

# CYBERSECURITY

## Switzerland



# Cybersecurity

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Quick reference guide enabling side-by-side comparison of local insights, including into the applicable legal and regulatory framework; best practices, including information sharing and insurance; enforcement, including relevant regulatory authorities, notification obligations, penalties, and avenues of private redress; threat detection and reporting; and recent trends.

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**LEGAL FRAMEWORK****Legislation**

Summarise the main statutes and regulations that promote cybersecurity. Does your jurisdiction have dedicated cybersecurity laws?

No overarching cybersecurity legislation has been adopted in Switzerland to date, and there are also no plans to comprehensively address the issue in a bespoke legal instrument. Rather, cybersecurity is and will remain regulated by a patchwork of various acts and regulatory guidance. Currently, the sole clear exception to this rule is the Ordinance on the Protection against Cyber Risks in the Federal Administration ( CyRV ) of 27 May 2020, which entered into force on 1 July 2020. The CyRV governs the organisation of the federal administration from a cyber risks protection standpoint. It therefore regulates the tasks of federal cybersecurity bodies, provides for a competence centre – the National Cyber Security Centre (NCSC) – and moreover regulates various compliance aspects regarding external service providers that contract with the federal administration. On 18 December 2020, Parliament approved a draft Information Security Act the aim of which is to bolster proper information security practices within all levels of the federal government.

The pertinent legislative and policy landscape has been analysed in a report concerning the national strategy on the protection of Switzerland from cyber risks, which was first approved by the federal government in 2012 and was updated in April 2018 for the 2018–2022 period. In summary, the April 2018 report outlines the existing cybercrime defence scheme, defines the main goals for enhancing protection against cyber risks and is based on the headway achieved between 2012 and 2017. After identifying the risks that originate from cyberthreats, the report identifies major weaknesses and resolves how the various stakeholders should proceed. The strategy focuses on seven objectives:

- Switzerland's disposal of the necessary skills, knowledge and capabilities to identify and evaluate cyber risks;
- the preparation and enforcement of measures to mitigate cyber risks;
- capabilities and structural organisations that can rapidly identify and address cyber incidents;
- ensuring Switzerland's IT resilience;
- a clear definition of the respective responsibilities and competencies of the various actors;
- involvement in the international dialogue to increase cybersecurity; and
- learning the lessons from cybersecurity incidents in Switzerland and abroad.

The report ultimately proclaims 29 measures (up from 16 in the 2012 report) aimed at minimising cyber risks and enhancing cybersecurity. Several of these measures are dedicated to the validation and implementation of the existing and prospective legal and regulatory instruments. The report acknowledges that the existing scattered legal framework is inconsistent and incomplete, but also opines that the adoption of a comprehensive cybersecurity regime would be inappropriate for addressing cyber risks. Rather, the existing legislative framework will be subject to continuous adjustment by taking into account the specific exposure to cyber risks within the relevant scope of application of each statute. Moreover, the report expresses the intent to reach minimum standards in terms of cybersecurity that should be coordinated at the international level. In May 2019, the Federal Council adopted the implementation plan for the national cybersecurity strategy for 2018–2022. This plan, in particular, sets out more precisely the timeline for the roll-out of the various steps and measures.

The aforementioned national cybersecurity strategies (for 2012–2017 and 2018–2022 respectively) partially overlap with another governmental initiative, the Digital Switzerland strategy, which was first adopted in spring 2016 and replaced in September 2018. The Digital Switzerland strategy is reviewed on a biennial basis and addresses any topic relevant to digitalisation, not just cybersecurity. The associated action plan features, inter alia, an increase of cybersecurity in the fields of automated vehicles and aviation security.

The following list sets out the most relevant legislative instruments dealing explicitly or implicitly with cybersecurity in the private sector (ie, excluding the CyRV, as it pertains to the federal administration).

## **Budapest Convention on Cybercrime**

The Budapest Convention on Cybercrime (CCC) entered into force in Switzerland on 1 January 2012 and imposes the following main obligations on member states with respect to cybercrime:

- harmonisation of substantive criminal laws;
- adoption of expedient investigation and prosecution measures; and
- establishment of a fast and effective regime of international cooperation.

Switzerland's adherence to the CCC brought about some light amendments to the Swiss Penal Code ( SPC ) and the Federal Act on International Mutual Assistance in Criminal Matters to render domestic law compliant with the prerequisites of the convention.

## **Federal Data Protection Act**

The Federal Data Protection Act ( FDPA ) governs the protection of personal data, which encompasses information pertaining to identified or identifiable natural persons and legal entities. Pursuant to article 7 of the FDPA, personal data must be protected against unauthorised processing through adequate technical and organisational measures. Enforcement of the data security principles is largely left to self-control by the concerned organisations and, eventually, civil courts; regulatory oversight by the Federal Data Protection and Information Commissioner in the area of data security, therefore, only exists in isolated cases and is non-existent on a large scale. In the wake of the adoption of the General Data Protection Regulation within the European Union, a fundamental revision of the FDPA and its implementing ordinance took place.

