
THE TECHNOLOGY,
MEDIA AND
TELECOMMUNICATIONS
REVIEW

SECOND EDITION

EDITOR
JOHN P JANKA

LAW BUSINESS RESEARCH

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JOHN P JANKA

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EDITOR'S PREFACE

The recent passing of TMT pioneer Steve Jobs provides an appropriate moment for reflecting on the impact that innovation in the sector has had on our lives, and how it also has driven – and outpaced – the development of the law.

Dramatic advances in microchips have fuelled the digital revolution, spawning a wide range of devices and services that our parents never could have imagined. The iPhone, the iPad, iTunes and the iPod are but a few examples of technological changes that have challenged old ways of doing business, and also have changed society. We are connected to our work and our social circles anywhere we go; we instantaneously access vast information resources from mobile devices; and we watch films and TV programmes, and listen to music, of our choosing, whenever and wherever we want.

Similarly, the Internet has changed the way people communicate, and has altered our preferences for receiving information and entertainment. Internet-based businesses have challenged traditional media businesses, such as print newspapers, print magazines, and television and radio broadcasting. Internet media delivery is now challenging more recently developed forms of media–cable and satellite delivery of subscription video programming. As a result, the legal constructs once put in place to govern media outlets are changing.

The existing telecommunications infrastructure is becoming outmoded. ‘Twisted pair’ (copper) is being bypassed in favour of fibre and wireless, as existing phone lines cannot readily support the increasing demand for broadband speeds and throughput. A robust wireless communications infrastructure is necessary to support the booming demand for mobile broadband connectivity to smart phones and tablets. As a result, government policy is evolving to support the deployment of broadband infrastructure, and to facilitate the growth of mobile services; but regulatory change never seems to occur fast enough. While nations are making significant investments to deploy high-speed broadband services to their citizens, significant private investment is still needed for tomorrow’s critical telecommunications and information infrastructure.

Historical spectrum planning did not provide for the current wireless boom. As a result, no incumbent user of spectrum is safe in the refarming of existing spectrum bands. The transition from analogue to digital signal forms is leading to more efficient use of the spectrum, and also is facilitating new approaches to sharing radio spectrum.

Regulators are coming under increasing pressure to capture the value associated with the spectrum bands that are being opened for these new purposes.

The broadband revolution has eliminated one information bottleneck that once existed when consumers had to rely on a few newspapers, TV stations and radio stations. Now they are able to use Internet-based services such as Facebook and Twitter – albeit sometimes in the face of governmental attempts to stem the free flow of information to and from their jurisdictions. Other ‘gatekeepers’ are developing in the distribution chain as application service providers seek to constrain access to certain content, whether by using their influence to cause broadband providers to block access to that content entirely, or to prioritise one information source over another.

We are being monitored, and our personal information is being collected, stored and mined, in a manner that regulators never envisioned and that the law is not well-suited to constrain. Virtually every Internet access and wireless device we use knows where we are, and tracks what we do. While this personal information can be used for purposes that some may find desirable (such as targeting products and services to us), gathering and storing that information virtually eliminates any expectation of privacy. In many jurisdictions, the law is inadequate to manage the chances for abuse and the consequences of security breaches.

This second edition of *The Technology, Media and Telecommunications Review* expands to 30 the jurisdictions in which we provide an overview of the legal constructs that govern these types of issues. While the authors cannot fully address every one of these topics in the following articles, we do hope this book provides a helpful framework for your analysis.

John P Janka

Latham & Watkins LLP

Washington, DC

October 2011

LIST OF ABBREVIATIONS

3G	Third-generation (technology)
4G	Fourth-generation (technology)
ADSL	Asymmetric digital subscriber line
ARPU	Average revenue per user
BIAP	Broadband Internet access providers
BWA	Broadband wireless access
CATV	Cable TV
CDMA	Code division multiple access
CMTS	Cellular Mobile Telephone System
DAB	Digital audio broadcasting
DDoS	Distributed denial-of-service
DoS	Denial-of-service
DSL	Digital subscriber line
DTH	Direct-to-home
DTTV	Digital terrestrial TV
DVB	Digital video broadcast
DVB-H	Digital video broadcast – handheld
DVB-T	Digital video broadcast – terrestrial
ECN	Electronic communications network
ECS	Electronic communications service
EDGE	Enhanced data rates for GSM evolution
FAC	Full allocated historical cost
FBO	Facilities-based operator'
FTNS	Fixed telecommunications network services
FTTC	Fibre to the curb
FTTH	Fibre to the home
FTTN	Fibre to the node
FTTx	Fibre to the <i>x</i>
FWA	Fixed wireless access
Gb/s	Gigabits per second
GB/s	Gigabytes per second

