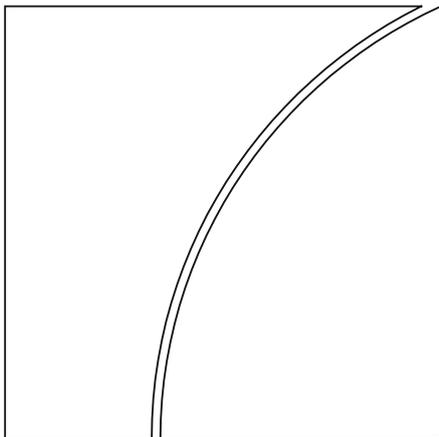


Committee on
Payments and Market
Infrastructures

Board of the International
Organization of Securities
Commissions



Implementation
monitoring of PFMI:
Assessment report for
Switzerland

January 2019



BANK FOR INTERNATIONAL SETTLEMENTS



OICU-IOSCO

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1. Executive summary

In April 2012, the Committee on Payments and Market Infrastructures (CPMI)¹ and the International Organization of Securities Commissions (IOSCO) issued the *Principles for financial market infrastructures* (PFMI).² The Principles within the PFMI (the Principles) set expectations for the design and operation of key financial market infrastructures to enhance their safety and efficiency and, more broadly, to limit systemic risk and foster transparency and financial stability. The Principles apply to all systemically important payment systems (PSs), central securities depositories (CSDs), securities settlement systems (SSSs), central counterparties (CCPs) and trade repositories (TRs) (collectively FMIs). These FMIs collectively clear, settle and record transactions in financial markets. In line with the G20's expectations, CPMI and IOSCO members have committed themselves to implementing and applying the PFMI in their respective jurisdictions.

Following the publication of the PFMI, the CPMI and IOSCO agreed to monitor the implementation of the PFMI in 28 jurisdictions that are members of the Financial Stability Board, the CPMI or IOSCO.³ To this end, the CPMI-IOSCO Steering Group⁴ established a standing working-level group (the Implementation Monitoring Standing Group (IMSG)) to design, organise and carry out the implementation monitoring assessments.⁵

The implementation monitoring programme has proceeded, so far, at three levels: a Level 1 self-assessment of the status of the implementation process; a Level 2 assessment of the completeness of the implemented framework and its consistency with the PFMI; and a Level 3 assessment of the consistency in outcomes of such frameworks.⁶ While, in the case of the Principles, Level 2 and Level 3 assessments have proceeded separately, in the case of the Responsibilities the IMSG considered it more appropriate and more efficient to carry out a combined Level 2 and Level 3 assessment.⁷

¹ The Committee on Payment and Settlement Systems (CPSS) changed its name to the Committee on Payments and Market Infrastructures on 1 September 2014. Please note that references to reports published before that date use the Committee's old name.

² The CPSS-IOSCO *Principles for financial market infrastructures* (April 2012) can be found on the websites of the BIS at www.bis.org/cpmi/publ/d101.htm and IOSCO at www.iosco.org/library/pubdocs/pdf/IOSCOPD377.pdf.

³ The 28 jurisdictions participating in the PFMI implementation monitoring exercise are Argentina, Australia, Belgium, Brazil, Canada, Chile, China, the European Union, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

⁴ The Steering Group comprises a subset of the members of the CPMI and the IOSCO Board, and is responsible for providing operational guidance on behalf of the parent committees on joint CPMI-IOSCO work.

⁵ The IMSG comprises representatives from a subset of the Steering Group member jurisdictions that reflect a balance of CPMI and IOSCO members and geographical dispersion, as well as a range of supervisors/overseers of domestic and global FMIs.

⁶ To date, all 28 jurisdictions have completed Level 1 self-assessments of the implementation of both the Principles and the responsibilities for authorities (the Responsibilities) within their jurisdictions, across all FMI types, and five updates to the initial Level 1 report have been published. The IMSG has conducted seven Level 2 assessments of the implementation of the Principles: in respect of CCPs and TRs in the European Union, Japan and the United States, and in respect of all FMI types in Australia, Canada, Hong Kong SAR and Singapore. The IMSG has also conducted a Level 3 assessment of the implementation of the Principles (this review focused on a subset of Principles in the PFMI that relate to financial risk management and recovery practices by CCPs, including certain practices related to governance of risk management, credit risk management, liquidity risk management, margin, collateral policy and investments and default management and recovery planning) and a follow-up Level 3 report assessing the progress made by CCPs in addressing the most serious issues of concern that were identified in an initial Level 3 report. The IMSG also conducted a combined Level 2/Level 3 "Assessment and review of application of Responsibilities for authorities". The above-mentioned reports are available on the CPMI and IOSCO's websites.

⁷ CPMI-IOSCO, *Assessment and review of application of Responsibilities for authorities*, November 2015, available at www.bis.org/cpmi/publ/d139.htm and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD514.pdf>.

This report presents the CPMI and IOSCO conclusions from a Level 2 assessment of whether, and to what degree, the content of the legal, regulatory and oversight frameworks, including rules and regulations, any relevant policy statements, or other forms of implementation applied to systemically important payment systems, CSDs/SSSs, CCPs and TRs in Switzerland (collectively implementation measures), are complete and consistent with the Principles. Notably, Level 2 assessments do not evaluate either FMIs' compliance with these measures, or the effectiveness of authorities' application of the legal and regulatory or oversight framework to FMIs (for example, through supervisory practices).

The work on the Level 2 assessment was carried out as a peer review from August 2017 to September 2018. The assessment reflects the status of Switzerland's legal, regulatory and oversight framework as of 30 June 2017. Accordingly, assessment ratings reflect the implementation measures in place as of 30 June 2017; other measures that were introduced after this date, or other material developments, are noted where relevant, but were not considered in assigning ratings of consistency.

1.1 Legal and regulatory framework

The authorities responsible for regulation, supervision and oversight of FMIs in Switzerland are the Federal Financial Markets Authority (FINMA) and the Swiss National Bank (SNB).

FINMA has responsibility for all CCPs, CSDs/SSSs, TRs and wholesale payment systems (unless operated by or on behalf of the SNB), including those not designated by the SNB as systemically important. The SNB has responsibility for all CCPs, CSDs/SSSs and payment systems that it designates systemically important as well as any payment systems that it operates or that are operated on its behalf. Therefore, FINMA has sole responsibility for TRs, the SNB has sole responsibility for payment systems that it operates or that are operated on its behalf, and FINMA and the SNB share responsibilities for systemically important CCPs and CSDs/SSSs and systemically important payment systems not operated by or on behalf of the SNB.

FINMA's authorisation and supervisory responsibilities are clearly set out in the Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading ("Financial Market Infrastructure Act" or "FMIA"). The FMIA is complemented by the more granular details available in the Ordinance of the Federal Council of 25 November 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading ("Financial Market Infrastructure Ordinance" or "FMIO").

The SNB's oversight responsibility for systemically important FMIs is set out in the National Bank Act ("NBA") and the FMIA. In addition to the rules in the FMIA and FMIO, FMIs that are designated as systemically important are also subject to requirements in the Ordinance to the Federal Act on the Swiss National Bank ("National Bank Ordinance" or "NBO").

The Federal Council's⁸ communication on the FMIA⁹ and the SNB's explanatory note on the 2013 revision of the NBO¹⁰ (collectively "Swiss Regulatory Notes") indicate that the overarching objective of these provisions is a regulatory framework for FMIs that is consistent with international standards. FINMA and the SNB have advised that the Swiss Regulatory Notes allow Swiss authorities to interpret the legal concepts used in the Acts and Ordinances, and exercise any discretion (particularly where rules may not be detailed), consistent with the PFMI.

⁸ This is the Federal Government of the Swiss Confederation.

⁹ Available in German only (www.admin.ch/opc/de/federal-gazette/2014/7483.pdf) and a summary press release available in English (www.admin.ch/gov/en/start/documentation/media-releases.msg-id-54305.html).

¹⁰ Available in German only (www.snb.ch/de/mmr/reference/Erlaeuterungsbericht/source).

1.2 Key findings of the assessment

Payment systems

The Assessment Team (AT) concluded that the Swiss implementation measures for PSs are consistent or broadly consistent for the majority of the Principles through the FMIA, FMIO and NBO. As the only systemically important payment system in Switzerland is operated on behalf of the SNB, and the SNB retains responsibility for many aspects of the system, some key considerations of the Principles are not applied. This approach is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note "*Application of the Principles for financial market infrastructures to central bank FMIs*".¹¹

The AT, however, observed certain gaps and inconsistencies between the Swiss regulatory framework and some of the Principles. As further elaborated in Section 4.1.3, these gaps relate to implementation of Principles 1, 2, 5, 7, 13, 16, 17, 19, 21 and 22. The gaps and shortcomings identified for Principles 1, 5, and 17 did not materially impact the overall assessment of those Principles, and therefore, the AT still assessed the implementation of those Principles as consistent.

