

Regulatory Challenges in the
Digital Economy

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Issue

- **The “New” Economy:**
 - Innovation and Knowledge based Growth
 - Modularity of Production — Mass-Customization — and Innovation
 - Globalization
- **« Regulation » and « Regulator »**
 - = set of rules designed by public authorities that shape economic/social activities and the related implementation bodies
 - In concrete terms
 - Law and regulations
 - Parliament, Government, Judiciary and... “Regulators”

Digital Networks

- **“Transparency”**
 - => Less externalities, but more complex transactions
 - Complexity: difficult to oversight
 - Cooperation: potential collusion
- **Technical and Marketing Innovation**
 - => Difficult for public authorities
 - To be aware of actual practices... and therefore to oversight
 - And to anticipate them... and therefore to regulate
- **Modularity + Innovation = Continuous marginal innovation**
 - => Need for a permanent upgrading of the regulatory framework
 - => **Forums** organized by the regulator (public hearings)
 - To allow information revelation
 - Controlling for/Bounding capabilities to manipulate information

The “4 + 1” Regulatory Topics in Networks

- **Fixed costs allocation**
 - ⇒ “Natural Monopoly” Issue
- **Establishing Property Rights**
 - ⇒ Incitation to Invest and Innovate
- **Negative network externalities management :**
 - ⇒ Coordination rules to bound congestions and prevent collapse
- **Positive network externalities management**
 - ⇒ Ensuring : Interconnection & Interoperability thanks to standards and interconnections rules
- **Establishing the “Public Interest”**
 - ⇒ Conflicting claims if no pure indivisibility of resource: Conflict among stakeholders to define both
 - *the notion of “public interest” (and the related fundamental private and individual rights)
 - *and the scope and the possible use of the “public domain”
 - ⇒ In any regulatory process lobbying of groups of interest to impose their regulatory preferences
 - ⇒ In the new context, permanent innovation in terms of usage (hardly observable by any regulator)

The “Digital” Challenges

- **Fixed costs allocation**
 - OW: Pricing of a single/stable service by a monopoly
 - NW: Interconnection tariffs among providers of permanently upgrading services
- **Establishing Property Rights**
 - OW: Stable and integrated rights
 - NW: Interplaying unbundled rights + low verifiability: Oversight of private Negotiations
- **Negative network externalities management :**
 - OW: Vertical Integration + Regulation
 - NW: Conflict settlement + Case Law
- **Positive network externalities management**
 - OW: National standards + International interconnection agreements
 - NW: Preventing abuses of dominant position through standards + Preventing endless capture (mandatory early stage revelation + support to competitors and open standards)
- **Establishing the « Public Interest »**
 - OW: Cost/benefit analysis + (Hicks-Kaldor) Compensation
 - NW: Recognizing uncertainty and incomplete information: Forums

The New-Regulatory Context

- **“Revealing” Regulator**
 - The regulator and the stakeholders lack of information and are uncertain about the future
 - Evolution is necessary while stability is a condition for investments (in R&D, infrastructures)
 - ⇒ Forums to share information and form consensus
 - ⇒ Information revelation based on competition
 - ⇒ Digital networks might help
- **“Public Interest” or “Evolving Compromise”**
 - *Maximization of social welfare + Compensation* is a too moving target
 - Regulations by forums are however the results of strategic games in which “voices” are inherently unequal while dominant position might be sustainable in the long run.
 - ⇒ Prevention of anticompetitive behaviors + Permanent antitrust assessment
 - ⇒ Permanent forums to reshape the regulatory framework
 - ⇒ Antitrust + Conflict Resolution
- **Empowering stakeholders**
 - Free access and openness incite stakeholders to reveal, develop their expertise, negotiate solutions, innovate
 - ⇒ Regulators need to “empower” the weakest
 - ⇒ By inciting them to contribute (e.g. class action)
 - ⇒ By supporting their contribution to the “Regulatory debate”