On 25 September 2020, Parliament approved the draft revised FDPA. On 23 June 2021, Parliament published a preliminary draft of the revised implementing ordinance. Entry into force should occur during the second half of 2022, though no exact date has yet been communicated. This revised legislation will bring about wide-ranging changes not only to the FDPA itself but also to various other laws insofar as they touch upon data protection issues. In particular, legal entities will no longer benefit from dedicated data protection, transparency will be strengthened, data breaches will have to be notified in most cases and the criminal sanctions for offences against the FDPA will be bolstered. As far as data security is concerned, however, the matter has not been specifically or exhaustively addressed as a standalone subject and, rather, will remain part of the subject matter of the revised FDPA and its ordinance (as is the case under current law).

## **Federal Telecommunications Act**

Pursuant to article 48a of the Federal Telecommunications Act ( TCA ) and article 96 of the corresponding Ordinance on Telecommunications Services (OTS), the Federal Office of Communications (OFCOM) is responsible for implementing the administrative and technical requirements pertaining to the security and availability of telecommunications services, which includes notification of the regulator in the event of security incidents. This body of laws was also revised to render it more compliant with the current technological landscape. The revised TCA, OTS and other implementing and technical ordinances entered into force on 1 January 2021. In particular, rules against unsolicited messaging and spamming are reinforced, though it can also be noted that the revised provisions on addressing resources seek to minimise risks of cybercriminality. Moreover, the Federal Act on the Surveillance of

Postal and Telecommunications Traffic of 6 October 2010 governs information requests and real-time and retroactive monitoring of postal and telecommunications traffic and has been revised, with the new law having entered into force on 1 March 2018.

In addition, the Federal Act on the Intelligence Service has also been revised, having entered into force on 1 September 2017. This Act governs the monitoring of data streams to and from Switzerland to fulfil antiterrorism and national security objectives. In this respect, on 25 September 2020, Parliament adopted a new act on police measures for combatting terrorism. This law, which grants the authorities extensive powers – including online surveillance – to combat terrorism, was approved during a nationwide referendum in June 2021, though it has not yet entered into force.

Further, pursuant to article 15 of the Ordinance on Internet Domains (which has been revised, with entry into force of the revised text on 1 January 2021 – see above), the registry for the '.ch' top-level domain (currently the SWITCH foundation) is required, if requested by an OFCOM-accredited body, to combat cybercrime or to block domain names if there are reasonable grounds to suspect that they are being used to access sensitive data using illegal methods (phishing) or to distribute harmful software (malware). The only organisation entitled to accomplish this task is the NCSC, as it now incorporates the former Reporting and Analysis Centre for Information Assurance (MELANI).

## **Federal Act on Financial Market Infrastructure**

The Federal Act on Financial Market Infrastructure ( FinMIA ), which entered into force on 1 January 2016, regulates the organisation and operation of financial market infrastructures, such as stock exchanges, multilateral trade systems, central deposits and payment systems. Article 14 of the FinMIA demands robust IT systems that are capable of deploying effective emergency responses and ensuring business continuity. The obligations are further detailed in article 15 of the implementing ordinance of the FinMIA. The systems must be designed to:

- ensure availability, confidentiality and integrity of data;
- enable reliable access controls; and
- provide features to detect and remedy security incidents.

Financial market infrastructures are under the regulatory surveillance of the Swiss Financial Market Supervisory Authority (FINMA).

The FinMIA is the first sector-specific federal act applicable to private undertakings that expressly acknowledges the high dependency of essential infrastructure on information technology and the vulnerability to which it is exposed owing to the interconnectivity of the market players' systems.

*Law stated - 01 December 2021*

### **Which sectors of the economy are most affected by cybersecurity laws and regulations in your jurisdiction?**

The focal zone of regulatory activity in the area of cybersecurity in Switzerland is the financial sector. In the aftermath of the financial crisis, the banking sector suffered from severe data leaks, albeit not primarily as a result of cyberattacks, which have greatly increased awareness of the importance of data security in general. Consequently, FINMA amended its Circular 2008/21 on the operational risks of banks by adding a new chapter on the security of electronic data. Annex 3 to the Circular now sets forth a number of principles and guidelines on proper risk management related to the confidentiality of client-identifying data stored electronically. FINMA makes it clear that state-of-the-art data security standards and procedures, as well as proper incident management, are pivotal. The main

message conveyed is that cybersecurity must become a matter of top management attention. FINMA further enhanced the required security standards through an amendment of Circular 2008/21, with effect from July 2017. Specifically, management is required to implement a cyber risk management concept, which also entails regular vulnerability assessments and penetration tests.

Another important instrument of financial sector oversight relevant to cybersecurity is FINMA Circular 2018/3 regarding outsourcing at banks and insurance companies. It increases the transparency of the outsourced tasks by introducing an inventory of these tasks. Further, the (financial) institution and the service provider must draw up a security framework to ensure that the outsourced function can continue to be performed in an emergency. In contrast to prevailing trends in regulatory activity and contrary to the previous version of the Circular, the Circular does not contain provisions on data protection, to avoid duplication with the FDPA.

Both FINMA Circulars 2008/21 and 2018/3 have been slightly amended to include more pragmatic provisions for small banks. These revised texts entered into force on 1 January 2020.