List of Abbreviations

GSM	Global system for mobile communications
HDTV	High-definition television
HITS	Headend in the sky
HSPA	High-speed packet access
ICT	Information and communications technology
IPTV	Internet protocol television
ICP	Internet content provider
ISP	Internet service provider
kb/s	Kilobits per second
kB/s	Kilobytes per second
LAN	Local area network
LRIC	Long-run incremental cost
LTE	Long Term Evolution (a next-generation 3G and 4G technology for both GSM and CDMA cellular carriers)
Mb/s	Megabits per second
MB/s	Megabytes per second
MMS	Multimedia messaging service
MMDS	Multichannel multipoint distribution service
MSO	Multi-system operators
MVNO	Mobile virtual network operator
MWA	Mobile wireless access
NFC	Near field communication
NGA	Next-generation access
NIC	Network information centre
NRA	National regulatory authority
PNETS	Public non-exclusive telecommunications service
PSTN	Public switched telephone network
RF	Radio frequency
SBO	Services-based operator
SMS	Short message service
STD-PCOs	Subscriber trunk dialling-public call offices
UAS	Unified access services
UASL	Unified access services licence
UHF	Ultra-high frequency
UWB	Ultra-wideband
UMTS	Universal mobile telecommunications service
USO	Universal service obligation
VDSL	Very high speed digital subscriber line
VHF	Very high frequency
VOD	Video on demand
VoB	Voice over broadband
VoIP	Voice over Internet protocol
WiMAX	Worldwide interoperability for microwave access

Chapter 27

SWITZERLAND

*Hans Rudolf Trüeb and Samuel Klaus**

I OVERVIEW

Over the past couple of years, the Swiss telecoms markets underwent a period of consolidation. The provision of voice services (both landline and mobile) is firmly in the hands of Swisscom (the incumbent provider), Sunrise, Orange (mobile only) and Cablecom (landline only). MVNO providers such as Lebara Mobile stand their ground, but cater mainly to private subscribers.

This less-than-dynamic market has repeatedly prompted interventions by the regulator and the Competition Commission. The most visible effect of such intervention is the prohibition of the proposed merger between Orange and Sunrise in 2010; and another was the postponement of the 4G auction due to initial problems. The more things change, the more they stay the same.

As regards electronic media, Switzerland is a long way from a competitive market. The Swiss Broadcasting Corporation ('SRG'), a public service station financed by mandatory contributions of the households and commercials, enjoys a quasi-monopoly. The attempts of SRG to enhance its online services were met with harsh criticism from private media houses.

Hopes of fostering private broadcasting by siphoning off a share of the public radio and television licence fees have so far been futile. Some niche players covering local news and 3+, an entertainment channel that can be received on the Swiss cable network, are surviving, but have only minimal market share.

The IT service models of most providers has recently seemed to converge on cloud computing. This has slowly transformed into viable commercial offerings, but data protection and data security concerns still hinder the full deployment of this as a business model.

* Hans Rudolf Trüeb is a partner and Samuel Klaus is an associate at Walder Wyss Ltd.

II REGULATION

i The regulators

The sector-specific regulator for the Swiss telecom market is ComCom (the Communications Commission), as established by virtue of Article 56f of the Federal Telecommunications Act ('the TCA') and the corresponding ordinance ('the OTS').¹ ComCom ensures (by periodically granting concessions) the universal service (TCA, Article 14), takes decisions in case of access disputes (TCA, Article 11a), and is the frequency licensing authority (TCA, Article 24a).

The ComCo (the Competition Commission) takes a broader approach, protecting competition in general, based on Article 18ff of the Federal Act on Cartels and other Restraints of Competition ('CartA').² The duties of the ComCo consist in combating harmful cartels and monitoring dominant companies for signs of anti-competitive behaviour (CartA, Article 26ff), enforcing merger control legislation (CartA, Articles 9f and 32ff) and preventing the imposition of restraints of competition by the state (CartA, Article 45ff). ComCom and ComCo oversight is parallel and cumulative.

