

Telecom Outlook: Rising cyber threats a cause for concern, as well as a source of success

Cybercrime is a double-edged sword for the telecoms industry, which benefits from the rising demand for cybersecurity services, but also faces pressure to secure client data



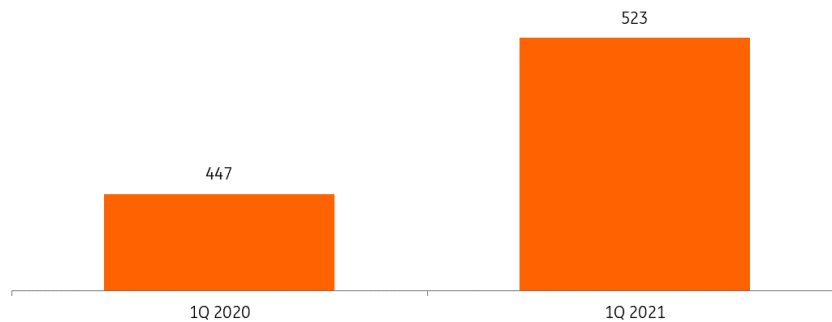
Over the past few years we have seen a rise in both the number and sophistication of cyber attacks

Cybercrime on the rise

The past few years have shown an almost continuous rise in both the number and sophistication of cyber attacks. The digitisation of business means a larger part of the economy is a potential target. This was accelerated by more people working from home during the Covid-19 pandemic. We're also seeing that the attack surface is on the increase as the number of connected devices grows and the cloud expands. The number of attacks, and the impact they're having, has grown because of the cybercriminals' increased professionalisation, automation, and the limited risk of being caught. As these trends are not at an end, we can expect the cyber threat to continue to rise in 2022.

Publicly disclosed cybersecurity incidents rise in 2021

Number of reported breaches worldwide, per quarter

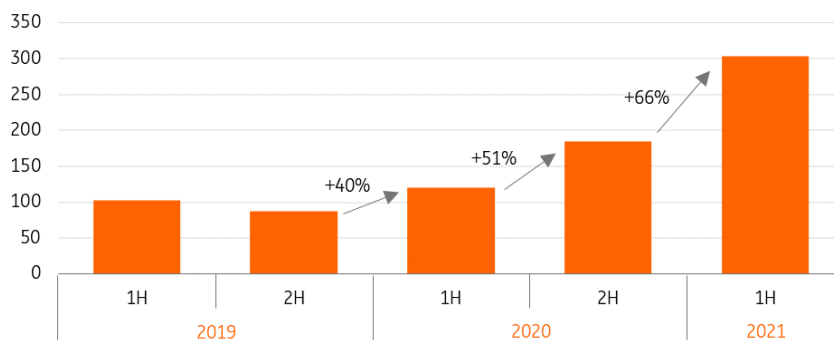


Source: McAfee Labs

Ransomware a major threat

From the second half of 2019 onwards, ransomware attacks have grown in number. It is mainly the professionalisation of the cybercriminals that drives this growth. Cybercriminals also benefit from the anonymity that cryptocurrencies offer, for example, and many now have the financial means to buy zero-day exploits (weak spots in software unknown to the software developer) increasing the chances of a successful attack. There is a whole chain of criminals with special expertise in every link, generating billions globally. For the victims, the damage is a lot bigger than the ransom that is paid.

Large rise in ransomware attacks



Source: SonicWall, ING Research

Growing reliance on mobile encourages attacks

Mobile devices and networks continue to be a target of cybercriminals as well. The number of mobile malware attacks is likely to increase as the use of mobile productivity apps, banking and payment platforms, and data storage solutions continue to grow. During 2020 and 2021, new security threats emerged trying to exploit the growing reliance on mobile devices. Mobile malware, and specifically banking Trojans, for instance, are targeted at intercepting text messages on devices, compromising the two-factor authentication security protocols.

Cyberthreat especially relevant for telecoms industry

Telecommunication companies are a major target for cybercriminals and nation-state actors because they build, control and operate critical infrastructure that is used to transmit and store large amounts of sensitive data. Securing client data is therefore a key component in protecting the operator brand. The surging complexity of networks increases the complexity of cybersecurity. Virtualisation means networks become more vulnerable to software-based attacks.

