Municipalities switch to All IP

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Municipalities undertake a broad range of communication tasks, making their demands with respect to their communication infrastructure numerous and wide-ranging. Municipalities therefore need to pay particular attention when approaching the topic of switching to All IP.

Global switch to All IP

With All IP, Swisscom is providing the technical basis for the digitization of Switzerland as a business location and thus for its customers to remain competitive. Thanks to All IP, they are always connected to all their services and data on all their devices. By the end of 2017, nearly all of Swisscom's residential customers and most business customers in Switzerland had switched to All IP. Starting in 2018, the complete switch to IP will be made in larger regions all over Switzerland. The conversion will start with the Solothurn/Biel/Jura and Schaffhausen/Winterthur regions, followed by Olten/regions in Aargau and the metropolitan area of Rapperswil/Jona, Glarus and Zug. The other regions are currently in the planning stages and will be notified in due course. Swisscom recommends that all business customers switch to IP now.

Unlocked potential for municipalities thanks to All IP

The switch to All IP offers great potential for municipalities. Processes and communication can be optimised and improved, in particular when it comes to cooperation between municipal administrations, municipal offices, local councils and community-based infrastructure systems. The new IP-based solutions allow for communication and cooperation regardless of location, time and device – resulting in more efficient cooperation overall.

Overview of the most important issues in your municipality

Swisscom is there to support you during the conversion. Below is an overview of the most important topics your municipality should deal with as quickly as possible regarding the switch.

Municipality telephone system	Frequently, the administration department is equipped with a telephone system. If it still uses the conventional land line network (e.g. ISDN or primary connections), the system must be converted to IP. In most cases this switch is easy. Many current systems are IP-ready. More information for small and medium-sized municipalities: www.swisscom.ch/ip-kmu
	For large cities and administrations: https://www.swisscom.ch/de/business/enterprise/themen/work-smart/all-ip.html

Specialised applications for lifts/alarms Fax/franking machine Building service control systems	Municipalities quite frequently use specialised applications as well. Mandatory systems (e.g. fire alarm systems) are alarm systems required to comply with specific standards. If they still use a conventional landline network (mostly EconomyLINE), they need to be switched. The provider setting up the system can be of help here. Lift phones connected to the conventional landline network need to be switched as well. Swisscom recommends discussing the conversion with the lift service provider. Alternatively, the Swisscom partner can switch the lift system to Swisscom Line Basic with outage protection. For more information go to: www.swisscom.ch/ausfallsicherung
Water supply	Water supply and disposal systems are frequently equipped with remote monitoring and remote maintenance. Some of them are already IP-based but still use voice mail transmitted via analogue lines for setting off the alarm. Contact the system supplier, as they will be familiar with the topic and can give sound advice to the municipality. Frequently, the system is then switched to the Smart Business Connect product from Swisscom, offering a choice of Internet, telephony and fixed IP addresses.
Civil defence system and military installations	In cooperation with Swisscom, the Federal Office for Civil Protection (FOCP) developed a scheme that provides for three location types and proposes one of the following solutions: - **Planned key locations:** Smart Business Connect Trunk (SIP Direct) and Swisscom Line Basic (emergency connection) - **Active existing key locations**: Smart Business Connect Trunk (SIP-to-ISDN box) and Swisscom Line Basic (emergency connection) - **Remaining locations:** Swisscom Line Basic In collaboration with Swisscom, the FOCP has developed a plan comprising concrete solutions: "All IP @ FOCP; the IP migration strategy for existing individual PSTN lines in civil protection facilities".
Siren alarm	In the past, siren systems used an analogue connection through the Infranet. Nowadays, sirens are connected to the federal Polycom network and are therefore not affected by the switch to IP.
Public safety organisations (fire brigade, police, pager)	Delivery of emergency calls to public safety organisations is usually organised by the cantons. Swisscom recommend that cantons select the Enterprise SIP unbundled product with implementation based on the LAN infrastructure with First and Dualnet. In addition to the actual emergency call transmission, it is important to check whether public safety organisations are equipped with other systems based on the conventional landline network: basic telephony, burglary and fire alarm systems, access systems, etc. Pager systems may also be affected by the switch. The conversion process can be discussed with the supplier of the pager system.

Additional topics to keep in mind with the switch:

Autonomy of power for mobile radio and landline networks	Most of the macro antennas in the Swisscom mobile radio network are supported by a battery backup lasting one hour. You can go to www.swisscom.ch/battery to check whether a location is covered by battery backup. The IP landline network is for the most part covered by battery backup as well. Not all locations in the fibre network are equipped with emergency power backup for technical reasons. Affected are in particular FTTB (fibre-to-the-building) locations, where Swisscom does not provide any emergency power supply at the customer's building. For this reason, Swisscom always recommends a secondary solution via mobile radio network for simple emergency communication. The outage protection via mobile radio network may be ordered separately with the Smart Business Connect, inOne or Swisscom Line Basic/Company products. For highly critical connections, it is important to define the right solutions within the context of a project.
Broadband expansion	Swisscom has been investing an average of approximately CHF 1.75 bn into network expansion for years; it is also upgrading the landline network in more than 300 municipalities each year, at least 30 of them in rural areas. Swisscom intends to have upgraded the broadband landline network in every Swiss municipality by the end of 2021. Go to www.swisscom.ch/checker to check the availability of broadband at each location. You will also find our plans for expansion. Broadband expansion is not a prerequisite for making the switch to IP. In most cases, the current broadband widths are sufficient, which is the reason that the switch to IP can be completed even before the broadband expansion.
Additional contacts	- The Swisscom partner supporting the municipality - Swisscom account manager - The contact from Swisscom municipality accounting

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www.swisscom.ch/ip