The markets are further observed by the Price Supervisor, as defined in Article 3ff of the Federal Price Supervision Act ('PSA'),³ combating abusive prices based on non-competitive behaviour below the threshold of the CartA (PSA, Article 4).

Although not being a regulator as such, the Federal Data Protection and Information Commissioner ('the FDPIC') plays an increasingly important role regarding new technologies and media. Based on Article 26ff of the Federal Act on Data Protection ('the DPA'),⁴ he watches over cross-border data disclosure (DPA, Article 6), maintains a publicly accessible register of data files (DPA, Article 11a),⁵ and may on his own initiative investigate possible violations of the DPA (DPA, Article 29). If a recommendation of the FDPIC on the basis of such an investigation is not complied with, he may refer the matter to the Federal Administrative Court – as he successfully did in November 2009 regarding *Google StreetView*.⁶ Google's appeal to the Federal Supreme Court (May 2011) is still pending.

ii Regulated activities

Whereas only a notification to the Federal Office of Communications ('OfCom') is required for the provision of general telecommunications services (TCA, Article 4ff), concessions are required for the provision of universal services (universal service concession, TCA, Article 14ff) and the usage of the radiocommunications frequency spectrum (radiocommunications

1 www.admin.ch/ch/e/rs/c784_10.html (TCA) and www.admin.ch/ch/e/rs/c784_101_1.html (OTS) (English).

2 www.admin.ch/ch/e/rs/c251.html (English).

3 www.admin.ch/ch/d/sr/c942_20.html (German).

4 www.admin.ch/ch/e/rs/c235_1.html (English).

5 www.datareg.admin.ch (German).

6 Federal Administrative Court Decision A-7040/2009 (30 March 2011).

concession, TCA, Article 22ff). Both concessions are obtained in a public tender process, such as the ongoing 4G auction (see Section IV.iii, *infra*).

In the revision of 2006, parliament decided against *ex ante* regulations of dominant competitors. Due to lengthy court proceedings, this *ex post* approach has been repeatedly criticised.

iii Ownership and market access restrictions

In Switzerland, no general ownership restrictions exist regarding foreign telecommunications providers. Article 5 of the TCA, however, gives ComCom the power to 'prohibit undertakings incorporated under foreign law from providing telecommunications services in Switzerland unless reciprocal rights are granted'. So far, this article has not been applied.

Market access is regulated by Article 4 of the TCA with only a notification to the OfCom being required. Article 6 sets out certain requirements for telecommunications services providers regarding their technical capacities, regulatory compliance, compliance with employment legislation and offering an appropriate number of apprenticeships.

iv Transfers of control and assignments

Since for general market access, no concession or licence is required, there are no provisions regarding transfer of such. In the wake of mergers and acquisitions, a (re)notification to the OfCom might become necessary (TCA, Article 4), depending on the nature of the transaction.

Only the provision of universal service(s) (TCA, Article 14ff) and the use of the radiocommunications frequency spectrum (TCA, Article 22ff) requires a licence, such licences being transferable only with the consent of the ComCom, including the economic transfer of the licence. An economic transfer of a licence occurs when a company has obtained control of the licensee in accordance with the CartA (TCA, Article 24d). In such cases, the concessions require that a notice is served to the ComCom.

III TELECOMMUNICATIONS AND INTERNET ACCESS

On 17 September 2010, the Federal Council published its report 'Evaluation of the Swiss Telecommunication Market'.⁷ Even though it identified shortcomings regarding competition (e.g., Swisscom, the incumbent provider, having increased its market share from 40 per cent in 2005 to 53 per cent in 2009), high prices (especially in comparison to EU benchmarks) and insufficient consumer protection (e.g., regarding 'cold calls'), plans for a revision of the TCA have been abolished. Certain aspects, however, might still trigger discussions about a revision of the TCA in the near future, for example, regarding a more proactive role for the regulator (with *ex ante* price regulations) or a more precise definition of the cost basis for access pricing.

