Further Information

Forward-looking investments to ensure the best network for our customers.

Wireline

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Swisscom Group five-year review

Glossary

Technical terms

ADSL (Asymmetric Digital Subscriber Line): A broadband data transmission technology that uses the existing copper telephone cable for broadband access to the data network. Filters at the customer end and in the network prevent mutual interference, allowing traditional analogue telephony and data transmission to exist in parallel. Depending on the line length and other factors, the transmission speed varies between 150/50 kbps and a maximum of 6,000/600 kbps.

All IP: All-IP is the technology behind the transition to a single unified network based on the Internet Protocol (IP). All-IP means that all services such as television, the Internet or telephony run over the same IT network based on the Internet Protocol. Phone calls are no longer transmitted using analogue signals but instead take the form of data packets, as is the case with Internet services. Thanks to the unified All-IP network infrastructure, devices and services can communicate with one another and exchange data. In the medium and long term, Swisscom intends to migrate all existing communications networks to IP to enable all telecommunications services (telephony, data traffic, TV, mobile communications, etc.) to be offered over IP.

Bandwidth: Bandwidth refers to the transmission capacity of a medium; also known as the data transmission rate. The higher the bandwidth, the more information units (bits) can be transmitted per unit of time (second): bps, kbps, Mbps.

Connectivity: Connectivity is the generic term used to denote IP services or the connection to the Internet and the ability to exchange data with any partner on the network.

DSL (Digital Subscriber Line): DSL is the generic term for transmission technologies that use subscriber lines based entirely or partly on copper. Examples of DSL technologies: ADSL or VDSL.

EDGE (Enhanced Data Rates for GSM Evolution): EDGE is a radio modulation technology used to enhance data transmission speeds in GSM mobile networks. EDGE enables data transmission speeds of up to 256 kbps. Today EDGE covers 99.8% of the Swiss population.

FTTH (Fibre to the Home): FTTH refers to the end-to-end connection of homes and offices using fibre-optic cables instead of traditional copper cables.

FTTS (Fibre to the Street)/FTTB (Fibre to the Building)/FTTC (Fibre to the Curb): FTTS, FTTB and FTTC with vectoring for VDSL2 refer to innovative, hybrid broadband connection technologies (optical fibre and copper). With these technologies fibre-optic cables are laid as close as possible to the building, or up to the basement in the case of FTTB, while the existing copper cabling is used for the remaining section. VDSL's subsequent evolution to G.fast will significantly increase bandwidths for FTTS and FTTB.

G.fast: G.fast, the latest technology for copper lines, is capable of providing far more bandwidth than VDSL2. The use of G.fast for FTTS and FTTB is part of Swisscom's access strategy. This technology is currently being standardised by the ITU-T.

GPRS (General Packet Radio Service): GPRS significantly accelerates the transmission speed in GSM mobile communications networks. GPRS enables speeds of 30 to 40 kbps.

GSM (Global System for Mobile Communications) network: GSM is a global digital mobile communications standard which, in addition to voice and data transmission, enables services such as SMS messaging and connections to and from countries abroad (international roaming).

HSPA (High Speed Packet Access): HSPA is a further development of the UMTS mobile communications standard. HSPA enables compared to UMTS large volumes of data to be transmitted at faster speeds and allows far more customers to use the same radio cell simultaneously and at a consistently high speed than would be possible with UMTS. At locations where mobile Internet use is particularly concentrated, HSPA is upgraded to HSPA+ (also referred to as HSPA Evolution). The maximum transmission speed currently delivered by this technology is 42 Mbps.

ICT (Information and Communication Technology): A collective term coined in the 1980s denoting the convergence of information technology (information and data processing and the related hardware) and communication technology (technically aided communications).

IP (Internet Protocol): IP enables different types of services to be integrated on a single network. Typical applications are virtual private networks (VPN), telephony (Voice over IP) and fax (Fax over IP).

IPTV (Internet Protocol Television): IPTV refers to the digital broadcasting of broadband applications (for example, television programmes and films) over an IP network.