Central counterparties

The AT concluded that the Swiss implementation measures for CCPs are consistent or broadly consistent for the majority of the Principles through the Swiss regulatory framework, including *inter alia* the FMIA, FMIO and NBO.

The AT observed, however, certain gaps and inconsistencies regarding the Swiss implementation of some of the Principles. As further elaborated in Section 4.1.4, these gaps relate to implementation of Principles 1, 2, 4, 5, 6, 7, 9, 10, 13, 15, 16, 17, 19, 21 and 22. The gaps and shortcomings identified for Principles 1, 4, 5, 6, 9, 10 and 17 did not materially impact the overall assessment of those Principles, and therefore, the AT still assessed the implementation of those Principles as consistent.

Central securities depositories / securities settlement systems

The AT concluded that the Swiss implementation measures for CSDs/SSSs are consistent or broadly consistent for the majority of the Principles through the Swiss regulatory framework, including *inter alia* the FMIA, FMIO and NBO.

The AT observed, however, certain gaps and inconsistencies regarding the Swiss implementation of some of the Principles. As further, elaborated in Section 4.1.5, these gaps relate to implementation of Principles 1, 2, 5, 7, 9, 10, 13, 15, 16, 17, 19, 21 and 22. The gaps and shortcomings identified for Principles 1, 5, 9, 10 and 17 did not materially impact the overall assessment of those Principles, and therefore, the AT still assessed the implementation of those Principles as consistent.

Trade repositories

The AT concluded that the majority of the Principles have been implemented for TRs in a broadly or partly consistent manner through the Swiss regulatory framework including, *inter alia* the FMIA and FMIO.

The AT observed, however, certain gaps and inconsistencies regarding the Swiss implementation of some of the Principles. As further elaborated in Section 4.1.6, these gaps relate to implementation of Principles 1, 2, 3, 15, 17, 19, 20, 21, 22 and 24.

¹¹ Available at www.bis.org/cpmi/publ/d130.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD501.pdf.

1.3 Response from the assessed jurisdiction's authorities

FINMA and the SNB welcome the assessment of the CPMI-IOSCO Implementation Monitoring Standing Group and thank the Assessment Team for their rigorous and diligent work. The Swiss authorities actively supported the development of the PFMI and continue to support their implementation. The Swiss authorities have sought to achieve full consistency of the Swiss regulatory framework for FMIs with the PFMI. We are pleased to acknowledge that the present assessment report evidences a high degree of consistency of the Swiss regulatory framework for PSs, CCPs, CSDs/SSSs and TRs with the PFMI.

The assessment report identifies a number of instances where the Swiss regulatory framework could reflect the PFMI more granularly. This largely mirrors the Swiss legal and regulatory tradition with a propensity for plain, simple language resulting in high-level principles and affording the Swiss authorities a relatively broad scope for interpretation. In conducting supervision and oversight activities FINMA and the SNB have the ability to review and approve all key elements of an FMI's governance and risk management framework and to induce changes in case they would not be consistent with the PFMI. Hence, FINMA and the SNB are convinced that in practice the Swiss regulatory and supervisory framework for FMIs does achieve the objectives of the PFMI. That said, the recommendations in this assessment report will be given careful consideration in any future amendment to the regulatory framework.

2. Introduction

This report presents the conclusions from the CPMI and IOSCO Level 2 assessment of Switzerland's implementation of and consistency with the Principles across all FMI types. This assessment was conducted as a peer review from August 2017 to September 2018. The assessment reflects the status of the Swiss legal, regulatory and oversight framework as of 30 June 2017. Accordingly, assessment ratings reflect the implementation measures in place as of 30 June 2017; other measures that were introduced after this date, or other material developments, are noted where relevant but were not considered in assigning ratings of consistency.

This review is part of the IMSG's effort to conduct Level 2 assessments of the legal, regulatory and oversight frameworks implementing the Principles for all FMI types in the 28 jurisdictions participating in the PFMI implementation monitoring exercise. For practical reasons, the Level 2 assessments are being carried out sequentially for groups of jurisdictions which have reported that final implementation measures for the Principles are in force, corresponding to the highest rating in the Level 1 assessments.¹²

The counterparts for this assessment were FINMA and the SNB, as these are the two authorities responsible for the regulation, supervision and oversight of FMIs in Switzerland.

2.1 Broader context of the Level 2 assessment

In line with the G20's expectations, CPMI and IOSCO members have undertaken to incorporate the Principles and the Responsibilities included in the PFMI in their legal and regulatory frameworks. The CPMI and IOSCO regard full, timely and consistent implementation of the PFMI as fundamental to ensuring the safety and soundness of FMIs, avoiding regulatory arbitrage, and supporting the resilience of the global financial system.

To that end, the CPMI and IOSCO have been actively monitoring the implementation of the PFMI based on a monitoring framework that, so far, has involved assessment at three levels:

- (1) Level 1, to self-assess whether jurisdictions have completed the process of adopting the legislation, regulations and other policies that will enable them to implement the Principles and Responsibilities;
- (2) Level 2, to assess whether the content of legislation, regulations and policies (the regulatory framework) is complete and consistent with the Principles and the Responsibilities; and
- (3) Level 3, to assess whether there is consistency in the outcomes of implementation of the Principles and Responsibilities.

The Level 1 exercise covered jurisdictions' adoption of both the Principles and Responsibilities, across all FMI types, and was based on a self-assessment by the jurisdictions. The Level 2 and Level 3 assessments of the Principles and the Responsibilities, by contrast, have been conducted as peer reviews across jurisdictions and in much greater detail.

The Principles assessments are ongoing, and are being considered separately at Level 2 and Level 3. For the Responsibilities, the IMSG combined the Level 2 and Level 3 assessments into a single exercise, whereby the IMSG focused on both the measures taken by the relevant authority to fulfil the Responsibilities, including its powers and the framework and processes in place to meet the

¹² CPMI-IOSCO, *Implementation monitoring of PFMI: Third update to Level 1 assessment report*, June 2016, www.bis.org/cpmi/publ/d145.htm and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD534.pdf>.

requirements under the Responsibilities (Level 2), and how these measures translated into observed outcomes (Level 3).

The CPMI and IOSCO have conducted six Level 1 assessments since the publication of the PFMI. The initial assessment was published in August 2013¹³ with annual updates published thereafter in May 2014,¹⁴ June 2015,¹⁵ June 2016,¹⁶ July 2017,¹⁷ and July 2018.¹⁸ Overall, the fifth update shows that the 28 participating jurisdictions have made further progress in completing the adoption of legislation, regulations and/or policies to support implementation of the PFMI. The Level 1 assessments also showed that jurisdictions have implemented, or are in the process of implementing, the PFMI in different ways. Depending on the national legal and regulatory or oversight framework some jurisdictions use a policy-based approach (ie rely on a policy statement as the primary tool for adopting the PFMI), some use a rules-based approach (ie rely on rules and/or regulations corresponding to the PFMI), and others combine these two approaches.

In this respect, both FINMA and the SNB can be described as having adopted a rules-based approach for implementing the Principles for the different FMI types.¹⁹ In the June 2016 third update to Level 1 assessment report, Switzerland reported that the final implementation measures for both the Principles and Responsibilities are in force for all FMI types. In the November 2015 Level 2 and Level 3 assessment of the Responsibilities, Switzerland was assessed to observe all the Responsibilities for all assessed FMI types. TRs were not considered ready for assessment at that point in time and were excluded from the review.

2.2 Objective and rating

The aim of the Level 2 assessment is to determine whether, and to what degree, the content of the legal and regulatory or oversight framework, including any relevant policy statements or other forms of implementation, applied in Switzerland is complete and consistent with the Principles. The focus of the Level 2 assessment is on the relevant framework itself, not on the application of this framework by authorities, nor on the FMIs' observance.

In conducting the assessment, the CPMI and IOSCO assessed whether there are gaps or shortcomings between implementation measures and the Principles and, where these existed, evaluated the materiality of the potential impact of those gaps. Ratings were then assigned based on these determinations to reflect the degree of completeness and consistency between an implementation measure and a particular Principle.

¹³ CPSS-IOSCO, *Implementation monitoring of PFMI – Level 1 assessment report*, August 2013, www.bis.org/cpmi/publ/d111.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD419.pdf.