Another emphasis lies on the protection of critical infrastructure from cyberthreats, such as in the electricity, transportation and telecommunications sectors. The healthcare sector has also received increasing attention recently, in particular, regarding the vulnerability of medical devices connected to the internet as well as in relation to the implementation of the electronic patient record. In this respect, it has been pointed out that a decentralised approach as adopted in Switzerland, despite its apparent disadvantages in terms of efficiency and interconnectivity, reduces the risk of a single point of failure and as such enhances data security. However, in small and medium-sized enterprises cybersecurity has not made it to the agenda of many board meetings as an item of strategic importance, but continues to be treated as a mere technicality. Nevertheless, there is a growing awareness among these enterprises that cybersecurity should become a top-level concern and must be addressed on a permanent and dynamic basis.

*Law stated - 01 December 2021*

### Has your jurisdiction adopted any international standards related to cybersecurity?

Adherence to international standards related to cybersecurity (such as ISO 27001:2013) is not mandatory in Switzerland. However, many undertakings are undergoing certification voluntarily, and those standards also serve as a benchmark when it comes to compliance with best practices as, for example, imposed by the regulator in the financial sector or by customers outsourcing their information and communications technology operations to third parties.

Further, pursuant to article 11 of the FDPA, the manufacturers of data processing systems or programs, as well as private undertakings that process personal data, may submit their systems, procedures and organisations to be evaluated by an accredited independent certification body on a voluntary basis. If they do so (which is very rare), abidance by the standards of ISO 27001:2013 is a prerequisite for this certification.

*Law stated - 01 December 2021*

### What are the obligations of responsible personnel and directors to keep informed about the adequacy of the organisation's protection of networks and data, and how may they be held responsible for inadequate cybersecurity?

As a matter of principle, responsibility for cybersecurity lies with the data processing organisation and not with the individuals entrusted with the task. Failure to comply with the data security requirements enshrined in article 7 of the FDPA does not constitute a criminal offence and, therefore, solely provides civil (tort) remedies to the persons (including legal entities) affected by a breach. It must, however, be noted that this situation is likely to change after the entry into force of the revised FDPA. Indeed, the revised FDPA criminalises intentional violations of basic data security

requirements.

However, the ultimate responsibility for the overall strategy as regards cybersecurity, particularly the determination of the appropriate internal organisation as well as the adoption of the necessary directives, processes and controls, is vested in the board of directors of the company. This is certainly the case with respect to cyber risks that may have an impact on the accuracy of the company's financial statements and, therefore, need to be monitored by an internal control system, which forms part of the statutory audit scope but may arguably be extended beyond that. Given the increasing importance and awareness of cybersecurity, the problem can no longer be simply delegated to the IT department. In this context, pursuant to article 754 of the Swiss Code of Obligations, the members of the board of directors and other executive directors are personally liable both to the company and to the individual shareholders and creditors for any loss or damage arising from any intentional or negligent breach of their duties. Hence, personal liability of the responsible individuals may materialise if a company suffered loss because of a severe data breach that resulted from a lack of appropriate internal cybersecurity controls and procedures.

*Law stated - 01 December 2021*

### How does your jurisdiction define cybersecurity and cybercrime?

The CyRV, which is not an overarching law but rather targets structural and organisational matters within the federal administration, defines 'cybersecurity' as follows in article 3a: 'The situation in which the processing of data, in particular the exchange of data between persons and organisations via information and communication infrastructures, operates as intended' (authors' translation).

Traditionally, because Swiss legislation is technologically neutral and instead mostly relies on general rules and definitions, cybersecurity is usually closely associated with the notion of data security, being specified that data security is not a comprehensively defined notion and should rather be seen as an evolving concept.

The national strategy reports on cyber risks adopted by the federal government in 2012 and 2018 define cybersecurity as protection from disruptions of and attacks against information and communication infrastructures. Hence, the term would embrace both pertinent operational reliability and extraneous vulnerability concerns.

In line with the scope of application of the CCC, it can be argued that, outside heavily regulated sectors, the inclusion of cybersecurity provisions in legislation is equated with defence against cybercrime, namely repressive sanctions and procedures in relation to crimes committed via the internet, whereas preventive security measures are dealt with as a secondary concern of data privacy.

*Law stated - 01 December 2021*

### What are the minimum protective measures that organisations must implement to protect data and information technology systems from cyberthreats?

Pursuant to article 7 of the FDPA, personal data (namely, all information relating to an identified or identifiable person) must be protected against unauthorised processing through adequate technical and organisational measures, commensurate with the type of personal data being processed. Given these vague requirements, and even though the FDPA stipulates minimum protective measures, there is a large margin of discretion as to what these minimum requirements would precisely entail. This picture will remain fundamentally unchanged under the revised FDPA as it follows the same logic in terms of technical and organisational requirements.

Even in heavily regulated sectors, such as critical infrastructures, the minimum protective measures are rarely defined. The organisations running the infrastructure are deemed best positioned to assess and implement the actual level of cybersecurity needed for their specific operations and risk exposures. The government would only intervene where self-

regulation fails. However, the national cyber risk strategy acknowledges a desire and need to devise more authoritative cybersecurity standards. An interesting observation is that the competitive landscape would not allow the adoption of more stringent (and costly) security requirements on a national level without simultaneous international harmonisation.

*Law stated - 01 December 2021*

### Scope and jurisdiction

Does your jurisdiction have any laws or regulations that specifically address cyberthreats to intellectual property?