ISP (Internet Service Provider): An ISP is a provider of Internet-based services; also commonly referred to as Internet Provider. Services include Internet connection (using DSL, for example), hosting (registration and operation of Internet addresses, websites and web servers) and content provision.

LAN (Local Area Network): A LAN is a local network for interconnecting computers, usually based on Ethernet.

4G/LTE (Long Term Evolution): 4G/LTE is the successor technology to HSPA and stands for fourth-generation mobile technology. At present, LTE enables mobile broadband data speeds of up to 150 Mbps.

MVNO (Mobile Virtual Network Operator): MVNO is a business model for mobile communications in which a company (the MVNO) with no network infrastructure or a limited network infrastructure is able to access the infrastructure of other mobile communications providers.

Optical fibre: Fibre-optic cables enable optical data transmission, unlike copper cables, which use electrical signals to transmit data.

OTT (Over the Top): OTT refers to content distributed by service providers over an existing network infrastructure without operating the infrastructure themselves. OTT companies offer proprietary services on the basis of the infrastructures of other companies in order to reach a broad range of users quickly and cost-efficiently.

PWLAN (Public Wireless Local Area Network): A PWLAN is a public local area network based on the IEEE802.11 Wi-Fi set of standards. Swisscom customers enjoy PWLAN access at more than 2,000 hotspots in Switzerland and over 65,000 worldwide. A PWLAN typically offers data transmission speeds of 5-10 Mbps.

Roaming: Roaming enables mobile network subscribers to use their mobile phones when travelling abroad. The mobile telephone of a subscriber outside Switzerland automatically selects the best-quality partner network. Information indicating the country and region where the mobile phone is located at any given time is sent to the exchange in Switzerland where the mobile phone is registered. On receipt of the calling signal, the exchange in Switzerland transmits it within a fraction of a second to the right region in the respective country, where the signal is forwarded to the base station in whose vicinity the mobile phone is located. The base station then forwards the signal to the mobile phone and the call can be taken. Roaming only works if all countries involved operate on the same frequency bands. In Europe all GSM networks use the same frequency bands. Other countries such as the USA or countries in South America use a different frequency range. Most mobile telephones today are triband or quadband and support 900 MHz and 1,800 MHz networks (which are most commonly used in Europe) as well as 850 MHz and 1,900 MHz networks.

Router: A router is a device for connecting or separating several computer networks. The router analyses incoming data packets according to their destination address, and either blocks them or forwards them accordingly (packet routing). Routers come in various sizes: from large-scale network devices to small devices for the home.

TDM (Time Division Multiplex): Multiplexing is a method which allows the simultaneous transmission of multiple signals over a single communications medium (line, cable or radio link), for example, by means of classic telephony (using an ISDN or analogue line). Multiplexing methods are often combined to achieve even higher utilisation. The signals are multiplexed once the user data have been modulated on a carrier signal. At the receiver end they are then demultiplexed and demodulated.

UMTS (Universal Mobile Telecommunications System): UMTS is an international third-generation mobile communications standard that combines mobile multimedia and voice services. A further development of GSM, UMTS complements GSM and Public Wireless LAN in Switzerland. Today the UMTS network covers around 98% of the Swiss population.

Unified Communications: An attempt to integrate the wide variety of modern communication technologies. Different telecommunication services such as e-mail, unified messaging, telephony, mobile, PDAs, instant messaging and presence functions are coordinated to enhance the reachability of dispersed communication partners, thereby speeding up business processes.

Vectoring: This technology is used in conjunction with VDSL2 to eliminate interference between copper wire pairs and enable bandwidths to be increased by as much as a factor of two.

VDSL (Very High Speed Digital Subscriber Line): VDSL is currently the fastest DSL technology, allowing data transmission speeds of up to 100 Mbps. The current version of VDSL is called VDSL2.

Video on Demand: A service that allows subscribers to choose from a selection of films and to watch the selected film at any time. The film is delivered to the subscriber either over the broadband cable network, over the original telephone network (DSL transmission), or over the new fibre-optic network (optical transmission).