¹⁴ CPSS-IOSCO, *Implementation monitoring of PFMI: first update to Level 1 assessment report*, May 2014, www.bis.org/cpmi/publ/d117.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD440.pdf.

¹⁵ CPMI-IOSCO, *Implementation monitoring of PFMI: Second update to Level 1 assessment report*, June 2015, www.bis.org/cpmi/publ/d129.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD489.pdf.

¹⁶ CPMI-IOSCO, *Implementation monitoring of PFMI: Third update to Level 1 assessment report*, June 2016, www.bis.org/cpmi/publ/d145.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD534.pdf.

¹⁷ CPMI-IOSCO, *Implementation monitoring of PFMI: Fourth update to Level 1 assessment report*, July 2017, www.bis.org/cpmi/publ/d166.pdf and www.iosco.org/library/pubdocs/pdf/IOSCOPD575.pdf.

¹⁸ CPMI-IOSCO, *Implementation monitoring of PFMI: Fifth update to Level 1 assessment report*, July 2018, www.bis.org/cpmi/publ/d179.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD605.pdf.

¹⁹ Refer to Section 3 for the overview of the regulatory, supervisory and oversight framework in Switzerland.

The rating framework used in Level 2 assessments (Table 1) is an adaptation of the approach described in the PFMI Assessment Methodology (AM).²⁰ To reflect the fact that the purpose of the Level 2 assessment is to evaluate the completeness and consistency of a jurisdiction's implementation measures, rather than whether FMIs in the jurisdiction are in observance of the Principles, the rating levels are: "Consistent", "Broadly consistent", "Partly consistent", "Not consistent" and "Not applicable".

Status rating of the Level 2 assessment		Table 1
Consistent	The jurisdiction's regulatory framework is consistent with the Principle. The assessment has identified no gaps or shortcomings, or only a few gaps and/or shortcomings that have no material impact on completeness and/or consistency.	
Broadly consistent	The jurisdiction's regulatory framework is broadly consistent with the Principle. The assessment has identified gaps and/or shortcomings that have a minor impact on completeness and/or consistency.	
Partly consistent	The jurisdiction's regulatory framework is partly consistent with the Principle. The assessment has identified gaps and/or shortcomings that have a significant impact on completeness and/or consistency.	
Not consistent	The jurisdiction's regulatory framework is not consistent with the Principle. The assessment has identified gaps and/or shortcomings that have a major impact on completeness and/or consistency.	
NA – No implementation measures needed (ie not applicable)	This status corresponds to the case where no relevant FMI exists that is within the scope of the Principle. A rating of "NA" will be indicated only if no relevant regulatory measures are being taken and no such FMI is expected to develop within the jurisdiction.	

2.3 Scope

This report covers implementation measures in Switzerland for PSs, CCPs, CSDs/SSSs and TRs. The main implementation measures assessed for Switzerland comprise the FMIA,²¹ the FMIO,²² the NBA,²³ the NBO,²⁴ Swiss Banking Act of 8 November 1934 (BA)²⁵ and the Swiss Regulatory Notes. Other implementation measures considered in this assessment include the Swiss Code of Obligations (CO),²⁶ Capital Adequacy Ordinance (CAO),²⁷ Liquidity Ordinance,²⁸ the Federal Act on Intermediated

²⁰ CPSS-IOSCO, *Principles for financial market infrastructures: Disclosure framework and assessment methodology*, December 2012, www.bis.org/cpmi/publ/d106.htm and www.iosco.org/library/pubdocs/pdf/IOSCOPD396.pdf.

²¹ See www.admin.ch/opc/en/classified-compilation/20141779/index.html.

²² See www.admin.ch/opc/en/classified-compilation/20152105/index.html.

²³ See www.admin.ch/opc/en/classified-compilation/20021117/index.html.

²⁴ See www.admin.ch/opc/en/classified-compilation/20040259/index.html.

²⁵ See www.admin.ch/opc/de/classified-compilation/19340083/index.html – an unofficial English translation is available on the KPMG website, assets.kpmg.com/content/dam/kpmg/ch/pdf/ch-banking-act-en.pdf.

²⁶ See www.admin.ch/opc/en/classified-compilation/19110009/index.html.

²⁷ See www.admin.ch/opc/de/classified-compilation/20121146/index.html – an unofficial English translation is available on the KPMG website, assets.kpmg.com/content/dam/kpmg/ch/pdf/ch-ordinance-concerning-capital-adequacy-en.pdf.

²⁸ See www.admin.ch/opc/de/classified-compilation/20122528/index.html – an unofficial English translation is available on the KPMG website, assets.kpmg.com/content/dam/kpmg/pdf/2016/01/ch-pub-20150101-liquidity-ordinance-en.pdf.

Securities (FISA)²⁹ and Circulars on corporate governance,³⁰ auditing,³¹ accounting,³² and market conduct.³³

The assessed legal, regulatory and oversight frameworks are further described in Section 3.

2.4 Process

This Level 2 assessment was carried out in three stages over the course of several months, applying the same methodology used for the previous Level 2 assessments. In developing its methodology, the IMMSG drew heavily on the AM, published in December 2012. The assessment proceeded as follows:

- (i) Collection of information based on the Swiss authorities' responses to questionnaires;
- (ii) Off-site review and follow-up exchange of information and discussions with the Swiss authorities and other members of the IMMSG; and
- (iii) Review of ratings by and response from the Swiss authorities.

The aim was to gain insight into the regulatory, supervisory and oversight framework through the content of existing legislation, regulations and policies used in the implementation of the Principles for all FMI types established in Switzerland.

The AT conducted a peer review based on the information provided by the relevant Swiss authorities as noted above. Interactions between the AT members and Swiss authorities helped ensure that the AT understood the content and intent of the Swiss framework, and gave Swiss authorities an opportunity to provide feedback to the AT. In addition, discussions with other members of the IMMSG helped ensure that a consistent approach was applied across all assessed FMI types, and that the approach was consistent with that of previous assessments.

The report also reflects input from the Swiss authorities who reviewed the findings and recommendations and provided a jurisdictional response.

²⁹ See www.admin.ch/opc/en/classified-compilation/20061735/index.html#ani9.

³⁰ See www.finma.ch/en/~media/finma/dokumente/dokumententcenter/myfinma/rundschreiben/finma-rs-2017-01.pdf?la=en.

³¹ See German text: www.finma.ch/de/~media/finma/dokumente/dokumententcenter/myfinma/rundschreiben/finma-rs-2013-03.pdf?la=de and other translations of the Federal Act on the Licensing and Oversight of Auditors (Auditor Oversight Act - AOA) are available at www.finma.ch/de/dokumentation/rundschreiben/.

³² See www.finma.ch/en/~media/finma/dokumente/dokumententcenter/myfinma/rundschreiben/finma-rs-2015-01.pdf?la=en.

³³ See www.finma.ch/en/~media/finma/dokumente/dokumententcenter/myfinma/rundschreiben/finma-rs-2013-08.pdf?la=en.

3. Overview of the regulatory, supervisory and oversight framework

The authorities responsible for regulation, supervision and oversight of FMIs in Switzerland are FINMA and the SNB. Responsibilities are allocated between the two authorities by type of FMI.

FINMA has responsibility for all CCPs, CSDs/SSSs, TRs and wholesale payment systems (unless operated by or on behalf of the SNB), including those not designated by the SNB as systemically important. The SNB has responsibility for all CCPs, CSDs/SSSs and payment systems that it designates as systemically important as well as any payment systems that it operates or that are operated on its behalf. Therefore, FINMA has sole responsibility for TRs, the SNB has sole responsibility for payment systems that it operates or that are operated on its behalf, and FINMA and the SNB share responsibilities for systemically important CCPs and CSDs/SSSs and systemically important payment systems not operated by or on behalf of the SNB.

FINMA and the SNB cooperate closely in the supervision and oversight of systemically important CCPs and CSDs/SSSs since these FMIs are subject to oversight by both authorities.³⁴ This includes regular meetings at management level and frequent contacts between FINMA and SNB staff.

FINMA

Under the FMIA, FINMA has the legal responsibility to authorise and supervise all FMIs in Switzerland. FINMA has the following responsibilities regarding the supervision of FMIs:

- FINMA has the legal responsibility to authorise and supervise all FMI types established in Switzerland, except in two circumstances (see Section 3.1);
- FINMA stipulates provisions that all authorised FMIs are required to adhere to;
- FINMA assesses the compliance of authorised FMIs with those provisions;
- FINMA may issue a recommendation or an order if an FMI does not comply with FINMA's requirements;
- FINMA has the power to take enforcement action where an FMI has violated supervisory law, including by withdrawing authorisation;
- FINMA consults with the SNB regarding matters related to systemically important FMIs that need authorisation or approval from FINMA – notably with respect to an FMI's authorisation and material changes in the facts on which an FMI's authorisation or approval is based; outsourcing of essential services; an FMI's recovery plan; a CCP's interoperability agreements; and a CSD's links with other CSDs.