The major players in the Swiss telecommunications market are slowly but steadily moving from triple (landline, mobile, Internet) to quadruple play (including television),

7 www.bakom.admin.ch/dokumentation/gesetzgebung/00512/03498/index.html?lang=en.

even though the distinction between these services becomes blurred due to the convergence of digital content. In essence, all quadruple-play products are provided in digital form, the only distinction between the different players' products being the means of delivery, either via self-owned copper or fibre landlines (Swisscom), via regulated access to such landlines (Sunrise, Orange) or via self-owned coaxial cable (UPC Cablecom).

- a* Swisscom, the incumbent provider, launched a package in August 2011 combining landline, mobile and Internet services with its Swisscom TV product.
- b* Sunrise, a second important market player, has communicated to add television to its triple-play products until the end of 2011.
- c* Orange is, in addition to its mobile, Internet and VoIP services, already providing 'Orange TV' as a web service based on its Internet products.
- d* UPC Cablecom, with its history as a CATV provider, has first added Internet services, then landline telephony (2003) and finally – in cooperation with Sunrise – mobile communication (2005) to its portfolio.

Since the cooperation between UPC Cablecom and Sunrise has not been particularly successful, UPC Cablecom applied for a mobile network code in July 2011 in order to be able to provide services as an MVNO, based on a recent MVNO contract with Orange. Whereas little competition is expected among the three 'copper-based' market players (Swisscom, Sunrise and Orange), the close cooperation between UPC Cablecom and Orange could spur market activities.

Furthermore, since the ComCo has thwarted the Sunrise/Orange merger in April 2010, France Télécom is looking at options to sell Orange (Switzerland). At a price estimated at €2 billion, not only the investment groups Apax Partners LLP and EQT Partners have been said to be interested, but also Liberty Global Inc. ('LGI').⁸ As UPC Cablecom is a wholly owned subsidiary of LGI, the latter's acquisition of Orange would add a mobile network to UPC Cablecom's infrastructure. This could boost its engagement in the mobile market beyond mere MVNO services and thus invigorate competition in the Swiss telecoms market.

After the US *FCC/Comcast* decision in April 2010, discussions about regulation of network neutrality have reached Switzerland. The 'big four' telecommunication providers all asserted to the public to adhere to strict network neutrality – while at the same time admitting that, in order to provide their services properly, they have to give priority to such services as their own IPTV (e.g., Swisscom TV) or VoIP services. No steps have yet been taken by the regulator (the ComCom), the general consensus being that the application of general competition rules should suffice to eliminate anti-competitive behaviour such as the adverse treatment of services (or content, respectively) of the competing market players. However, with the rapid growth of bandwidth demand due to new services (e.g., cloud services) and increasing mobile network usage, it might just be a matter of time until the first disputes erupt – and calls for regulation will soon follow. These problems

8 According to Bloomberg – www.bloomberg.com/news/2011-08-05/france-telecom-said-to-get-interest-in-swiss-unit-from-apax-eqt-liberty.html

could only be solved by separating network infrastructure and service delivery – a step that will not likely be taken in the near future.

i Internet and Internet protocol regulation

Telecommunications regulation in Switzerland is fairly technology-neutral, defining a ‘telecommunications service’ as the ‘transmission of information for third parties by means of telecommunications techniques’ (TCA, Article 3b), thus not providing for either specific regulation for traditional telephony or IP-based services. Therefore, providers of IP-based services such as VoIP must comply with the general provisions of the TCA, with certain specific – mostly technical – aspects (such as the location of emergency calls in case of ‘nomadic’ use of VoIP services) being regulated in the corresponding ordinance. A rather important distinction between telephony and IP services, however, is made regarding surveillance; due to the technical definition of ‘surveillance means’ in the ordinance⁹ to the Federal Act on the Surveillance of Postal and Telecommunications Traffic (‘the SPTT’),¹⁰ non-e-mail Internet traffic is currently not subject to surveillance (see Section III.iv, *infra*).