There is no specific legislation in Switzerland that deals with cyberthreats to intellectual property. Nevertheless, article 39a of the Swiss Federal Copyright Act prohibits the circumvention of effective technological measures for the protection of works and other protected subject matter (digital rights management (DRM)). DRM refers to technologies and devices such as access control, copy control, encryption, scrambling and other modification mechanisms intended and suitable for preventing or limiting the unauthorised use of intellectual property. It is unlawful to manufacture, import, offer, transfer or otherwise distribute, rent, give for use and advertise; possess for commercial purposes, devices, products or components; or provide services that purport the circumvention of DRM.

These prohibitions may not be enforced against persons who are permitted to circumvent DRM by virtue of statutory permission, such as the use of copyrighted work for private purposes or other statutory fair use limitations. It is against this background that the federal government established a surveillance office that monitors and reports on the effects of DRM and acts as a liaison between user and consumer groups. Given its mandate, the surveillance office focuses on the abusive use of DRM systems by the industry rather than on cyberthreats to intellectual property.

*Law stated - 01 December 2021*

Does your jurisdiction have any laws or regulations that specifically address cyberthreats to critical infrastructure or specific sectors?

The regulation of cybersecurity in critical infrastructure is fragmented and inconsistent. Although some legislative instruments deal with protection against cyber risks, they generally lack a precise definition of the required security measures. The same conclusion was reached by a report dealing with the national strategy for the protection of critical infrastructure, which was endorsed by the government in 2012 and revised in 2017 for the years 2018 to 2022, though the latter revised report does note a positive legislative trend towards better resilience and clearer security measures.

The primary responsibility to establish suitable controls and procedures lies with the organisations operating critical infrastructure. In the case of the need for governmental intervention, it would, in the majority of cases, be the competent regulator's task to define the appropriate measures. For instance, OFCOM may issue technical and administrative regulations concerning the handling of information security, the obligation to report faults in the operation of networks and other measures that make a contribution to the security and availability of telecommunications infrastructures and services (article 96, paragraph 2 OTS). In the financial sector, it is up to FINMA to adopt the necessary measures by way of circulars and regulatory notices (article 7 of the Financial Market Supervision Act).

The regulatory activities are seconded by the NCSC, which is a multidisciplinary body sponsored by the federal government and, inter alia, responsible for counselling a closed circle of roughly 140 operators of critical infrastructure in cybersecurity issues by:

- informing them of cyber incidents and threats;

- providing analyses for early detection and evaluation of cyberattacks and incidents; and
- examining malicious code.

In June 2019, the Swiss Federal Council appointed a Cyber Security Delegate, who now leads the newly created National Cyber Security Centre. The primary purposes of the NCSC and the Cyber Security Delegate are to provide dedicated competencies and skills in the cybersecurity area, serve as a contact point for the government, the media and the general public and raise awareness around matters of cybersecurity and the related risks.

*Law stated - 01 December 2021*

### Does your jurisdiction have any cybersecurity laws or regulations that specifically restrict sharing of cyberthreat information?

Pursuant to telecommunications secrecy governed by article 43 of the TCA, any person who is or was entrusted with providing tasks pertaining to telecommunications services must not disclose information relating to subscribers' communications or give anyone else the opportunity to do so. The range of addressees of telecommunications secrecy is very broad and encompasses not only telecommunications operators but also all stakeholders that are active in the delivery of telecommunications services, including any auxiliaries entrusted in full or in part with the provision of telecommunications services on behalf of service providers.

Telecommunications secrecy prohibits not only disclosure of communications content (including peripheral data) to third parties but also the interception of such content by the addressees of the telecommunications themselves, subject to the following limitative exemptions:

- lawful interception in accordance with the prerequisites of the Federal Act on the Surveillance of Postal and Telecommunications Traffic;
- filtering of malicious content causing damage to the telecommunications network (viruses, etc) and unsolicited mass advertising; and
- processing of peripheral data for billing and debt collection purposes.

Telecommunications secrecy does not provide for a clear exemption with respect to filtering of malicious content. However, according to article 321-ter, paragraph 4 of the SPC, breach of telecommunications secrecy for the sake of preventing damage is justified and, therefore, not subject to prosecution. However, pursuant to article 49 of the TCA, the falsification or suppression of information by a person involved in the provision of telecommunications services constitutes a criminal offence. In a synthesis of these two partially contradicting provisions, the following conditions will apply:

- the filtering must be carried out in an automatic manner to the effect that no individual is capable of taking notice of the content of the information; and
- the objective of the filtering process must be confined to the suppression of the malicious code.

Suppression of the entire message is only permissible if:

- there are no other means of preventing the malicious code from being transmitted; and
- the sender and the intended recipient of the message are informed about the suppression.

## What are the principal cyberactivities that are criminalised by the law of your jurisdiction?

The following cybercrimes are sanctioned pursuant to the SPC:

- unauthorised obtaining of data (article 143);
- unauthorised access to a data processing system (article 143-bis);
- damage to data (article 144-bis);
- computer fraud (article 147);
- breach of secrecy or privacy through the use of an image-carrying device (article 179-quater);
- obtaining personal data without authorisation (article 179-novies);
- industrial espionage (article 273); and
- breach of the postal or telecommunications secrecy (article 321-ter).