Title 2 of the FMIA contains the following: common provisions that apply to all FMIs (Chapter 1, Section 1), special requirements for systemically important FMIs (Chapter 1, Section 2), the authorisation procedure (Chapter 1, Section 3), as well as further provisions that apply to specific types of FMI, notably CCPs (Chapter 3), CSDs (Chapter 4), TRs (Chapter 5), and PSs (Chapter 6). In addition, the insolvency and recovery regime for FMIs, including CCPs' direct and indirect participants, is laid out in Chapter 8. The provisions in the FMIA are written in the form of high-level principles, which are spelled out in greater detail in the FMIO.

³⁴ Currently there are no payment systems that are subject to both FINMA and SNB oversight. Therefore, cooperation is not relevant for payment systems.

SNB

The SNB's oversight powers and responsibilities for systemically important CCPs, CSDs and PSs are set out in the NBA and the FMIA.³⁵ The SNB has the following responsibilities regarding the oversight of systemically important FMIs:

- The SNB designates systemically important FMIs and their systemically important business processes;
- The SNB may issue special requirements for systemically important FMIs;
- The SNB assesses the compliance of systemically important FMIs with the special requirements;
- The SNB may issue a recommendation or an order if a systemically important FMI does not comply with the special requirements;
- The SNB is consulted by FINMA to provide its view on matters related to systemically important FMIs that need authorisation or approval from FINMA – notably with respect to an FMI's authorisation, and material changes in the facts on which an FMI's authorisation or approval is based; outsourcing of essential services; an FMI's recovery plan; a CCP's interoperability agreements; and a CSD's links with other CSDs.

The SNB has issued special requirements for systemically important FMIs, which are detailed in Chapter 4 Section 2 of the NBO. These special requirements are applied in addition to the general requirements stipulated in the FMIA and FMIO.

Swiss Regulatory Framework for PFMI Implementation

The Swiss authorities have implemented the Principles through regulatory acts and ordinances (FMIA, FMIO and NBO),³⁶ which are supported by two public explanatory notes (previously referred to as "Swiss Regulatory Notes") that contain further interpretation of the acts and ordinances: (i) a public communication made by the Federal Council regarding the FMIA/FMIO; and (ii) an explanatory note by the SNB to complement the NBO. The Swiss Regulatory Notes indicate that the requirements in the corresponding regulation should be implemented consistently with the PFMI. FINMA and the SNB rely on the Swiss Regulatory Notes when interpreting legal requirements in the FMIA, FMIO, and NBO and in exercising their day-to-day supervision and authorisation decisions consistent with the PFMI.

The FMIA provides the regulatory requirements for all FMIs authorised by FINMA, which include CCPs, CSDs/SSSs, TRs and PSs.³⁷ The high-level requirements in the FMIA are further complemented by more detailed requirements in the FMIO.

Additional requirements for systemically important FMIs are detailed in the NBO. The NBO requirements apply only to those FMIs designated as systemically important by the SNB.

A number of other regulations for businesses or financial institutions also apply to FMIs in Switzerland, including the NBA, CO, CAO, Liquidity Ordinance, Circulars on corporate governance, auditing, accounting, and market conduct, and FISA. In instances where there is not an explicit

³⁵ Under the current legal framework, TRs cannot be deemed systemically important and are therefore not subject to oversight by the SNB, nor do they have to comply with the special requirements for systemically important FMIs issued by SNB.

³⁶ According to FINMA and the SNB, Switzerland has opted for a rules-based implementation of the PFMI, but the rules tend to be relatively high-level, reflecting the traditional principles-based approach to financial regulation in Switzerland.

³⁷ Although FINMA has the power to authorise certain PSs, which would then be required to meet the requirements set out in the FMIA, the only systemically important PS in Switzerland is operated on behalf of the SNB and is therefore not authorised by FINMA or subject to the FMIA requirements.

regulatory requirement to address a particular element of the Principles, FINMA and the SNB rely on the Swiss Regulatory Notes that permit supervisory discretion to interpret the FMIA, FMIO and NBO to be consistent with the requirements set out in the PFMI.

3.1 Payment systems

In Switzerland, both FINMA and the SNB have responsibility over certain payment systems. FINMA has the legal responsibility to authorise and supervise payment systems established in Switzerland, unless the payment system is operated by the SNB or on its behalf (Art. 4(3) of the FMIA).³⁸

The SNB has oversight responsibility for any payment systems it designates as systemically important.³⁹ The SNB has only designated one payment system as systemically important: the Swiss Interbank Clearing (SIC) system.

SIC is the SNB's real-time gross settlement (RTGS) system, which is operated on its behalf by SIX Interbank Clearing AG (a subsidiary of SIX Group AG). Therefore, SIC is subject to SNB oversight and is not subject to FINMA authorisation or supervision. Participating financial institutions process their large-value payments as well as a significant part of their retail payments in Swiss francs in SIC.

The SNB is the system manager for SIC. In this function, it establishes the conditions for admission to and exclusion from the SIC system. It provides the liquidity necessary for settlement in SIC, sets times when operations begin and end, and maintains the accounts of the participating financial institutions. In addition, the SNB monitors daily operations and is responsible for crisis management in the event of disruptions or incidents. SIC AG is the system operator. SIC AG is a private sector entity that operates and maintains the processing centres as well as the communications and security installations. SIC AG also develops and maintains the software and manages the data files as well as the organisational and administrative rules of conduct in SIC.

Only a limited set of requirements in the FMIA and FMIO apply to SIC, namely the criteria to designate systemically important FMIs and critical services (Art. 22 of the FMIA), the reference to special requirements in the NBO (Art. 23 of the FMIA), the definition of liquid resources (Art. 50 and 58 of the FMIO), and rules about finality protection (Art. 89 of the FMIA). According to Art. 21a(1) of the NBO, all special requirements for payment systems in Art. 22–34 of the NBO apply to SIC.

As system owner and manager, the SNB has ultimate responsibility for SIC. Consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note *Application of the Principles for financial market infrastructures to central bank FMIs*, some of the key considerations in the Principles may not apply to central bank-operated FMIs. In line with PFMI paragraph 1.23, there are some exceptional cases where the SNB does not apply the special requirements set out in the NBO to functions provided by the SNB in SIC (eg recovery planning according to Art. 26 of the NBO, equity requirements according to Art. 31 of the NBO). The SNB's oversight function and its operational function in SIC are organisationally separated (SIC oversight is part of financial stability in Department II, while SIC operations are in Department III).⁴⁰

³⁸ A payment system requires authorisation from FINMA only if this is necessary for the proper functioning of the financial market or the protection of financial market participants and if the payment system is not operated by a bank (Art. 4(2) of the FMIA). Banks are subject to FINMA authorisation and ongoing supervision under the Swiss Banking Act and accompanying Banking Ordinance.

³⁹ The SNB's mandate to oversee FMIs also covers retail payment systems, which are not discussed in this report since no retail payment systems have been designated by the SNB as systemically important. In the area of retail payments, the SNB focuses mainly on monitoring for the early identification of relevant developments and possible hazards. Retail payment systems are subject to a duty to provide statistical information and – depending on their importance – an obligation of disclosure to the SNB.

⁴⁰ SNB organisation is available at: www.snb.ch/en/i/about/snb/org/id/snb_org.org.

3.2 Central counterparties

FINMA and the SNB share supervisory and oversight responsibilities for systemically important CCPs. In accordance with Swiss law, FINMA and the SNB cooperate closely in their supervision and oversight of CCPs. CCPs are required to obtain authorisation from FINMA (paragraph (1) of Art. 4 of the FMIA on "*Duty to obtain authorisation*"). Exemptions from this rule (also referenced in Art. 4) are provided for (i) FMIs operated by or on behalf of the SNB and (ii) CCPs established in foreign jurisdictions. CCPs established in foreign jurisdictions must seek recognition from FINMA (Art. 60 of the FMIA on "*Recognition of foreign central counterparties*") rather than authorisation, unless they have been granted an exemption from this requirement.

To obtain authorisation from FINMA, CCPs must meet the general requirements set out in Art. 8–21 of the FMIA and in Art. 4–19 of the FMIO. The relevant articles of the FMIA and FMIO cover various aspects of an FMI's functioning, including requirements related to corporate governance and organisation; essential services, business conduct and conflict of interest; provision of ancillary services; business continuity; IT systems and outsourcing; minimum capital; risk management; documentation and retention responsibilities; and disclosure of essential information. In addition to the general requirements in the FMIA and FMIO, a CCP also needs to meet the specific requirements applicable to CCPs under Art. 48–59 of the FMIA and Art. 44–51 of the FMIO. These articles include CCP-specific requirements related to collateral, fulfilment of payment obligations, liquidity, default management, segregation and portability, interoperability, publication of prices, exchange of value settlement, and capital adequacy.