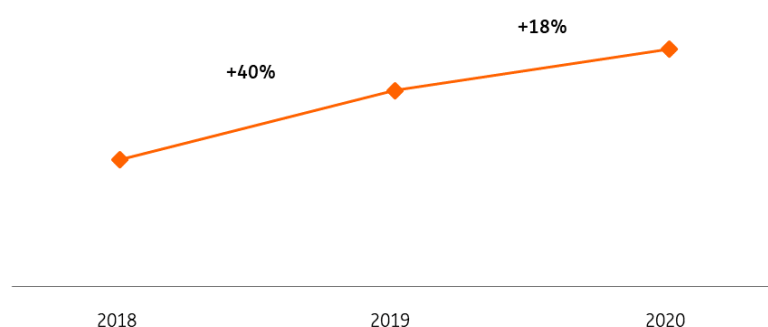
The integration of more and more technologies potentially creates further vulnerabilities, while increased network connectivity (e.g. to the cloud) also complicates security efforts. A recent cybersecurity incident shows that the threat is very much real. In August 2021, a hacker accessed 50 million customer records of US operator T-Mobile. Operators will therefore have to increase investments in cybersecurity while also keeping in mind the additional security efforts required by the Internet of Things (IoT) and the roll-out of 5G, and the increase in connected devices with it. Note that 5G technologies are said to be safer than older technologies.

Leveraging on cybersecurity capabilities

While the threat of cyberattacks poses a challenge for the sector, it is simultaneously a business opportunity. Besides being an integral part of network services, several telco's such as KPN, Telefonica, Orange and BT offer stand-alone security services. In defending against cyberattacks, telco's have developed capabilities they can sell, while they have the possibility to leverage on an existing customer base. Through acquisitions and organic growth, operators expand their security services. Recently, BT acquired Safe Security, while Orange bolstered its security business back in 2019 by adding SecureLink and Secure Data Group. Scale is an important factor in security services. Most small and medium-sized enterprises do not have in-house cybersecurity expertise and therefore rely on managed services. These services could also help increase customer retention rates.

Strong growth of telco global security services revenue

Revenue in EUR billions and percentage increase



Source: TM Forum

Small but growing revenues

Currently, security revenues make up a small part of overall telco revenues, with Telefonica and Orange, for example, generating 1-2% of total revenues in cybersecurity. Growth, however, is high;

for Orange, cybersecurity revenue grew by 14% in the first half of 2021.

Demand for managed security services in general is driven by the increasing value of digital services, a shortage of skilled cybersecurity personnel, and the growing complexity and risks due to the diversified IT landscape combining cloud, edge and operational technology. With many telcos viewing cybersecurity as a significant opportunity for services growth, we can expect the deployment of services such as 5G, cloud, IoT and edge to contribute to further growth in their cybersecurity business.

The cybersecurity market is very fragmented. Customer demand is driving offerings towards integrated security software and services, with companies offering security platforms, not single solutions. We can therefore also expect more mergers and acquisitions in the security area and partnerships with vendors.

Author

Jan Frederik Slijkerman

Sector Strategist, TMT

jan.frederik.slijkerman@ing.com

Disclaimer

This publication has been prepared by the Economic and Financial Analysis Division of ING Bank N.V. ("ING") solely for information purposes without regard to any particular user's investment objectives, financial situation, or means. *ING forms part of ING Group (being for this purpose ING Group N.V. and its subsidiary and affiliated companies).* The information in the publication is not an investment recommendation and it is not investment, legal or tax advice or an offer or solicitation to purchase or sell any financial instrument. Reasonable care has been taken to ensure that this publication is not untrue or misleading when published, but ING does not represent that it is accurate or complete. ING does not accept any liability for any direct, indirect or consequential loss arising from any use of this publication. Unless otherwise stated, any views, forecasts, or estimates are solely those of the author(s), as of the date of the publication and are subject to change without notice.

The distribution of this publication may be restricted by law or regulation in different jurisdictions and persons into whose possession this publication comes should inform themselves about, and observe, such restrictions.

Copyright and database rights protection exists in this report and it may not be reproduced, distributed or published by any person for any purpose without the prior express consent of ING. All rights are reserved. ING Bank N.V. is authorised by the Dutch Central Bank and supervised by the European Central Bank (ECB), the Dutch Central Bank (DNB) and the Dutch Authority for the Financial Markets (AFM). ING Bank N.V. is incorporated in the Netherlands (Trade Register no. 33031431 Amsterdam). In the United Kingdom this information is approved and/or communicated by ING Bank N.V., London Branch. ING Bank N.V., London Branch is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. ING Bank N.V., London branch is registered in England (Registration number BR000341) at 8-10 Moorgate, London EC2 6DA. For US Investors: Any person wishing to discuss this report or effect transactions in any security discussed herein should contact ING Financial Markets LLC, which is a member of the NYSE, FINRA and SIPC and part of ING, and which has accepted responsibility for the distribution of this report in the United States under applicable requirements.

Additional information is available on request. For more information about ING Group, please visit <http://www.ing.com>.