VoIP (Voice over Internet Protocol): VoIP is used to set up telephone connections over the Internet.

VPN (Virtual Private Network): Nowadays VPN is generally used to refer to a virtual IP network (usually encrypted) that acts as a closed subnetwork within another IP network (usually the public Internet).

WLAN (Wireless Local Area Network): A WLAN is a network that connects several computers wirelessly and links them to a central information system, printer or scanner.

Networks

Leased lines: Swisscom operates various data networks that support leased lines based on a range of different technologies such as SDH (Synchronous Digital Hierarchy) and, of course, Ethernet. Business customers can take advantage of permanent, overload-free point-to-point connections using bandwidths of between 2 Mbps and 10 Gbps. Redundancies are tailored to customers' individual requirements in terms of availability and security.

Next-generation network: To enable more cost-effective use of new services such as VoIP and convergent solutions in the future, Swisscom is investing in a network infrastructure that is based exclusively on All-IP. This infrastructure allows Swisscom to offer services irrespective of the type of access technology selected (copper, wireless or fibre optic). Having migrated the data transport network to IP, commissioned an IP-based telephony and multimedia platform, and launched its first IP-based services such as Swisscom TV and VoIP, Swisscom has already gained experience in All-IP offerings. The first products based solely on IP were already rolled out in 2009 and supplemented since then by a wide range of new services and bundled offerings.

PSTN network: The PSTN network connects virtually all private households and a large proportion of business customers in Switzerland. Four-fold redundancy in the core network and two-fold redundancy in the switching layer ensure excellent voice quality and optimum security and availability.

Transport network: The transport network is a wide area network that connects the regional parts of the fixed network as well as the regional parts of the mobile network with each other as well as with the respective central network core. It also provides the link to computer centres and the global Internet. The transport network is used for all services (voice, video and data) and all customers (residential/business).

Wired access network: Swisscom's copper access network largely consists of twisted copper-wire pairs and extends to virtually every household in Switzerland. Swisscom began with the expansion of optical fibre to homes and offices (FTTH) in 2008. It started rolling out broadband technology in 2000, first based on ADSL (coverage at end-2013: 98%), then in 2006 based on VDSL2 (coverage at end-2013: over 91%) and in 2008 based on optical fibre technology (coverage at end-2013: FTTB in more than 750,000 homes and businesses). To fulfil its mandate for basic broadband provision, Swisscom also uses wireless technologies such as UMTS and satellite. At present, ADSL is mainly used to provide Internet access. Internet access using very high bandwidths and more broadband-intensive services such as IPTV and video telephony are transmitted only over VDSL2 or optical fibre. A million customers are already using Swisscom's IPTV, and more than 85% enjoy at least one channel in HD quality (high-definition TV). At the end of 2013 Swisscom launched a service on the fibre-optic network offering speeds of 1 Gbps.

Wireless access network: Swisscom operates a nationwide mobile network in Switzerland. The mobile services it provides are based on GSM, UMTS and LTE, the dominant digital standards across Europe and much of the world. Swisscom has implemented different technologies that enable transmission between handsets and base stations. In 2005, it enhanced all active GSM antennas with EDGE technology, a further development of GPRS. EDGE enables bandwidths of between 150 and 200 kbps and currently covers 99% of the Swiss population. Swisscom began rolling out UMTS as far back as 2004, and since 2006 has continued to expand its mobile network using HSPA/HSPA+. This allows download speeds of up to 42 Mbps. By the end of 2013, UMTS/HSPA covered around 98% of the Swiss population. Swisscom took another major step in 2011 when it became the first mobile provider in Switzerland to launch a field trial with LTE. Swisscom's launched its 4G/LTE offerings on the Swiss market in December 2012 and has since extended coverage to 85% of Swiss households. With LTE currently supporting bandwidths of up to 150 Mbps, Swisscom already has the fastest mobile network in Switzerland and is aiming to further extend this technological lead.

Other terms

BSA (bit stream access): Regulated bit stream access is a high-speed link which Swisscom sets up on the last mile (on a metallic pair cable from the local exchange to the home) and makes available to other telecoms service providers (TSP) as an upstream service at a price regulated by the government. TSPs can use this link, for example, to offer their customers broadband services or fast Internet access.