In line with Articles 6 and 22 of the FMIA, *systemically important CCPs* must additionally comply with further requirements of Art. 23 and 24 of the FMIA, Art. 20 and 21 of the FMIO, and Art. 21a–34 of the NBO. The relevant articles of the FMIA and FMIO cover requirements related to recovery and resolution planning, governance and organisation; transparency; access; the management of the default of a participant; payments and settlements; credit and liquidity risk management; recovery and orderly wind-down; management of custody, investment, general business and operational risks; information security and business continuity; outsourcing; management of risk of indirect participants and FMI links.

SIX x-clear (SXC) is the only CCP domiciled in Switzerland.⁴¹ It has been designated as systemically important by the SNB. Therefore, it is supervised by FINMA and overseen by the SNB.

3.3 Central securities depositories and securities settlement systems

FINMA and the SNB share supervisory and oversight responsibilities for systemically important CSD/SSSs. In accordance with Swiss law, FINMA and the SNB cooperate closely in their supervision and oversight of CSD/SSSs. Like other FMI types, CSD/SSSs are required to obtain authorisation from FINMA (paragraph (1) of Art. 4 of FMIA on "*Duty to obtain authorisation*"). Exemptions from this rule are provided in Art. 4(3) of the FMIA concerning FMIs operated by, or on behalf of, the SNB.

To obtain authorisation from FINMA, a CSD/SSS must meet the general requirements set out in Art. 8–21 of the FMIA and in Art. 4–19 of the FMIO. The general articles of the FMIA and FMIO cover various aspects of an FMI's functioning, including requirements related to corporate governance and organisation; essential services, business conduct and conflict of interest; provision of ancillary services; business continuity; IT systems and outsourcing; minimum capital; risk management; documentation and retention responsibilities; and disclosure of essential information. In addition to the general requirements in the FMIA and FMIO, a CSD/SSS also needs to meet the specific requirements applicable to this type of FMI under Art. 61–73 of the FMIA and Art. 52–58 of the FMIO. These articles include

⁴¹ SIX x-clear is a designated payment and securities settlement system under the European settlement finality regulations.

CSD/SSS-specific requirements related to custody, recording and transfer of securities, settlement deadlines, collateral, fulfilment of payment obligations, capital adequacy and risk diversification, liquidity, default management, segregation and interoperability.

In line with Articles 6 and 22 of the FMIA, *systemically important CSDs* must additionally comply with further requirements of Art. 23 and 24 of the FMIA, Art. 20 and 21 FMIO, and Chapter 4 Section 2 of the NBO. The relevant articles of the FMIA and FMIO cover requirements related to recovery and resolution planning, governance and organisation; transparency; access; the management of the default of a participant; payments and settlements; credit and liquidity risk management; recovery and orderly wind-down; management of custody, investment, general business and operational risks; information security and business continuity; outsourcing; management of risk of indirect participants and FMI links.

SIX SIS (SIS) is the only CSD/SSS in Switzerland. It has been designated as systemically important by the SNB. Therefore, it is supervised by FINMA and overseen by the SNB.

3.4 Trade repositories

TRs, like CCPs and CSDs, require FINMA authorisation (Art. 4(1) of the FMIA on duty to obtain authorisation). A TR that meets the general requirements set out in Art. 8–21 of the FMIA and in Art. 4–19 of the FMIO, as well as the specific requirements applicable under Art. 74–80 of the FMIA and Art. 59–65 of the FMIO, is entitled to authorisation (Art. 5 of the FMIA). The general articles of the FMIA and FMIO cover various aspects of an FMI's functioning, including requirements related to corporate governance and organisation; essential services, business conduct and conflict of interest; provision of ancillary services; business continuity; IT systems and outsourcing; minimum capital; risk management; documentation and retention responsibilities; and disclosure of essential information. In addition to the general requirements in the FMIA and FMIO, a TR also needs to meet the specific requirements applicable to this type of FMI under Art. 74–80 of the FMIA and Art. 59–65 of the FMIO. These articles include TR-specific requirements related to data retention and publication; data access for domestic and foreign authorities; data transmission to private individuals; and recognition of foreign TRs.

The SNB does not have the power to designate TRs as systemically important FMIs (Art. 22 (1) of the FMIA and Art. 18–20 of the NBO). Therefore TRs are not subject to SNB oversight and are not subject to the requirements in the FMIA, FMIO and NBO that are applicable only to systemically important FMIs (including the requirements related to recovery and resolution).

SIX-TR is the only TR domiciled in Switzerland. It has been authorised and supervised by FINMA since 1 April 2017. However, SIX-TR only began its operations on 1 October 2017 when the Swiss reporting obligation for OTC derivatives transactions came into effect. Therefore, SIX-TR was not yet operational as of the 30 June 2017 cut-off date for this Level 2 assessment report.

4. Assessment and recommendations

4.1 Summary assessment of completeness and consistency with the Principles

This section provides a high-level summary of how consistent and complete the PS, CCP, CSD/SSS and TR regimes in Switzerland are with regard to the Principles. A more detailed assessment, including citations of the relevant legislation, policy and guidance, and notes explaining the assigned ratings is provided in tabular form in Section 4.2.

4.1.1 Overview

The AT found that Switzerland has consistently adopted most of the Principles across FMI types. While the Swiss regulations do not always mirror the language and structure of the Principles, the relevant requirements were found generally to have been implemented in a consistent or broadly consistent way.⁴²

In developing these ratings, the AT and IMSG have taken into account the Swiss Regulatory Notes and oversight practices.⁴³ As noted in Section 3 of this report, the Swiss regulations are not always detailed. However, the Swiss Regulatory Notes indicate that the overarching objective is to apply a regulatory framework for FMIs consistent with international standards, including the PFMI. FINMA and the SNB have indicated that the Swiss Regulatory Notes are legally binding. Therefore, where relevant regulatory provisions are less granular than the PFMI, the Swiss authorities advise that they use the Swiss Regulatory Notes to interpret the relevant regulatory provisions for authorisation decisions and for day-to-day supervision and oversight.⁴⁴ Although the Swiss Regulatory Notes are treated as legally binding by the Swiss authorities, the objective in the Swiss Regulatory Notes to apply the existing regulations consistently with international standards/PFMI may not always be reasonably interpreted to address more significant gaps, inconsistencies, and shortcomings in the regulations as compared to the PFMI. In these cases, the language in the Swiss regulations does not provide a sufficient anchor for the interpretive effect of the objective in the Swiss Regulatory Notes. For such cases, the AT has assessed a rating of "Not consistent", "Partly consistent" or "Broadly consistent," depending on the level of the gap, inconsistency, or shortcoming identified. On the other hand, for cases where the gap, inconsistency, or shortcoming in the regulations is less significant, the regulations provide a sufficient anchor for the interpretive effect of the Swiss Regulatory Notes to apply the existing regulations consistently with international standards/PFMI. In these cases, based on the regulation read in conjunction with the Swiss Regulatory Notes, the identified gap, inconsistency or shortcoming can reasonably be deemed to have no material impact on completeness or consistency with the PFMI, and the AT has assessed a rating of "consistent." This methodology is reflected in the ratings described below.

4.1.2 Implementation measures

For PSs, 11 Principles have been implemented in a consistent way (Principles 1, 3, 4, 5, 8, 9, 12, 15, 17, 18 and 23), four Principles in a broadly consistent way (Principles 2, 13, 16 and 21), and two

⁴² Tables 2–5 summarise the assessment ratings by Principle for each FMI type.

⁴³ As noted in Sections 3.4 and 4.1.6 of this report, it has not been possible to rely on supervisory practices in assessing TRs, as SIX-TR was not yet operational as of 30 June 2017.

⁴⁴ The Swiss authorities indicated to the AT that they uphold the spirit of the PFMI to a great extent through their supervisory and oversight practices. Based on statements provided by the Swiss authorities, the Swiss authorities would have the necessary tools at hand during their supervisory and oversight practices in order to enforce compliance of the FMIs with the PFMI.

Principles in a partly consistent way (Principle 7 and 19), through the NBO, FMIA, FMIO, BA, CO, CAO and the Swiss Regulatory Notes. One Principle (Principle 22) was not consistent.