Further, the TCA stipulates criminal sanctions where private information received through means of a telecommunication device is used or disclosed to third parties without permission (article 50 TCA), or of the establishment or operation of a telecommunications installation with the intention to disturb telecommunications or broadcasting (article 51 TCA). In addition, the processing of data on external devices by means of transmission using telecommunications techniques without informing users thereof is prohibited (article 45c TCA) and constitutes a misdemeanour. Lastly, the transmission of mass advertising through telecommunication channels (spam) constitutes an act of unfair competition and is criminalised as such.

Law stated - 01 December 2021

## How has your jurisdiction addressed information security challenges associated with cloud computing?

Although cloud services have become increasingly popular in Switzerland, there are no specific hard-law provisions with regard to the security requirements of cloud computing. Accordingly, the general data protection provisions apply. If personal data is processed in the cloud by a provider, the processing regularly qualifies as data processing by a third party on behalf of the principal in accordance with article 10a of the FDPA. Pursuant to this provision, the processing of personal data may be outsourced to a cloud provider by agreement or by law if the data is processed only in the manner permitted for the principal itself and the outsourcing is not prohibited by a statutory or contractual duty of confidentiality. Moreover, the principal must ensure that the provider guarantees appropriate data security. Depending on the sensitivity of the data processed in the cloud, this may entail an obligation of the principal to conduct security audits, which will often be unrealistic in a cloud setting. In practice, principals will largely rely on the cloud providers' data security certifications; however, they provide no guarantee that the provider in practice heeds these respective security controls and procedures.

Additionally, cloud computing will frequently entail cross-border disclosure of personal data. According to article 6 of the FDPA, personal data must not be disclosed abroad if the privacy of the data subjects would be seriously endangered thereby, in particular owing to the absence of legislation in the country of import that guarantees an adequate level of data protection. However, even in the absence of comparable privacy legislation, cross-border disclosure through cloud services is generally permissible if sufficient alternative safeguards (in particular, contractual clauses) substitute for an adequate level of data protection. Given that in Switzerland data pertaining to legal entities is, in contrast to many foreign (including European) data protection laws, qualified as personal data, outsourcing to the

cloud in a cross-border setting may often trigger the obligation to enter into contractual guarantees; however, the revised FDPA does away with the qualification of legal entities as data subjects, and the divergence between Swiss and EU law is thus expected to be evened out in this respect with the entry into force of the revised FDPA.

*Law stated - 01 December 2021*

**How do your jurisdiction's cybersecurity laws affect foreign organisations doing business in your jurisdiction? Are the regulatory obligations the same for foreign organisations?**

There are no particular cybersecurity regulations specifically applicable to foreign organisations doing business in Switzerland. Under Swiss conflict of law rules, a foreign organisation generally needs to observe the provisions of the FDPA if it processes personal data in Switzerland or if data subjects resident in Switzerland are affected, even if the organisation is domiciled abroad. As a general rule, sectorial regulatory requirements pertaining to data security must be observed by Swiss branches or representations of foreign organisations.

*Law stated - 01 December 2021*

## **BEST PRACTICE**

### **Increased protection**

**Do the authorities recommend additional cybersecurity protections beyond what is mandated by law?**

The National Cyber Security Centre (NCSC) and its precursor, the Reporting and Analysis Centre for Information Assurance (MELANI), adopted recommendations for small and medium-sized enterprises with regard to best practices for removing malware, cleaning up websites, protecting industrial control systems and content management systems, securing e-banking and countering distributed denial-of-service attacks. They are partially based on recommendations issued by the US Industrial Control Systems Cyber Emergency Response Team.

*Law stated - 01 December 2021*

**How does the government incentivise organisations to improve their cybersecurity?**

Apart from the services provided by the Cyber Security Delegate and the NCSC, the government also has a stake in the public-private partnership Swiss Cyber Experts, which is an alliance of cybersecurity experts in the information and communications technology and sciences industries and the public and private sectors. The Swiss Internet Security Alliance is a similar project that aims to reduce the infection rate of devices within Switzerland. Further, cybersecurity projects occasionally receive a grant from Innosuisse, which is a federal innovation promotion agency responsible for encouraging science-based innovation in Switzerland by providing financing, professional advice and networks. Moreover, the government has set up a 'cyber defence campus' at the federal technology institutes (namely, ETH in Zurich and the EPFL in Lausanne).

*Law stated - 01 December 2021*

**Identify and outline the main industry standards and codes of practice promoting cybersecurity. Where can these be accessed?**

The pertinent industry norms, such as ISO 27001:2013, can be obtained from the Swiss Association for

Standardisation ( [www.snv.ch](http://www.snv.ch) ). Further, the NCSC provides some additional guidance ( [www.ncsc.admin.ch](http://www.ncsc.admin.ch) ).

*Law stated - 01 December 2021*

### Are there generally recommended best practices and procedures for responding to breaches?

Victims of cyberattacks are encouraged to share information and to report incidents to the supporting units maintained by the federal government (to the NCSC, which issues alerts and helps to coordinate the response to cyberattacks).

*Law stated - 01 December 2021*

### Information sharing

#### Describe practices and procedures for voluntary sharing of information about cyberthreats in your jurisdiction. Are there any legal or policy incentives?

