

FEDERAL OFFICE OF COMMUNICATIONS (OFCOM)
STATE SECRETARIAT FOR ECONOMIC AFFAIRS (SECO)

USE OF BROADBAND BY SMALL ENTERPRISES

INFRAS

Final Report Summary

Zürich, December 2012

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INFRAS - RÉSUMÉ EN.DOCX

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SUMMARY

STARTING POINT, OBJECTIVE

Modern high-speed telecommunications networks play an important role in the economic and social development of Switzerland. In the legislature plan for 2011-2015 and in the strategy for an information society, the Federal Council has set itself the goal of further extending powerful and open telecommunications networks. Against this background, OFCOM set up the "High-speed Broadband/Next Generation Access" working group. The working group aims firstly to map the provision of high-speed broadband services¹ geographically in Switzerland and to make it accessible to the various interested parties (mapping) and secondly to draw up a guide for public authorities. Thirdly, the demand among small enterprises in particular for high-speed broadband should be determined. For this purpose, in April 2012 OFCOM and SECO commissioned a qualitative study from INFRAS. The following questions were to be clarified in the context of personal interviews within small enterprises:

- › How are small businesses connected to the internet and which applications do they use?
- › How satisfied are the businesses with the offerings and to what extent are their needs being met?
- › How extensive is the technical knowledge of the businesses and do they encounter any difficulties in relation to the use of telecommunications services?

Forty small businesses employing between 3 and 49 people in urban and rural regions were interviewed locally. The survey adopted a deliberately qualitative approach with no claim to be representative of the whole of Switzerland and all sectors.

RESULTS

A broadband connection is standard

In virtually all the businesses interviewed, the internet and internet applications play an important role in business activities. All the businesses have a broadband internet connection with a download speed of at least 1 Mbit/s. Low speeds of less than 1 Mbit/s have now virtually disappeared, but at the same time connections with speeds over 50 Mbit/s are still rare. Between town and country, there are only minor differences in provision in the surveyed regions. The bandwidths needed by businesses today are available virtually nationwide in most cases, not only in urban areas but also in rural areas too. The choice of different access technologies and speeds is,

¹ In the present study, connections with download speeds over 1 Mbit/s are considered to be broadband, and speeds of 50 Mbit/s as high-speed broadband.

however, limited in comparison with the towns and cities. Whereas several technologies (ADSL/VDSL, cable, fibre) are available in the towns and cities, offerings in rural areas are generally limited to ADSL and VDSL connections. Very high bandwidths are not available there in all cases or only at very high cost. These outlying enterprises, however, do not demand these bandwidths or do not consider the disadvantages for their businesses as relevant.

In the businesses, the demand for high bandwidths does not depend on the business's location but rather on its activity or the sector in which it operates and the internet applications which are used. The businesses surveyed in rural areas do not see the internet connection currently available in their region as a major disadvantage in terms of location.

Internet applications widely used

Figure Z-1 illustrates the internet applications which the businesses surveyed use:

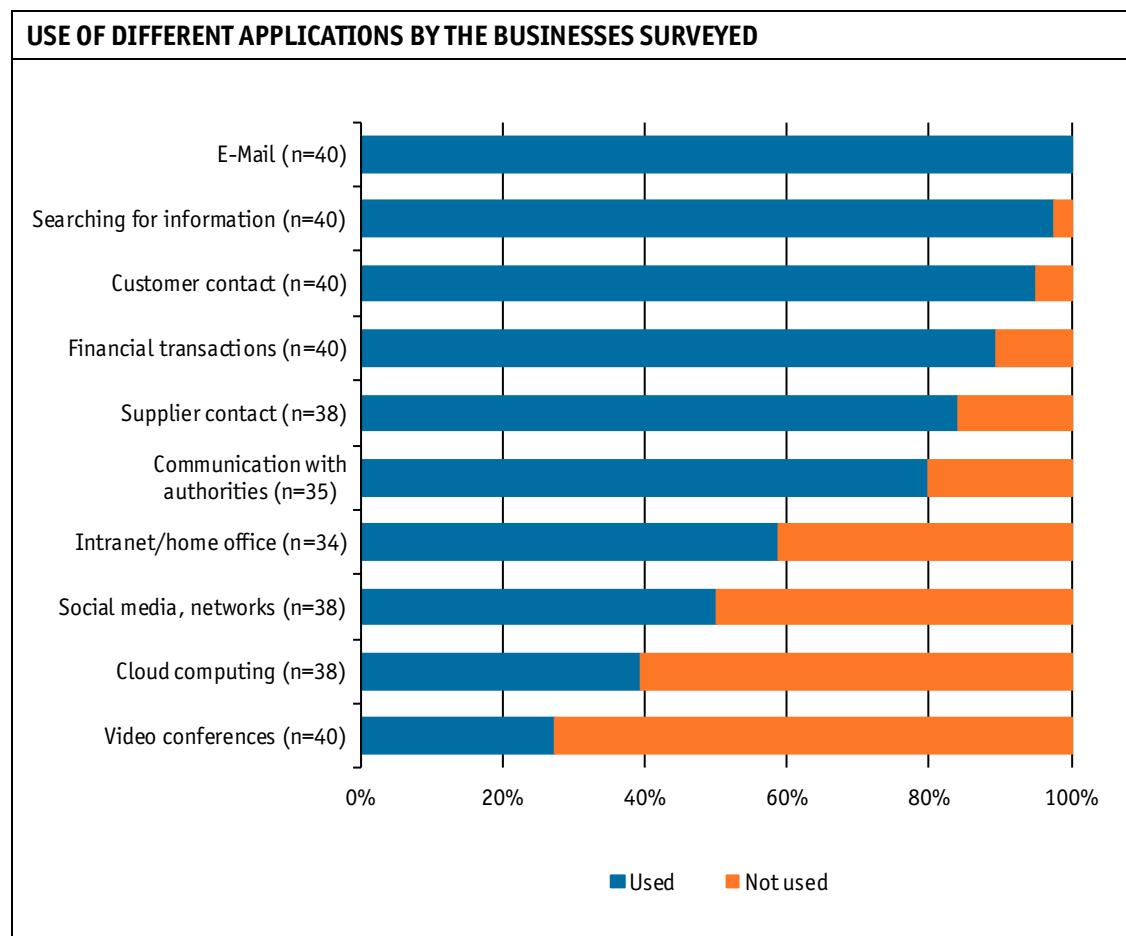


Figure Z1 n = number of responses. Example: there were 40 responses in the e-mail section. 40 businesses or 100% of the responding businesses use e-mail. Source: INFRAS survey.

E-mail and the internet have become established and are indispensable for commercial activity. Almost all businesses use the internet to search for information and also for market observations on a more or less regular basis. Internet purchasing has also become widespread, particularly for office supplies or IT equipment. Websites of public authorities are also actively used, e.g. electronic forms or billing.

Less widespread and strongly dependent on the sector in which the business operates, the competitive environment and customer needs are the internet sales channels of businesses, either in the form of simple order forms or elaborate web store solutions. Intranet and home office applications mirror this trend.

In the case of home office applications, however, the responses of the businesses indicate that these will become increasingly important in the future. At least, numerous businesses seem to be seriously considering their increased use.

Social media are known to the businesses and are used in some cases, but to date are of little importance.

IT know-how frequently sought from external providers

IT know-how is mostly concentrated in the management of businesses; the majority of the businesses surveyed were too small to have their own internal IT specialist. Approximately half of them therefore use the services of external IT experts to ensure the necessary know-how. These relationships play an important role for the businesses in that external providers can be contacted in emergencies, for example, or as consultants.

Lack of know-how, cautious attitudes and security concerns have a restrictive effect.

The vast majority of the businesses surveyed are satisfied with the products and services of their providers, though some small businesses want higher bandwidths, a wider selection or lower prices. These restrictions, however, do not seem to be serious problems from the current viewpoint of the businesses. Nowadays it is not so much the infrastructure which is holding back the use of high-speed broadband internet applications for small businesses but a lack of know-how, pragmatic and cautious use of ICT and some security concerns, especially in relation to cloud computing. Small businesses are open in principle to new applications, but do not want to take any unnecessary risks by endangering a proven system. Instead, they initially hold back and wait until an application has become established.

CONCLUSIONS AND RECOMMENDATIONS

Overall, small businesses are largely satisfied with current internet connectivity, the available bandwidths and the level of internal use of ICT. Acute shortcomings or major problems do not arise. As a rule there are currently only minor and insignificant differences between urban and rural areas. The differences are not deemed to be especially relevant by the businesses surveyed. From the perspective of the businesses surveyed, there is no acute need for action with regard to policy. However, the situation might change in the future if demand for bandwidth continues to increase as in recent years. In the light of this expectation, investments are currently being made in the cities in high-speed optical fibre or cable networks. On the other hand, it will probably take even longer in some rural areas before such high-speed networks are also there. Consequently it cannot therefore be excluded that in the medium to long term bottlenecks may arise in some rural areas. The Confederation, the cantons and municipalities should therefore monitor developments closely and, if necessary, examine possibilities for accelerated deployment in the peripheral zones.

At least today it is not the availability of the high-speed broadband infrastructure which represents a bottleneck for small businesses from the economic point of view. In order to make better use of the internet's innovation potential, first and foremost the knowledge and technical expertise of small businesses should be improved. Secondarily, the high-speed broadband offerings for small businesses should be more diverse and more attractive in terms of pricing. To this end we see three approaches at the policy level:

- 1) Provision of **unbiased information on and assistance** with ICT equipment and the use of ICT by small businesses.
- 2) Promoting **ICT skills and media skills** among decision-makers and employees in businesses, as well as in the population at large.²
- 3) Ensuring regulatory conditions for **functioning competition in infrastructure and services** for diverse and attractively priced high-speed broadband products.

² With regard to the term 'media skills' we rely on the European Commission definition. This covers the ability to use the media, to understand and critically assess the different aspects of the media and media content and to communicate in a variety of different contexts (COM 2007, 833).