In the early days of the Internet, registration of domain names has been attributed to the quasi-governmental entity ‘Switch’, a foundation, according to Article 80ff of the Swiss Civil Code,¹¹ founded by the Swiss Confederation, Swiss universities and their home cantons. Recently, Switch started to offer competitive hosting services through its subsidiary Switchplus Ltd, which is operated at arm’s-length terms. A number of private suppliers lodged a complaint against this state-subsidised competition with the OfCom, whose strict ruling has since been appealed by Switch and is currently pending before the Federal Administrative Court.

ii Universal service

The latest ITU numbers show good coverage with Internet services. 5.7 million Internet users, which equates to 75.3 per cent of the population having access to the Internet. The numbers have been more or less stable over recent years indicating that the penetration appears to have reached the optimum level. With the ever-growing demand for bandwidth of new services, the focus currently lies on the deployment of faster technologies such as FTTH or LTE (see Section IV.iii, *infra*). While FTTH is necessary in order to provide interactive HD television services, LTE will cater to the public’s growing demand for mobile high-speed Internet access.

In June 2007, Swisscom was awarded the concession to provide universal service in Switzerland from 2008 to 2017. For the first time, and uniquely in Europe, the concession obliges Swisscom to provide nationwide broadband Internet coverage of least 600/100 kb/s for no more than 69 Swiss francs per month. This obligation is worded to be technology-neutral, thus making no specific technology (e.g., DSL or FTTH) part of universal service. Currently, a revision of the Ordinance to the TCA is being discussed, in order to raise the

9 www.admin.ch/ch/d/sr/c780_11.html (German).

10 www.admin.ch/ch/d/sr/c780_1.html (German).

11 www.admin.ch/ch/e/rs/c210.html (English).

download rate of such universal service broadband connections per 2012 from 600kb/s to 1Mb/s and to lower the maximum price from 69 to 55 Swiss francs.

Currently, the advancement of FTTH is achieved at a communal level with communal utility or cable net companies investing in new FTTH networks by using their existing infrastructure. However, in October 2009 Swisscom convinced the Swiss cable operators, the regulator ComCom and the competent OfCom to accept the implementation of a multi-fibre FTTH model, securing exclusive access for Swisscom to one of the four planned fibres. A fair number of communal companies have now succumbed to this model, building FTTH networks in cooperation with Swisscom. Once more, the incumbent provider seems to be successfully extending into new markets. However, the ComCo is starting to take a closer look at these practices and started investigations, with the corresponding report having been released to the parties involved in September 2011. The report is expected to be made public before the end of 2011.

iii Restrictions on the provision of service

The access to the facilities and services of dominant providers are regulated in Article 11ff of the TCA and Article 51ff of the OTS, providing for:

- a* fully unbundled access to the local loop (OTS, Article 58);
- b* fast bitstream access (OTS, Article 59);
- c* rebilling of the connection (OTS, Article 60);
- d* interconnection services, such as call origination, termination and transit; caller identification, access to value-added services, etc. (OTS, Article 61);
- e* leased lines (OTS, Article 62) and
- f* access to cable ducts (OTS, Article 63).

A number of interconnection disputes led to the revision of the TCA in 2007, leading to today's interconnection regime. Some issues, however, are still being disputed, especially the financial aspects. Both Swisscom and Sunrise are appealing the current regulated prices for access services, Swisscom claiming higher prices and Sunrise contesting the values the calculation is based on. The current method takes the Swisscom infrastructure into account at replacement costs; in contrast, Sunrise argues that only its residual value should be accounted for, as assets cannot be depreciated twice. In April 2011, the Federal Administrative Court ruled against Sunrise by stating that the method of calculation is stipulated in the OTS and the decision about the advisability thereof does not lie with the court, but with the Federal Council.¹² Therefore, Sunrise has now taken a more political approach and integrated its demand for a change in access pricing in the current consultation process regarding the ongoing revision of the OTS. Since the Federal Council has already supported a change regarding the calculation basis in its 2010 report on the telecommunication market, this approach might prove more successful.

In late 2009, the Swiss telecommunication providers (finally) lowered their somewhat elevated termination fees, but still not getting close to EU standards. The step anticipated a ruling by the ComCo imposing a fine on Swisscom of 333 million Swiss

12 Federal Administrative Court Decision A-300/2010 (8 April 2011).

francs for abusing its dominant position on the mobile termination market. The Swiss Federal Supreme Court reversed this and lifted the fine in April 2011.¹³

iv Security

Swiss data protection law comprehensively protects personal information, not only covering data of natural persons, but also that of companies (DPA, Article 3b). In September 2010, the Federal Supreme Court ruled that even (dynamic) IP addresses can, according to the circumstances, be considered personal data and thus be protected by the DPA.¹⁴ The FDPIC may on his own initiative investigate possible violations of the DPA (DPA 29), as he has done regarding possible privacy violations by Google StreetView, such case still pending (see Section II.i, *supra*).