For CCPs, 14 Principles have been implemented in a consistent way (Principles 1, 3, 4, 5, 6, 8, 9, 10, 12, 14, 17, 18, 20 and 23) and six Principles in a broadly consistent way (Principles 2, 13, 15, 16, 19 and 21), through NBO, FMIA, FMIO, BA, AOA, CAO, CO, FISA, FINMA circulars on corporate governance (2017/01) and auditing (2013/03), and the Swiss Regulatory Notes. One Principle (Principle 7) was partly consistent, and one Principle (Principle 22) was not consistent.

For CSDs/SSSs, 13 Principles have been implemented in a consistent way (Principles 1, 3, 4, 5, 8, 9, 10, 11, 12, 17, 18, 20 and 23) and six Principles in a broadly consistent way (Principles 2, 13, 15, 16, 19 and 21), through NBO, FMIA, FMIO, BA, CO, AOA, CAO, FISA, FINMA circulars on corporate governance (2017/01), auditing (2013/03) and accounting (2015/01), and the Swiss Regulatory Notes. One Principle (Principle 7) was partly consistent, and one Principle (Principle 22) was not consistent.

For TRs, two Principles have been implemented in a consistent way (Principles 18 and 23), three Principles in a broadly consistent way (Principles 2, 19, and 21) and seven Principles in a partly consistent way (Principles 1, 3, 15, 17 and 20, 22 and 24) through FMIA, FMIO, BA, AOA, FINMA Circular 2017/01 on Corporate Governance.

4.1.3 Payment systems

The Swiss regulatory framework for systemically important PSs is comprehensive, and the implementation measures are consistent with a majority of the Principles in the PFMI. Of the 18 Principles applicable to PSs, the AT has concluded that the Swiss regulatory framework is consistent with 11, broadly consistent with four, partly consistent with two, and not consistent with one as summarised in Table 2. As the only systemically important payment system in Switzerland is operated on behalf of the SNB, and the SNB retains responsibility for many aspects of the system, some KCs and certain elements within some KCs of the Principles are not applied. This approach is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note *Application of the Principles for financial market infrastructures to central bank FMIs*.

Assessment category	Principle
<i>Consistent</i>	<i>Principles 1, 3, 4, 5, 8, 9, 12, 15, 17, 18, 23</i>
<i>Broadly consistent</i>	<i>Principles 2, 13, 16, 21</i>
<i>Partly consistent</i>	<i>Principles 7, 19</i>
<i>Not consistent</i>	<i>Principle 22</i>
<i>Not applicable</i>	<i>None</i>

Based on the review and assessment of the NBO and the Swiss Regulatory Notes, certain gaps and inconsistencies⁴⁶ were identified regarding the Swiss implementation of the PFMI. These gaps relate to implementation of Principles 1, 2, 5, 7, 13, 16, 17, 19, 21 and 22. The gaps, and shortcomings identified for Principles 1, 5, and 17 did not materially impact the overall assessment of those Principles, and therefore, the implementation of those Principles was still assessed as consistent.

⁴⁵ The rating summary only lists those Principles that are applicable to the given type as defined in paragraphs 1.10 to 1.14 and shown in Table 1 of the PFMI.

⁴⁶ Some of the inconsistencies relate only to differences in language between the Swiss regulations and the PFMI. These differences in language are assessed to be immaterial and are highlighted in Section 4.2 of this report.

This section of the report describes the identified gaps, inconsistencies and shortcomings. The assessment tables for each of the types of FMI annexed to this report contain a detailed account of the identified gaps and inconsistencies (Section 4.2).

Switzerland is recommended to implement measures that address the identified gaps and inconsistencies. Although inconsistencies in language were assessed to be immaterial and thus consistent with the PFMI, Switzerland is still recommended to consider providing clarity to FMIs with respect to minimum standards to address these inconsistencies.

Principle with the rating of not consistent

- Communication procedures and standards (Principle 22) – the implementation measures for PSs are not consistent with Principle 22. While the intent of the Swiss authorities is that the NBO be interpreted in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs that would provide sufficient anchor for the SNB to rely on the Swiss Regulatory Notes in order to require FMIs to use or accommodate internationally accepted communications procedures and standards.

Principles with the rating of partly consistent

- Liquidity risk (Principle 7) – the implementation measures for PSs are partly consistent with Principle 7. The overall rating has been influenced by the gaps, shortcomings or inconsistencies in the implementation measures for KCs 2, 5 and 9. In regard to KC 2, the NBO does not explicitly address the need for FMIs to monitor and manage its intraday liquidity. In regard to KC 5, the Swiss regulations address what types of resource FMIs can use for the purpose of meeting the minimum liquid resource requirement but do not explicitly specify the requirement for FMIs to put in place pre-arranged and highly reliable funding arrangements for converting FX balances or liquidating non-cash collateral through sales. In regard to KC 9, the NBO does not explicitly address the need for FMIs to have clear procedures to report the results of its stress tests to appropriate decision-makers at the FMI and to use these results to evaluate and adjust its liquidity risk management framework. Having considered the role of the Swiss Regulatory Notes for the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day oversight, the AT still considers gaps in KCs 2, 5 and 9 to be material.
- Tiered participation arrangements (Principle 19) – the implementation measures for PSs are partly consistent with Principle 19. The overall rating has been influenced by the gaps and shortcomings regarding KCs 1, 2, 3 and 4. In regard to KCs 1, 2 and 3, there is a gap regarding the requirement that FMIs, including PSs, should ensure that their rules, procedures, and agreements allow them to gather basic information about all indirect participation, regardless of the type of indirect participant. The NBO requires FMIs to gather this information only for indirect participants that are visible to the FMI, which has the potential to limit an FMI's application of this requirement. For SIC AG, the gap is more significant, as the SNB has applied a narrower interpretation of this regulatory requirement by requiring the PS only to gather information and monitor and manage indirect participation insofar as SIC AG can identify the sender/receiver in the payment message, which is not consistent with the expectation established in the Principle, particularly for the purpose of ensuring that all material indirect participants have been identified. In regard to KC 4, there is a gap in the NBO regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. There are general risk provisions in the Swiss regulations that may capture this. Having considered the role of the Swiss Regulatory Notes for the SNB to interpret the NBO consistent with the PFMI in its day-to-day oversight, the AT considers this gap with respect to KC 4 to be minor.

Principles with the rating of broadly consistent

- Governance (Principle 2) – the implementation measures for PSs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the

implementation measures for KCs 3 and 6. In regard to KC 3, while there is a requirement for FMIs to assess the board's *overall* performance, the requirement to ask the board to regularly review the performance of its *individual* board members is not explicitly addressed by the NBO. In regard to KC 6, the NBO does not explicitly address the need for the risk management function to have sufficient authority, independence, resources and access to the board. Having considered the role of the Swiss Regulatory Notes for the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers these gaps to be minor.

- Participant-default rules and procedures (Principle 13) – the implementation measures for PSs are broadly consistent with Principle 13. The overall rating has been influenced by the minor gaps or shortcomings identified for KC 4. In regard to KC 4, there is a minor gap as the NBO does not explicitly address the requirement to involve relevant stakeholders in the testing and review of the FMI's default procedures. In addition, the requirement to conduct such testing and review following material changes to the rules and procedures of the FMI is also not addressed explicitly in the NBO. Having considered the role of the Swiss Regulatory Notes for the SNB to interpret the NBO consistent with the PFMI in its day-to-day oversight, the AT considers these gaps to be minor.
- Custody and investment risk (Principle 16) – the implementation measures for PSs are broadly consistent with Principle 16. The overall rating has been influenced by the minor gap regarding KC 1. KC 1 requires an FMI to hold its own and its participants' assets at "supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets". The NBO requires such action only "in so far as possible". The inclusion of the phrase "in so far as possible" could potentially be interpreted to allow an FMI to hold assets at an unsupervised entity, which would set a lower expectation than KC 1 and could put the FMI's and its participant's assets at risk. At the same time, the SNB relies on the Swiss Regulatory Notes to interpret the NBO consistent with the PFMI. In particular, during its oversight and supervisory activities, the SNB does not allow FMIs to use entities that are not regulated and supervised, unless those custodians are central banks. Based on its statement, the SNB has sufficient control over FMIs' custodian policies because any significant change to the risk profile of an FMI's custodians would need to be approved by the SNB. For this reason, the gap found for KC 1 is considered minor.
- Efficiency and effectiveness (Principle 21) – the implementation measures for PSs are broadly consistent with Principle 21. The overall rating has been influenced by the gaps or shortcomings regarding KCs 2 and 3. In regard to KC 2, while the NBO requires appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for the FMI to have goals and objectives that are measurable and achievable. In regard to KC 3, while the NBO requires appropriate corporate management rules and organisation, and that the board's work should be evaluated regularly, there is a gap regarding explicit requirements on mechanisms for the regular review of an FMI's efficiency and effectiveness. Having taken into consideration that the NBO requires appropriate corporate management rules and organisation with related objective and goal-setting and the regular evaluation of such a governance, the missing aspects are assessed as having only a minor impact on completeness and/or consistency of the Swiss implementation of the PFMI.