Collocation: Collocation is governed by the Ordinance on Telecommunications Services (Verordnung über Fernmeldedienste, FDV). The market-dominant provider offers alternative providers non-discriminatory access to the required locations so that they can use the location and install and operate their own telecommunications systems at that location.

ComCo (Competition Commission): ComCo enforces the Federal Cartel Act, the aim of which is to safeguard against the harmful economic or social impact of cartels and other constraints on competition in order to foster competition. ComCo combats harmful cartels and monitors market-dominant companies for signs of anti-competitive conduct. It is also responsible for examining mergers and issuing statements of position on official decrees that affect competition.

ComCom (Federal Communications Commission): ComCom is the decision-making authority for telecommunications. Its primary responsibilities include issuing concessions for use of the radio frequency spectrum as well as basic service licences. It also provides access (unbundling, interconnection, leased lines, etc.), approves national numbering plans and regulates the conditions governing number portability and freedom of choice of service provider.

COSO/COSO ERM (Committee of Sponsoring Organizations of the Treadway Commission): COSO is a voluntary, private-sector US organisation whose goal is to improve the quality of financial reporting through ethical conduct, effective internal controls and good corporate management. The Enterprise Risk Management (ERM) Framework is an extension of COSO's Internal Control Framework.

ERM (Enterprise Risk Management): ERM is a Group-wide management system that ensures the assessment, handling and reporting of significant risks at Group level as well as Group-company level.

Ex-ante: In an ex-ante regime, the particulars of the regulated offerings (commercial, technical and operating conditions) must be approved by a government authority (authorisation obligation). The conditions approved by the authority (for example, price) are known to the parties using the regulated services. There is legal provision for the affected providers to establish that the price has been correctly determined.

Ex-post: In an ex-post regime, the parties must agree all possible aspects of the contractual content (primacy of negotiation). In the event of a dispute, the authorities decide only on the points on which the parties have been unable to agree (objection principle).

FTE (full-time equivalent): Throughout this report, FTE is used to denote the number of full-time equivalent positions.

Full access: Full access in connection with unbundling means providing alternative telecommunications service providers with access to subscriber lines for the purpose of using the entire frequency spectrum of metallic pair cables.

Hubbing: Hubbing relates to the trading of telephone traffic with other telecommunication operators.

Interconnection: Interconnection means linking up the systems and services of two TSPs so as to enable the logical interaction of the connected telecoms components and services and to provide access to third-party services. Interconnection allows the customer of one provider to communicate with the subscribers of another provider. Under the terms of the Federal Telecommunications Act, market-dominant TSPs are required to allow their competitors interconnection at cost-based prices (LRIC, see below).

ISO (9001, 14001–14064, 15504, 27001, 31000): The International Organization for Standardization (ISO) draws up international standards in all fields with the exception of electricity and electronics, for which the International Electrotechnical Commission (IEC) is responsible, and with the exception of telecommunications, for which the International Telecommunication Union (ITU) is responsible. Together, these three organisations form the WSC (World Standards Cooperation). The relevant ISO standards are ISO 9001 Quality Management System – Requirements; ISO 14001 to ISO 14064 Environmental Management System; ISO 15504 Software Process Improvement and Capability Determination (SPICE); ISO 27001 Information Technology – IT Security Techniques – Information Security Management Systems – Requirements; ISO 31000 Risk Management Principles and Guidelines. These standards govern the principles and general requirements for the risk management process.

Last mile: Also referred to as the local loop, the last mile denotes the subscriber access line between the subscriber access point and the local exchange. In Switzerland, as in most other countries, access to the last mile is regulated (unbundling).

LRIC (Long-Run Incremental Costs): LRIC is the method defined by the Ordinance on Telecommunications Services (Verordnung über Fernmeldedienste, FDV) for calculating regulating prices. It is future-oriented and therefore creates economically efficient investment incentives.