Law enforcement interests are addressed by Federal surveillance legislation, obliging network operators to implement (at their own cost) the necessary 'surveillance means' in order to provide upon judicial order to law enforcement entities the relevant data. The means of surveillance which a provider can be ordered to implement, are regulated in the ordinance¹⁵ to the Federal Act on the Surveillance of Postal and Telecommunications Traffic ('the SPTT').¹⁶ The ordinance explicitly distinguishes between 'telecommunications in general' and 'Internet', regulating the surveillance of the latter with the focus only on e-mail and IP addresses. In a recent decision (June 2011), the Federal Administrative Court hence ruled that based on the current legislation, providers cannot be ordered to provide the means for surveillance of Internet traffic in general.¹⁷ While telephone communication by landline or mobile network is subject to surveillance, such communication done by Skype is not; while SMS services are subject to surveillance, Whatsapp or Facebook messages are not.

Understandably, the SPTT and corresponding ordinance are currently under review, but the revision process is taking much longer than first expected. The Federal Department of Justice and Police ('the FDJP'), in charge of this process, is now trying to implement far-reaching changes (such as the all-embracing surveillance of Internet traffic in general) in the ordinance, thus bypassing the parliamentary revision process. Protests have come not only from groups advocating privacy protection, but also from telecommunication providers who would have to invest large sums in the technical surveillance equipment necessary to meet the new surveillance obligations. The FDJP has started a consultation process involving the affected parties in June 2011, the results of which are expected before the end of the year.

13 Federal Supreme Court Decisions 2C_343/2010 (*Federal Department of Economic Affairs v. Swisscom*) and 2C_344/2010 (*Swisscom v. ComCo*).

14 Federal Supreme Court Decision 136 II 508 (*FDPIC v. Logistep Ltd*).

15 www.admin.ch/ch/d/sr/c780_11.html (German).

16 www.admin.ch/ch/d/sr/c780_1.html (German).

17 Federal Administrative Court Decision A-8267/2010 (23 June 2011).

IV SPECTRUM POLICY

i Flexible spectrum use

Spectrum use in Switzerland is forward-looking and regulated in a technology-neutral manner, thus completely leaving it up to providers as to what services to provide. Furthermore, Switzerland has already implemented the WRC-07 resolution regarding the 'Digital Dividend', thus making way for fast implementation of broadband mobile (data) communication.

ii Broadband and next-generation mobile spectrum use

The shift from analogue to digital TV broadcasting (see Section V.ii, *infra*) allows for a more efficient use of the spectrum, thus making part of the UHF spectrum (470–862MHz) available for mobile (data) communication (the 790–862MHz spectrum). While the World Radio Conference 2007 (WRC-07) resolution provides for this spectrum to be available in 2015, the Swiss federal government decided as early as 2008 to make this spectrum available for mobile communications, OfCom making sure to allocate for national digital terrestrial TV broadcast-only frequencies in the lower spectrum (470–789MHz). Therefore, this 'Digital Dividend' (790–862MHz spectrum) is already available for mobile (data) communication services as of today and is part of the ongoing spectrum auction (see Section IV.iii, *infra*). However, since the spectrum concerned is still used in neighbouring countries for DTTV broadcast, some interference might be expected in areas close to the border. Realistically, nationwide mobile telecommunication services in this spectrum might be expected from 2014 to 2015.

iii Spectrum auctions and fees

Initiated in November 2010, the long-awaited spectrum auction was first planned to take place in summer 2011, but was postponed in January 2011, due to a number of initial flaws of the auctioning process. In May 2011, the ComCom decided that the auction should take place in the first quarter of 2012 and that it would embrace all mobile frequencies, including the existing 900/1,800MHz GSM concessions (expiring at the end of 2013) and 2,100/2,600MHz UMTS concessions (expiring at the end of 2016). The new concessions will be technology-neutral and last until 2028 in order to allow for long-term investment. It will be up to the providers to decide which technology to implement on these frequencies, the focus naturally being on 4G or LTE. At the most conservative estimate, the auction is expected to generate revenues of a total of 637 million Swiss francs.