Principles with the rating of consistent, but with gaps and inconsistencies identified at the KC level

- Legal basis (Principle 1) – the implementation measures for PSs are consistent with Principle 1, although there are some minor gaps or shortcomings with KC 5 that have no material impact on completeness or consistency. In regard to KC 5, the NBO does not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions. However, this is addressed via the requirement that the operator shall regularly review the effectiveness and enforceability of the contractual framework in all relevant jurisdictions. The enforceability of the contractual framework in all

relevant jurisdictions practically implies that the risks from conflict of laws across jurisdictions are identified and mitigated. Furthermore, there is a requirement that the PSs shall take the necessary measures to limit any legal risks. Moreover, the Swiss Regulatory Notes indicate that the overarching objective is to apply a regulatory framework for FMIs consistent with international standards, including the PFMI.

- Collateral (Principle 5) – the implementation measures for PSs are consistent with Principle 5, although there are some minor gaps or shortcomings with KC 6 that have no material impact on completeness or consistency. In regard to KC 6, the NBO does not explicitly address the need for FMIs to use a collateral management system and does not explicitly require that such a collateral management system be well designed and operationally flexible. Rather, the NBO, among other things, requires the FMI to provide tools and incentives for the participants to continuously contain and manage risks through appropriate procedures and tools. These stipulations, in conjunction with the requirement for the FMI to manage credit risk via appropriate tools and procedures, in essence, assume the establishment of a well designed and operationally flexible collateral management system by the FMI that can be checked by the SNB during its oversight activities.
- Operational risk (Principle 17) – the implementation measures for PSs are consistent with Principle 17. However, there is a minor gap with KC 2 that has no material impact on completeness or consistency. In regard to KC 2, the NBO does not have an explicit requirement to periodically, and after significant changes, test systems, operational policies and controls. However, the SNB audit strategy and plan cover this aspect with the aim of ensuring that tests are conducted.

4.1.4 Central counterparties

The Swiss regulatory framework for CCPs is comprehensive, and the implementation measures are consistent with a majority of the Principles in the PFMI. Of the 22 Principles applicable to CCPs, the Swiss regulatory, supervisory and oversight framework is consistent with 14, broadly consistent with six, partly consistent with one, and not consistent with one, as summarised in Table 3.

Ratings summary ⁴⁷ for CCPs		Table 3
Assessment category	Principle	
<i>Consistent</i>	<i>Principles 1, 3, 4, 5, 6, 8, 9, 10, 12, 14, 17, 18, 20, 23</i>	
<i>Broadly consistent</i>	<i>Principles 2, 13, 15, 16, 19, 21</i>	
<i>Partly consistent</i>	<i>Principle 7</i>	
<i>Not consistent</i>	<i>Principle 22</i>	
<i>Not applicable</i>	<i>None</i>	

Based on the review and assessment of the FMIA, FMIO and NBO, and the Swiss Regulatory Notes, certain gaps and inconsistencies⁴⁸ were identified regarding the Swiss implementation of the PFMI. These gaps relate to implementation of Principles 1, 2, 4, 5, 6, 7, 9, 10, 13, 15, 16, 17, 19, 21 and 22. The gaps, inconsistencies and shortcomings identified for Principles 1, 4, 5, 6, 9, 10 and 17 did not materially impact the overall assessment of those Principles, and therefore, the implementation of those principles was still assessed as consistent. This section of the report describes the identified gaps, inconsistencies and shortcomings. The assessment tables for each of the types of FMI annexed to this report contain a detailed account of the identified gaps and language inconsistencies (Section 4.2).

⁴⁷ The ratings summary only lists those Principles that are applicable to the given type of FMI as defined in paragraphs 1.10 to 1.14 and shown in Table 1 of the PFMI.

⁴⁸ Some of the inconsistencies relate only to differences in language between the Swiss regulations and the PFMI. These differences in language are assessed to be immaterial and are highlighted in Section 4.2 of this report.

Switzerland is recommended to implement measures that address the identified gaps and inconsistencies. Although inconsistencies in language were assessed to be immaterial and thus consistent with the PFMI, Switzerland is still recommended to consider providing clarity to FMIs with respect to minimum standards to address these inconsistencies.

Principle with the rating of not consistent

- Communication procedures and standards (Principle 22) – the implementation measures for CCPs are not consistent with Principle 22. While the intent of the Swiss regulations is to be in line with the PFMI, there is no explicit requirement on FMIs that would provide sufficient anchor for the Swiss authorities to rely on the Swiss Regulatory Notes in order to require FMIs to use or accommodate internationally accepted communications procedures and standards.

Principle with the rating of partly consistent

- Liquidity risk (Principle 7) – the implementation measures for CCPs are partly consistent with Principle 7. The overall rating has been influenced by the gaps, shortcomings or inconsistencies in the implementation measures for KCs 2, 5 and 9. In regard to KC 2, the Swiss regulations do not explicitly address the need for FMIs to monitor and manage its intraday liquidity. In regard to KC 5, the Swiss regulations address what types of resource FMIs can use for the purpose of meeting its minimum liquid resource requirement but do not explicitly specify the requirement for FMIs to put in place pre-arranged and highly reliable funding arrangements for converting FX balances or liquidating non-cash collateral through sales. In regard to KC 9, the Swiss regulations do not explicitly address the need for FMIs to have clear procedures to report the results of its stress tests to appropriate decision-makers at the FMI and to use these results to evaluate and adjust its liquidity risk management framework. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT still considers gaps in KCs 2, 5 and 9 to be material.

Principles with the rating of broadly consistent

- Governance (Principle 2) – the implementation measures for CCPs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 1, 3 and 6. In regard to KC 1, the Swiss regulations do not explicitly address the need for FMIs to have objectives that explicitly support financial stability and other relevant public interest considerations. In regard to KC 3, while there is a requirement for FMIs to assess the board's *overall* performance, the requirement to ask the board to regularly review the performance of its *individual* board members is not explicitly addressed by the Swiss regulations. In regard to KC 6, the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources and access to the board. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers these gaps to be minor.
- Participant-default rules and procedures (Principle 13) – the implementation measures for CCPs are broadly consistent with Principle 13. The overall rating has been influenced by the minor gaps or shortcomings identified for KC 4. In regard to KC 4, there is a minor gap as the Swiss regulations do not explicitly address the requirement to involve relevant stakeholders in the testing and review of the FMI's default procedures. In addition, the requirement to conduct such testing and review following material changes to the rules and procedures of the FMI is not addressed explicitly in the Swiss regulations. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers these gaps to be minor.
- General business risk (Principle 15) – the implementation measures for CCPs are broadly consistent with Principle 15. The overall rating has been influenced by the gap identified for KC3. The Swiss

regulations state FINMA's authority to ease the capital requirement for FMIs. This discretionary power of FINMA is given by the law in a generic way. Therefore, the Swiss regulations do not provide specificities of circumstances when FINMA may exercise this power. Even if FINMA does not have the intention to do so, the relevant requirement of the Swiss regulation is open to interpretation, giving the indication that the easing may go below the minimum requirement in general, which would not be in accordance with KC3 of the Principle.