Victims of cyberattacks are encouraged to notify incidents to the NCSC. The report can be made by a simple message on the NCSC's website and may be submitted anonymously. The NCSC looks to be a central point of contact in all matters relating to cybersecurity and is therefore the primary (federal) governmental body in this respect.

*Law stated - 01 December 2021*

#### How do the government and private sector cooperate to develop cybersecurity standards and procedures?

The national strategy for the protection of Switzerland against cyber risks, which was first adopted by the government in 2012 and updated in 2018, has identified a desire within the industry for intensified cooperation between the public authorities, the private sector and operators of critical infrastructure to mitigate cyber risks. Stakeholders expect increased consistency in the elaboration of standards and procedures to be devised in a cooperative manner. The government also holds that the primary responsibility to fight cyberattacks lies with each responsible organisational unit individually, and the authorities are only supposed to interfere if public interests are at stake or if the relevant risks cannot be addressed at the competent subordinate level. In line with this strategy, the government is a stakeholder in private initiatives dedicated to the enhancement of cybersecurity awareness and defence schemes.

*Law stated - 01 December 2021*

### Insurance

#### Is insurance for cybersecurity breaches available in your jurisdiction and is such insurance common?

At the beginning of 2013, the first insurance company started to offer insurance for cybersecurity in Switzerland. Since then, several Swiss insurance companies have followed this example and offer coverage for cyber risks. The risks covered by this insurance vary and include, for example, the loss or theft of data, unwanted publication of data, damage resulting from hacking and malware, or costs ensuing from investigations or crisis management as a result of cybercrime.

*Law stated - 01 December 2021*

## ENFORCEMENT

### Regulation

Which regulatory authorities are primarily responsible for enforcing cybersecurity rules?

On a general scale, the following authorities are primarily responsible for enforcing cybersecurity regulations affecting the private sector:

- the Federal Data Protection and Information Commissioner (FDPIC), who is responsible for the supervision of private undertakings with regard to their compliance with the Federal Data Protection Act (FDPA); and
- the Cybercrime Coordination Unit Switzerland, which forwards cases of incoming reports to the appropriate prosecution authorities in Switzerland and abroad (namely the police and public prosecutors in charge of prosecuting cybercrimes), it being specified that the Cyber Security Delegate and the National Cyber Security Centre also serve as valuable contact points for matters pertaining to cyber security and cyber risks.

On a sectoral level, the authorities entrusted with regulatory oversight are also responsible for enforcing compliance of the regulated undertakings with cybersecurity rules. In crisis situations affecting critical infrastructure, the special task force for information assurance would intervene. It is composed of decision-makers from the public and private sectors dealing with critical infrastructures. The latter are involved in power supply, emergency and rescue services, banks and insurance companies, telecommunications, transport and traffic, and public health (including water supply), as well as the government and public administrations.

*Law stated - 01 December 2021*

Describe the authorities' powers to monitor compliance, conduct investigations and prosecute infringements.

A distinction must be drawn between the general economy and regulated sectors.

On a general level, the FDPIC is endowed with powers to investigate cases on his or her own initiative or at the request of a third party if methods of data processing are capable of breaching the privacy of a larger number of persons (conceptual systemic failures). This could, for instance, be the case if a specific undertaking processing a large volume of sensitive personal data is suspected of neglecting data security obligations. However, the investigative powers would not extend to the examination of data breaches. In the performance of his or her duties, the FDPIC is empowered to request files, obtain information and investigate data processing mechanisms. The FDPIC does not, however, have enforcement powers; he or she may only issue recommendations. If these recommendations are not complied with, the FDPIC may institute proceedings before the Swiss Federal Administrative Court. By contrast, the text of the revised FDPA gives the FDPIC the authority to issue binding decisions and take the administrative measures that he or she deems necessary.

In regulated sectors, the authorities do have extended investigative powers within their field of competence. By way of example, the Swiss Financial Market Supervisory Authority (FINMA) may appoint independent experts to conduct audits of supervised persons and entities, which must provide the experts with all the information and documents required to carry out their tasks.

*Law stated - 01 December 2021*

## What are the most common enforcement issues and how have regulators and the private sector addressed them?

Switzerland has experienced increased exposure to cyber incidents in recent years, with ransomware and identity theft being among the top issues. More specifically, the Reporting and Analysis Centre for Information Assurance (MELANI) – now part of the National Cyber Security Centre (NCSC) – observed an increase of incidents concerning ransomware, including the expansion of ransomware as a service, as well as usurpation of the names of various federal authorities or companies (such as the Swiss Post and Swisscom). Since 2018, MELANI has been flagging the widespread use of ransomware affecting not only private actors but governmental bodies as well. Over the course of 2019, MELANI highlighted the propagation of the latest generations of ransomware, namely Ryuk, GandCrab, Dharma, LockerGoga, MegaCortex and RobbinHood. MELANI moreover noted that sports organisations based in Switzerland (which is a hub for the sports world) have been the targets of numerous cyberattacks, and CEO fraud has been another frequent occurrence.