The following frequencies are part of the ongoing spectrum auction:

Spectrum	Category	Licence term	# Lots	Lot size	Minimum price (million Swiss francs) per	
					Lot	Category
Digital dividend	A: 800MHz	1/1/2013 to 31/12/2028	6	2 x 5 MHz	21.3	127.8
GSM (900)	B: 900 MHz	1/1/2014 to 31/12/2028	7	2 x 5 MHz	21.3	149.1
GSM (1,800)	C: 1,800MHz	as of now to 31/12/2028	1	2 x 10MHz	16.6	16.6
	D: 1,800MHz	1/1/2014 to 31/12/2028	13	2 x 5MHz	7.1	92.3
UMTS	E: 2,100MHz TDD	as of now to 31/12/2028	1	1 x 5MHz	4.15	4.15
	F: 2,100MHz TDD	1/1/2017 to 31/12/2028	3	1 x 5MHz	2.7	8.1
	G: 2,100MHz FDD	as of now to 31/12/2028	3	2 x 5MHz	8.3	24.9
	H: 2,100MHz FDD	1/1/2017 to 31/12/2028	9	2 x 5MHz	5.4	48.6
	I: 2,600MHz FDD	as of now to 31/12/2028	14	2 x 5MHz	8.3	116.2
	J: 2,600MHz TDD	as of now to 31/12/2028	3	1 x 15MHz	12.45	37.35
	K: 2,010–2,025MHz	as of now to 31/12/2028	1	1 x 15MHz	12.45	12.45
<i>Total (million Swiss francs)</i>						637.55

In July 2011, the OfCom published the tender documents, with an application period until the end of September 2011. The initial problems have been addressed and new regulations have been introduced regarding spectrum caps, the migration process and the mode of payment:

- a In order to avoid monopolisation of a specific frequency, spectrum caps have been introduced, limiting the allocated frequency spectrum per tenderer. In addition, an ‘overall cap’ of 50 per cent of all duplex frequencies has been introduced in order to prevent a tenderer with enough financial bidding power – meaning Swisscom – from gaining control over too large a spectrum of these frequencies essential for the new 4G services (LTE).
- b Since a tenderer might purchase in the auction a GSM frequency, which is still in use by another provider, the migration process and corresponding time frame for the migration of such frequencies after the expiration of the current concessions at the end of 2013 had to be extended.
- c Even though a tenderer might purchase a concession in 2012, it might not be able to use the allocated frequencies before 2014 (GSM) and 2017 (UMTS). OfCom did not change this mode of payment, despite the providers’ complaints. At least it lowered the bank guarantee to be provided by any tenderer to 50 per cent of the lowest bid of the frequency tendered for.

However, since France Télécom is looking to sell Orange (Switzerland), it is not entirely clear whether the auction will take place as planned. The 3G auction in 2000 was already postponed due the merger of (then) diAx and Sunrise. The ComCo has already announced that a sale of Orange shortly before the auction would probably lead to a further postponement until any possible competition issues have been addressed.

V MEDIA

i Restrictions on the provision of service

As from the restatement of the Federal Act on Radio and Television (RTVA),¹⁸ in 2007, the provision of content and the transmission of content via cable or mobile networks are regulated separately. Must-carry rules secure access to cable broadcast infrastructure for the content providers listed below (RTVA, Article 59f), and all other content providers' access to the broadcasting infrastructure is subject to commercial agreements with the infrastructure provider. Content providers who benefit from must-carry rules are:

- a* SRG;
- b* all Swiss stations that have been accorded a special mandate (often subsidised);
- c* foreign stations with special contribution to education, cultural development or free opinion-forming (free speech); and
- d* all stations serving a special public interest, subject to capacity restrictions and for a limited time only.

SRG is (technically) a non-profit organisation, funded through radio and television licence fees levied upon every owner of a TV or radio. The convergence of digital content has led to fees also being charged for broadband connections and computers, leading to public outrage and starting discussions about whether to change the licence fee system or to abolish it altogether.

