

## Convergence in the communications market and regulatory challenges

Communication is a basic human need. Up until the end of the 20<sup>th</sup> century, the two essential options for long-distance communication were the telephone for oral conversation and the letter for written correspondence. Because two or more persons take part in each communication, the corresponding channels are considered platforms on which economic network effects appear: the larger the number of persons who are participating in a platform, the more valuable this becomes for all users. As a consequence, the individual decision to join a platform impacts not just individual communication opportunities, but also affects those of all other existing and potential platform users.

This so-called externality was one of the main reasons why such communication platforms were procured by the state: in Switzerland in the form of PTT. Corresponding universal service obligations were designed to ensure that all population groups in Switzerland received access to communication services at affordable prices and subject to uniform conditions.

### From divergence to convergence

At the end of the nineties, the increasing differences between the technological developments of letter mail and telephony led to the separation of Swiss Post and today's Swisscom. Both companies still are universal service providers. Swiss Post is required to collect and deliver letters throughout Switzerland on a daily basis. Universal telecommunications services initially essentially entailed a telephone connection for all households.

A new communication age was rung in at the start of the new millennium by the spread of internet use. This enabled a wide

variety of written communications to be performed via the traditional telephone channel. It formed a new electronic communications platform. As a consequence, the provision of a broadband internet connection was added to the Swiss universal telecommunications service obligation in 2006.

Today, two platforms for written communication exist in the form of the postal network and the internet. They meet different needs but are increasingly converging: technical processes are being created which make e-mails more secure and confidential – just like a sealed letter or even registered mail.

### Challenges and potential solutions

The convergence of physical and electronic mail represents not just a challenge, but is also bringing opportunities for the traditional letter mail market and its regulatory framework. A first challenge is to ensure the consistent regulation of the communications market, above and beyond the traditional sectors. High infrastructure costs combined with sinking volumes of letters result in increasing unit costs. To extend the scope of its services and make them more attractive, Swiss Post offers electronic forwarding. This means letters can be received at all times and at all locations. As a consequence, it is increasingly bridging the gap between the physical and the electronic communications platforms. The function is particularly attractive from a commercial perspective if it reduces the cost of rendering the traditional services. Such a reduction is contingent upon a flexible universal service obligation which is formulated in a "technology-neutral" manner. New Swiss post office legislation, which is due to come

into force before the end of the current year, makes a step in this direction. However, the new regulatory framework still treats the postal service as if it was isolated and independent of telecommunications, and consequently unaffected by competing electronic substitution to traditional letter mail. Currently, there are overlapping universal service obligations in the postal and telecommunications sectors with the same objective: A high availability of communication channels. This overlap makes universal service provision needlessly expensive.

In view of the intermodal competition between electronic and physical services within the communications market, it would be prudent and desirable to coordinate overlapping universal service obligations.

A second challenge comprises the need to establish a consistent general regulatory framework which, in addition to the provision of universal services, also encompasses further aspects. Specifically, competition law and intellectual property law are of relevance.

Providing universal services at uniform prices leads to cross-subsidies between customer groups, and consequently to a distortion of competition. Such effects are deliberately taken into account by sector-specific regulation, and need to be considered when

assessing the communications market in the context of competition law.

When it comes to intellectual property, the situation is similar. The interface between electronic and physical communications is creating new processes. This poses the question of the extent to which such innovations should be protected by patents, and whether any possible patent protection actually hinders or blocks the rendering of universal services. A topical example is the legal dispute between the US-based RPost and various providers of physical and electronic postal services. At stake are the processes used to ensure the secure transmission of electronic messages. Swiss Post is also affected, as it has developed its own solutions for the secure electronic transmission of messages. In the interim, all aspects of a key RPost patent have been declared null and void by the United States Patent and Trademark Office in an initial court ruling. Nevertheless, in future there is an increasing risk of the regulatory environment failing to keep pace with technical advances and market developments.

From a legislative perspective, in view of the rapid technical advances within the communications market, the key challenge will be to counterbalance the three objectives of cost-effective universal public provision, effective competition and reasonable protection of intellectual property.

## Bibliography

Maegli, Martin, Christian Jaag, Martin Koller and Urs Trinkner (2010). Postal Markets and Electronic Substitution: Implications for Regulatory Practices and Institutions in Europe. *Journal for Competition and Regulation in Network Industries*, Vol. 4, 382-397.

Dietl, Helmut and Christian Jaag (2011). Postal and Regulatory Reform in Intermodal Competition, in: *The Future is in the Post Vol. 2: Perspectives on Transformation in the Postal Industry*, K. Sund and D. Osborn (Eds.), Faringdon. Libri Publishing.

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