A noteworthy event in 2019 occurred when, on 6 June 2019, an important share of European mobile internet traffic transited through the network of China Telecom. This was the result of an error attributed to the Swiss data centre Safe Host and affected the services of several European providers and, most importantly, Swisscom. The most notable event, however, surfaced in spring 2016, when it was revealed that the Swiss defence technology company RUAG had been the victim of cyberespionage since 2014, resulting in a loss of approximately 23 GByte of data. The government decided to have the report of the technical analysis conducted by MELANI published to give organisations the chance to check their networks for similar infections and to show the modus operandi of the attacker group.

On a judicial level, the expectations of expedited international cooperation in combatting cybercrime propagated by the Budapest Convention on Cybercrime (CCC) suffered a setback by a landmark decision handed down by the Swiss Federal Supreme Court in January 2015: the judges ruled that cantonal prosecutors were not empowered to bypass judicial assistance and order Facebook to release the IP history of its users by virtue of article 32 of the CCC. With respect to cybersecurity regulations, new rules on the treatment of electronic client data by banks adopted by FINMA entered into force at the beginning of 2015, with a revision tightening the rules entering into force in July 2017. These amendments have enhanced cybersecurity awareness in the financial sector. More recently, in a July 2020 decision, the Federal Supreme Court ruled that, in a client-bank relationship, clients bear the (contractually allocated) risk of being hacked, save for cases of the bank's gross negligence. This specific matter involved a situation where a third party hacked into the client's email accounts and sent inaccurate transfer orders.

*Law stated - 01 December 2021*

## What regulatory notification obligations do businesses have following a cybersecurity breach? Must data subjects be notified?

Switzerland currently does not have a general duty to notify cybersecurity breaches; any reporting is currently done on a voluntary basis, typically via the NCSC. The Swiss government is nevertheless contemplating introducing this obligation in the context of its 2018–2022 national cybersecurity strategy. Consequent to a 13 December 2019 report, the Federal Council initiated a consultation period, ending on 14 April 2022, regarding the introduction of reporting duties for cyber incidents affecting critical national infrastructures. Under the contemplated setup, operators of critical infrastructures would need to notify the NSCS of certain cyber attacks; the NCSC would then provide support, information and coordination duties.

The revised FDPa also contains a duty to report violations of data security that have a likelihood of inducing a high risk for the personality or the fundamental rights of a data subject. This duty to report would not systematically call for the

data subjects to be informed but would be applied only if the FDPIC orders it or if it is necessary to protect the data subject.

Sector-specific regulations may nonetheless call for notification, as is the case in the banking sector where FINMA Circular 2008/21 requires that banks implement a clear communication strategy in case of grave incidents pertaining to the confidentiality of client-identifying data.

*Law stated - 01 December 2021*

## **Penalties**

### **What penalties may be imposed for failure to comply with regulations aimed at preventing cybersecurity breaches?**

If a recommendation made by the FDPIC in the course of an investigation (referred to in 'Regulation') is not complied with or is rejected by the affected entity, the matter may be referred to the Swiss Federal Administrative Court for a decision. There is also the right to appeal against the decision before the Swiss Federal Supreme Court. However, there are no penalties associated with this. The revised FDPA contains provisions under which failure to follow the basic data security requirements may lead to a criminal fine.

Failure to comply with rulings of regulatory authorities may constitute a criminal offence or entail administrative sanctions depending on the applicable statute.

*Law stated - 01 December 2021*

### **What penalties may be imposed for failure to comply with the rules on reporting threats and breaches?**

In the absence of a general obligation to report cyberthreats and data breaches, there are no criminal or administrative penalties associated with a failure to do so. In regulated sectors, failure to submit a required report to the regulatory authority may be prosecuted as a crime or entail administrative sanctions depending on the applicable statute. However, the text of the revised FDPA calls for data breaches to be notified to the FDPIC, unless an exception applies (see 'Policies and procedures' for further details on the notification of data breaches). This reporting obligation, if not heeded, may lead to criminal penalties. Moreover, failure to implement the minimal requirements for data security is criminally sanctioned by a fine.

*Law stated - 01 December 2021*

### **How can parties seek private redress for unauthorised cyberactivity or failure to adequately protect systems and data?**

Victims of cyberattacks may seek redress in a civil action against the tortfeasor. This may be the cybercriminal or the entity that has failed to comply with appropriate data security standards and procedures. Since class actions do not exist in Switzerland, private individuals whose data have been hacked will, in most cases, be incapable of asserting financial damages in an amount that merits a claim. The revised FDPA provides that if the basic data security measures were not implemented, a criminal complaint may be filed by the injured party, which may lead to a criminal fine.

*Law stated - 01 December 2021*

## THREAT DETECTION AND REPORTING

### Policies and procedures

What policies or procedures must organisations have in place to protect data or information technology systems from cyberthreats?

Personal data must be protected against unauthorised processing through adequate technical and organisational measures. These measures are set forth in more detail in articles 8 to 12 of the implementing Ordinance to the Federal Data Protection Act ( DPO ). Any system in which personal data is processed must live up to appropriate state-of-the-art technical standards in terms of protection against the risk of unauthorised or accidental destruction or loss, technical flaws, forgery, theft or unlawful access, copying, use, alteration and other kinds of unauthorised processing. More specific requirements are imposed on systems that feature automated processing of personal data. Those systems must, in particular, ensure appropriate access, disclosure, storage and usage controls. In the context of the revision of the FDPA, the DPO was also overhauled; compared to the current DPO, the revised ordinance contains some bolstered requirements around data security, but it does not, however, define specific technical requirements.