SRG raised further concerns for private content providers (e.g., publishing companies) by extending its government-financed services from its legally prescribed area of television broadcasting to providing written and multimedia content over the Internet. The provision of such Internet content is permitted under the current concession, as long as it is 'in direct temporal and thematic relation to a broadcast and necessary for the support of the constitutional programme service obligation'. However, private publishers have been concerned that the web-based services of SRG extend into areas beyond its constitutional mandate (e.g., user-generated content such as blogs, interactive content, advertising, webshops, etc.), thus competing with their efforts to establish fee-based news and related services on the Internet. The debate continues, but OfCom published a study in March 2011 ascertaining that SRG's services are well within the legal mandate, with only a small percentage of them being in what the study calls 'grey areas'.

18 www.admin.ch/ch/e/rs/c784_40.html (English).

ii Digital switchover

The digital switchover has led to widespread discontent due to the fact that providers (most prominently Swisscom and UPC Cablecom) have the first and last call on the choice of set-top boxes. Consumer groups have advocated to introduce a new article to the RTVA, currently under revision, to provide for free choice in digital receivers. However, the parliament decided in April 2011 against such regulation. After a lengthy struggle, the Price Supervisor did at least achieve a price reduction of 33 per cent from UPC Cablecom for the rental of such set-top boxes (their purchase not being possible).

iii Internet-delivered video content

Swiss copyright law¹⁹ allows for IP-based retransmission of TV programmes to the extent that (1) the programme may be legally received in Switzerland, (2) the retransmission is simultaneous and (3) without any change (CopA, Article 22). Such retransmission is subject to a permission by one of the collecting societies (Swissperform) and payment of a use-based fee.

On a large scale, the telecommunications providers have entered the market with such IP-based TV (Swisscom TV, Orange TV and Sunrise mobile TV). A completely new market has been opened up by such innovative Swiss newcomers as Zattoo (a P2P IPTV service) or Wilmaa (a server-based in-browser streaming TV service). A number of niche providers also exist serving expatriates in Switzerland with programmes from their home countries.

iv Mobile services

The growing demand for mobile media services has had an impact on spectrum policy, freeing up the Digital Dividend frequencies and making them available for future services such as 4G or LTE by including them in the ongoing spectrum auction.

VI THE YEAR IN REVIEW

The most prominent development during the past year is surely the postponement of the mobile spectrum auction showing again how slowly legislators and regulators act in such a fast-moving market. Also, the prohibition of the Orange/Sunrise merger is of note, as well as the reversal of a sanction of 333 million Swiss francs on Swisscom for abuse of market power. Furthermore, some interconnection disputes and the slow but steady implementation of FTTH infrastructure (with its particular four-fibre model) should be mentioned.

Regarding data protection and surveillance issues, the privacy case against Google Street View has raised quite some questions, as have the recognition of dynamic IP addresses as personal data falling under the protection of the DPA and the decision that there is currently no legal grounds for surveillance of Internet traffic in Switzerland.

19 Federal Act on Copyright and Neighbouring Rights ('the CopA'), www.admin.ch/ch/d/sr/c231_1.html (German).

VII CONCLUSIONS AND OUTLOOK

The most interesting development in 2012 will be the outcome of the mobile spectrum auction, planned for the first quarter of 2012. Also, France Télécom is looking to sell Orange (Switzerland), possibly to the current owners of UPC Cablecom, a transaction that might affect competition in the otherwise quite slow mobile communication market, but will be reviewed closely by the ComCo.

Another big issue will be the ongoing revision of the telecommunication ordinance, especially regarding the change of the relevant calculation basis for interconnection and access prices, promoted by Sunrise and strongly contested by Swisscom.

Last but not least, the ongoing revision of the post and telecoms surveillance ordinance might cause quite some debate as it will likely induce heavy financial burdens on telecommunication providers.

Appendix 1

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Hans Rudolf Trüeb was educated at the Universities of Zurich and Berkeley (California). He was admitted to the Bar in 1993. His areas of expertise include telecoms and IT law as well as public sector law where he is a prominent litigator and arbitrator. He has also led a great number of corporate transactions in the technology field as well as outsourcing transactions (both IT and BPO).

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At Walder Wyss, Dr Klaus is part of the intellectual property, information technology and competition team. Having written his doctoral thesis on the deregulation of network-based infrastructure, his preferred areas of practice include technology, telecoms, energy, competition and procurement law, with an emphasis on infrastructure and network markets, new media and information technology.

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