

Switzerland's COVID-19 lockdown: 'Some networks are more crisis-resilient than others'

April 7 2020, by Emmanuel Barraud



Credit: CC0 Public Domain

Matthias Finger, an EPFL professor of network industry management, does not foresee water and power supply problems in Switzerland, even

with the country in lockdown. But internet access could prove more challenging.

Mediacom: Could the lockdown lead to blackouts in Switzerland?

I don't think so. Electricity consumption has actually fallen since people have been confined to their homes, and grids aren't overloaded. The [regulatory authority](#) is also keeping a close eye on supply capacity to make sure it matches demand, and ensuring energy firms like Swissgrid, the national grid company, are making the necessary [infrastructure](#) investments.

What about transport and water supply?

A similar model applies to rail infrastructure. The Swiss government is investing heavily in expanding the Swiss Federal Railways (SBB) [network](#). But there have been problems on the maintenance side in recent years, with the necessary work lagging behind owing to regulatory gaps and, to a lesser extent, poor management. Assessing the condition of the water supply infrastructure is much harder because the pipes and systems are often old and managed independently by local authorities. We don't have a national picture of network health and, perhaps more importantly, there's no national regulator. So we could face some surprises.

With so many people working from home, much of the economy has shifted online. Will the telecommunications infrastructure be able to cope?

Telecommunications is a case apart. There's long been an argument that,

because the sector is vibrant and innovative, public investment isn't needed and market forces should be allowed to run their course. But just as there were growing calls to regulate fixed [telephone services](#)—a monopoly until the 1990s—along came [mobile communications](#). Landline providers, which are still responsible for the underlying infrastructure we all need to get online, finally accepted that the market needed regulating given the rising competition. As a general rule, however, regulators don't concern themselves with network investment and maintenance. So perhaps the only people who can answer your question are the providers themselves. And they'll tell you everything is fine.

The Swiss government holds a majority stake in Swisscom, the country's leading telecommunications infrastructure provider. Does that make a difference?

The government may own 51% of Swisscom, but only an independent regulator can have a full picture of the situation and wield significant influence. What's more, Swisscom is shouldering the blame for the network congestion that happened when the country went into partial lockdown on 16 March, even though it could have been a more widespread issue. We've seen streaming service providers like YouTube and Netflix voluntarily reducing video quality in order to ease bandwidth pressure. The move may also have been an attempt to head off calls for a closer review of the state of our telecommunications infrastructure. After all, broadband and mobile networks are just as important to our economy and our society as electricity, transport and water.

Provided by Ecole Polytechnique Federale de Lausanne

Citation: Switzerland's COVID-19 lockdown: 'Some networks are more crisis-resilient than

others' (2020, April 7) retrieved 19 April 2024 from

<https://techxplore.com/news/2020-04-switzerland-covid-lockdown-networks-crisis-resilient.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.