OFCOM (Federal Office of Communications) OFCOM deals with issues related to telecommunications and broadcasting (radio and television), and performs official and regulatory tasks in these areas. It prepares the groundwork for decisions by the Federal Council, the Federal Department for Environment, Transport, Energy and Communications (DETEC) and the Federal Communications Commission (ComCom).

Termination charges: Termination charges are levied by a network operator for forwarding calls to another third-party network (e.g. calls from Orange to Swisscom or from Sunrise to Orange).

Unbundling: Unbundling of the last mile (Unbundling of the Local Loop, ULL) enables fixed-network competitors without their own access infrastructure to access customers directly at non-discriminatory conditions based on original cost. The prerequisite for ULL is the presence of a market-dominant provider. There are two types of unbundling: Unbundling at the exchange (unbundling of the local loop/ULL or LLU, referred to as TAL in Switzerland), currently available at around 600 unbundled locations, and unbundling at the neighbourhood distribution cabinet (sub-loop unbundling, referred to as T-TAL in Switzerland), in which Swisscom's competitors have so far shown no interest.

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In CHF million, except where indicated		2009	2010	2011	2012 [1]	2013
Net revenue and results						
Net revenue		12,001	11,988	11,467	11,384	11,434
Operating income before depreciation and amortisation (EBITDA)		4,702	4,599	4,584	4,477	4,302
EBITDA as % of net revenue	%	39.2	38.4	40.0	39.3	37.6
Operating income (EBIT) before impairment losses on goodwill		2,707	2,627	2,681	2,527	2,258
Operating income (EBIT)		2,707	2,627	1,126	2,527	2,258
Net income		1,938	1,788	694	1,815	1,695
Share of net income attributable to equity holders of Swisscom Ltd		1,941	1,813	683	1,808	1,685
Earnings per share	CHF	37.47	35.00	13.19	34.90	32.53
Balance sheet and cash flows						
Equity at end of year		6,212	5,350	4,296	4,717	6,002
Equity ratio at end of year	%	28.0	25.4	22.1	23.8	29.3
Cash flow provided by operating activities		4,395	4,024	3,951	4,245	4,131
Capital expenditure in property, plant and equipment and other intangible assets		1,987	1,903	2,095	2,529	2,396
Net debt at end of period		9,141	8,848	8,309	8,071	7,812
Employees						
Full-time equivalent employees at end of year	number	19,479	19,547	20,061	19,514	20,108
Average number of full-time equivalent employees	number	19,813	19,464	19,832	19,771	19,746
Operational data at end of period						
Fixed access lines in Switzerland	in thousand	3,391	3,233	3,120	3,013	2,879
Broadband access lines retail in Switzerland	in thousand	1,478	1,584	1,661	1,727	1,811
Mobile access lines in Switzerland	in thousand	5,602	5,828	6,049	6,217	6,407
Swisscom TV access lines in Switzerland	in thousand	232	421	608	791	1,000
Unbundled fixed access lines in Switzerland	in thousand	153	255	306	300	256
Broadband access lines in Italy	in thousand	1,644	1,724	1,595 [2]	1,767	1,942
Swisscom share						
Par value per share at end of year	CHF	1.00	1.00	1.00	1.00	1.00
Number of issued shares at end of period	in million of shares	51.802	51.802	51.802	51.802	51.802
Market capitalisation at end of year		20,491	21,296	18,436	20,400	24,394
Closing price at end of period	CHF	395.60	411.10	355.90	393.80	470.90
Closing price highest	CHF	400.90	420.80	433.50	400.00	474.00
Closing price lowest	CHF	293.50	358.00	323.10	334.40	390.20
Ordinary dividend per share	CHF	20.00	21.00	22.00	22.00	22.00 [3]
Ratio payout/earnings per share	%	53.38	60.00	166.79	63.04	67.63

[1] Amendements to IAS 19 revised, restated from 2012.
[2] As a result of the settlement of litigations Fastweb reduced the number of access lines by 197,000.
[3] In accordance with the proposal of the Board of Directors to the Annual General Meeting.

Publishing details

The Annual Report is published in English,
French and German.