Sector-specific regulations and guidance may contain more detailed technical requirements or recommendations.

*Law stated - 01 December 2021*

Describe any rules requiring organisations to keep records of cyberthreats or attacks.

To date, Swiss law does not expressly prescribe such recording obligations. Under the text of the revised FDPA, in particular, as certain data breaches will have to be notified, this would imply recording cyberthreats to the extent these resulted in a breach.

*Law stated - 01 December 2021*

Describe any rules requiring organisations to report cybersecurity breaches to regulatory authorities.

The current FDPA does not provide for an explicit obligation to notify data breaches. Switzerland is finalising the steps towards ratification of the revised Council of Europe Treaty 108 (Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data) as the Federal Council ratified it in December 2019 and Parliament is expected to give its formal approval in the near future. Under the revised Council of Europe Treaty 108, a notification obligation in the case of data breaches would have to be included in local law. Pursuant to article 7, paragraph 2 of the revised Treaty, the data controller is obliged to notify, without delay, at least the competent supervisory authority of data breaches that may seriously interfere with the rights and fundamental freedoms of data subjects. Consequently, and in anticipation of the ratification, the revised FDPA provides for a duty to notify data breaches to the Federal Data Protection and Information Commissioner (FDPIC). The revised rules call for data controllers to notify the FDPIC as soon as possible if a data breach has occurred and when the breach is likely to result in a high risk to the privacy or the fundamental rights of the data subject. Conversely, the data processors must notify all breaches of data security to the data controller as soon as possible. This breach notification mechanism will not systematically require informing the data subjects, as this step shall only be required when necessary for the protection of the data subject or if requested by the FDPIC.

Notification duties specific to certain sectors and critical infrastructures include the following:

- financial services sector: mandatory notification to the Swiss Financial Market Supervisory Authority without delay regarding events of material relevance for the supervision of the relevant supervised entity;
- telecommunications sector: notification to the Federal Office of Communications of faults in the operation of telecommunications networks that affect a significant number of customers;
- aviation sector: notification to the Federal Office of Civil Aviation in the event of safety-related data breaches;
- railway industry: notification to the Federal Department of the Environment, Transport, Energy and Communications in the event of severe incidents; and
- nuclear sector: notification to the Swiss Federal Nuclear Safety Inspectorate in the event of safety-related data breaches.

*Law stated - 01 December 2021*

## Time frames

What is the timeline for reporting to the authorities?

Sector-specific provisions may require the affected entity to report any relevant cybersecurity incidents without delay.

*Law stated - 01 December 2021*

## Reporting

Describe any rules requiring organisations to report threats or breaches to others in the industry, to customers or to the general public.

Scholarly opinion holds that article 4, paragraph 2 of the FDPA, which enshrines the principle of good faith, entails the rule that data subjects must be informed of unauthorised access to their data. However, such notification duty depends on the gravity of the breach in question. Further, specific contractual obligations may impose on organisations a duty to report threats or breaches. The revised FDPA contains rules on the notification of data breaches. Pursuant to these rules, the data controller may be required to inform the data subjects of the breach if the information should prove necessary for the protection of the data subject or if it is requested by the FDPIC.

*Law stated - 01 December 2021*

## UPDATE AND TRENDS

### Key developments of the past year

What are the principal challenges to developing cybersecurity regulations? How can companies help shape a favourable regulatory environment? How do you anticipate cybersecurity laws and policies will change over the next year in your jurisdiction?

One main challenge to the development of cybersecurity regulations is the speed at which cyberthreats evolve. This renders legislating on the subject rather difficult for Parliament. The international dimension of cybersecurity (eg, the involvement of foreign operatives) would also constitute an obstacle to the implementation of the criminal provisions contained in any dedicated cybersecurity law.

The current Swiss approach relies to a broad extent on providing private actors with helpful contact points and resources, with the ultimate aim of mitigating to the greatest extent possible the impact of any cyberthreat on national infrastructures, local businesses and the general public. This is leading the government to bolster its resources, both financially and in terms of personnel. Cross-the-board sharing of information and interaction with the science and

research domains should also occur on a more regular basis, paving the way for a transversal and interdisciplinary approach to cybersecurity. If not already the case, companies should make a habit of ensuring they implement proper cybersecurity practices and train their personnel accordingly. They should also interact with the ad hoc bodies, in particular the National Cyber Security Centre and the Cyber Security Delegate, to promptly share any relevant information.

*Law stated - 01 December 2021*

## Jurisdictions

	<b>Austria</b>	MGLP Rechtsanwälte   Attorneys-at-Law
	<b>Belgium</b>	NautaDutilh
	<b>China</b>	Fangda Partners
	<b>European Union</b>	Taylor Wessing
	<b>France</b>	ADSTO
	<b>India</b>	AZB & Partners
	<b>Italy</b>	ICT Legal Consulting
	<b>Japan</b>	TMI Associates
	<b>Singapore</b>	Drew & Napier LLC
	<b>Switzerland</b>	Walder Wyss Ltd
	<b>Turkey</b>	Paksoy
	<b>USA</b>	Ropes & Gray LLP