemblance to the "Schumpeterian" universe, will be pressed to respond to social demands, some of which will prove insolvent. Political mediation will remain necessary in any case. For practical reasons, governing entities must renounce the dogma of self-regulation in favour of more sophisticated forms which will invariably have certain counter-productive effects. This practical approach to regulation must be "properly" synchronised with the expected evolution, while remaining wary of a tendency to get caught up in the complexities of institutionalisation. It must set down its own objectives and be open to a certain public validation of their impact.

In a context where "*pax americana*" will be both ever-present and constantly questioned, Europe, armed with its veritable strengths, must play the role of "active compromise" in the key fields of economy and cultural and political co-operation, in order to best defend the interests of the economic and social players who will make increasingly greater demands on the Union. Europe must take advantage of this new opportunity to compensate for its industrial shortfalls and ensure cohesion while respecting its most recent historic heritage, where economy is sparring off with culture, and sustain its position in the global management movement, in the manner which we have striven to outline in this essay.