- Custody and investment risk (Principle 16) – the implementation measures for CCPs are broadly consistent with Principle 16. The overall rating has been influenced by the minor gaps or shortcomings regarding KCs 1 and 2. KC 1 requires an FMI to hold its own and its participants' assets at "supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets". The Swiss regulations require such action only "in so far as possible". The inclusion of the phrase "in so far as possible" could potentially be interpreted to allow an FMI to hold assets at an unsupervised entity, which would set a lower expectation than KC 1 and could put the FMI and its participant's assets at risk. At the same time the Swiss authorities rely on the Swiss Regulatory Notes to interpret the Swiss regulations consistently with the PFMI. In particular, during their oversight and supervisory activities the Swiss authorities do not allow for FMIs to use entities that are not regulated and supervised, unless those custodians are central banks. Based on their statement, the Swiss authorities have sufficient control over the FMIs' custodian policy, as any significant change to the risk profile of custodians would need to be approved by the Swiss authorities. For this reason, the gap found for KC 1 is eventually considered as minor. With regard to KC 2, the Swiss regulations do not explicitly address the need for prompt access to the FMI's own assets. This gap is also assessed to be minor, having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight.
- Tiered participation arrangements (Principle 19) – the implementation measures for CCPs are broadly consistent with Principle 19. The overall rating has been influenced by the gaps or shortcomings regarding KCs 1, 2, 3 and 4. In regard to KCs 1, 2 and 3, there is a gap regarding the requirement that FMIs should ensure that their rules, procedures and agreements allow them to gather basic information about all indirect participation, regardless of the type of indirect participant. The Swiss regulations require FMIs to gather this information only for indirect participants that are identifiable to the FMI, which has the potential to limit an FMI's application of this requirement. In regard to KC 4, there is a gap in the Swiss regulations regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, there are general risk provisions that may capture this. Therefore, having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers this gap with respect to KC 4 to be minor.
- Efficiency and effectiveness (Principle 21) – the implementation measures for CCPs are broadly consistent with Principle 21. The overall rating has been influenced by the gaps or shortcomings regarding KC 2 and KC 3. In regard to KC 2, while the Swiss regulations require appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for these to be measurable and achievable. In regard to KC 3, while the Swiss regulations require appropriate corporate management rules and organisation, and that the board's work should be evaluated regularly, there is a gap regarding explicit requirements on mechanisms for the regular review of an FMI's efficiency and effectiveness. Having taken into consideration that the Swiss regulations do require appropriate corporate management rules and organisation with related objective and goal setting and the regular evaluation of such a governance, the missing aspects are assessed as having only a minor impact on the completeness and/or consistency of the Swiss implementation of the PFMI.

Principles with the rating of consistent, but with gaps and inconsistencies identified at the KC level

- Legal basis (Principle 1) – the implementation measures for CCPs are consistent with Principle 1, although there are some minor gaps or shortcomings with KC 5 that have no material impact on completeness or consistency. In regard to KC 5, the Swiss regulations do not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions. However, this is addressed via the requirement that the operator shall regularly review the effectiveness and enforceability of the contractual framework in all relevant jurisdictions. The enforceability of the contractual framework in all relevant jurisdictions practically implies that the risks from conflict of laws across jurisdictions are identified and mitigated. Furthermore, there is a requirement that the CCPs shall take the necessary measures to limit any legal risks. Moreover, the Swiss Regulatory Notes indicate that the overarching objective is to apply a regulatory framework for FMIs consistent with international standards, including the PFMI.
- Credit risk (Principle 4) – the implementation measures for CCPs are consistent with Principle 4, although there are some minor gaps and shortcomings with KC 5 that have no material impact on completeness or consistency since they are captured by general risk management requirements. In regard to KC 5, the Swiss regulations do not explicitly address the need for an FMI to have clear procedures to report the results of its stress tests to appropriate decision-makers at the FMI and to use these results to evaluate the adequacy of its total financial resources, and to adjust them, although the regulation is clear that that CCPs should conduct daily stress tests to assess financial resource adequacy and make any necessary adjustments in the event of a shortcoming so as to meet the requirements, and inform and submit to the SNB documentation on the results of such risk controls. Moreover, the Swiss authorities use the Swiss Regulatory Notes, which indicate that the overarching objective is to apply a regulatory framework for FMIs consistent with international standards, including the PFMI, to interpret the relevant regulatory provisions for day-to-day oversight and supervisory activities. Therefore, although the Swiss regulations are not explicit, the Swiss authorities, through the application of the Swiss Regulatory Notes to the requirements in the Swiss regulations noted above, are in a position to ensure that CCPs meet the requirements of KC 5 and have the ability to enforce the requirements of KC 5.
- Collateral (Principle 5) – the implementation measures for CCPs are consistent with Principle 5, although there are some minor gaps or shortcomings with KC 6 that have no material impact on completeness or consistency. In regard to KC 6, the Swiss regulations do not explicitly address the need for FMIs to use a collateral management system and do not explicitly require that such a collateral management system be well designed and operationally flexible. Rather, the Swiss regulations, among other things, require the FMI to provide tools and incentives for the participants to continuously contain and manage risks through appropriate procedures and tools. These stipulations, in conjunction with the requirement for the FMI to manage credit risk via appropriate tools and procedures, in essence assume the establishment of a well designed and operationally flexible collateral management system by the FMI that can be eventually checked by the Swiss authorities during their oversight and supervisory activities.
- Margin (Principle 6) – the implementation measures for CCPs are consistent with Principle 6, although there are some minor gaps or shortcomings with KC 2 that have no material impact on completeness or consistency. In regard to KC 2, the Swiss regulations do not explicitly address the requirement that a CCP should have (i) a reliable source of timely price data for its margin system or (ii) alternative procedures and valuation models, if pricing data are not readily available or reliable. However, the Swiss regulations have general risk provisions in relation to margining that are designed to capture these aspects.
- Money settlement (Principle 9) – the implementation measures for CCPs are consistent with Principle 9, although there are some minor gaps or shortcomings with KCs 3 and 5 that have no

material impact on completeness or consistency. In regard to KC 3, the Swiss regulations require FMIs to monitor credit risks vis-à-vis commercial settlement banks but do not otherwise explicitly address the need for FMIs to establish and monitor adherence to criteria for settlement banks, or to monitor and manage concentration of exposures to settlement banks. In regard to KC 5, the Swiss regulations do not require from the CCP that its arrangements with any settlement banks should (i) clearly state the specific points of the payment and settlement process and (ii) explicitly address those aspects of KC 5 regarding finality and transferability. The identified gaps and shortcomings were assessed to be immaterial, in particular taking into consideration that for the time being the CCP domiciled in Switzerland does not use any commercial settlement bank arrangement. The CCP exclusively relies on other FMIs in relation to settlement.

- Physical deliveries (Principle 10) – the implementation measures for CCPs are consistent with Principle 10, although there are some minor gaps or shortcomings with KC 2 that have no material impact on completeness or consistency. In regard to KC 2, the Swiss regulations do not explicitly state that an FMI should manage the risks and costs associated with the “storage and delivery” of physical instruments or commodities. Nevertheless, the regulations include general risk requirements that should cover all risks. Furthermore, the identified gaps and shortcomings were assessed to be immaterial, in particular taking into consideration that for the time being there is no CCP domiciled in Switzerland that clears physically deliverable instruments or commodities.
- Operational risk (Principle 17) – the implementation measures for CCPs are consistent with Principle 17. However, there is a minor gap or shortcoming with KC 2 that has no material impact on completeness or consistency. In regard to KC 2, the Swiss regulations do not explicitly require FMIs to periodically, and after significant changes, test systems, operational policies and controls. However the Swiss authorities’ audit strategy and plan cover this aspect with the aim of ensuring that tests are conducted.

4.1.5 Central securities depositories/securities settlement systems

The Swiss regulatory framework for CSDs is comprehensive, and the implementation measures are consistent with a majority of the Principles in the PFMI. Of the 21 Principles applicable to CSDs, the Swiss regulatory, supervisory and oversight framework is consistent with 13, broadly consistent with six, partly consistent with one and not consistent with one, as summarised in Table 4.

Ratings summary ⁴⁹ for CSDs/SSSs		Table 4
Assessment category	Principle	
<i>Consistent</i>	<i>Principle 1, 3, 4, 5, 8, 9, 10, 11, 12, 17, 18, 20, 23</i>	
<i>Broadly consistent</i>	<i>Principle 2, 13, 15, 16, 19, 21</i>	
<i>Partly consistent</i>	<i>Principle 7</i>	
<i>Not consistent</i>	<i>Principle 22</i>	
<i>Not applicable</i>	<i>None</i>	

Based on the review and assessment of the FMIA, FMIO and NBO, and the Swiss Regulatory Notes, certain gaps and language inconsistencies⁵⁰ were identified regarding the Swiss implementation of the PFMI. These gaps relate to implementation of Principles 1, 2, 5, 7, 9, 10, 13, 15, 16, 17, 19, 21 and 22. The gaps and shortcomings identified for Principles 1, 5, 9, 10 and 17 did not materially impact the

⁴⁹ The ratings summary only lists those Principles that are applicable to the given type of FMI as defined in paragraphs 1.10 to 1.14 and shown in Table 1 of the PFMI.

⁵⁰ Some of the inconsistencies relate only to differences in language between the Swiss regulations and the PFMI. These differences in language are assessed to be immaterial and are highlighted in Section 4.2 of this report.

overall assessment of those Principles and, therefore, the implementation of those principles was still assessed as consistent.

This section of the report describes the identified gaps and shortcomings. The assessment tables for each of the types of FMI annexed to this report contain a detailed account of the identified gaps and language inconsistencies (Section 4.2).

Switzerland is recommended to implement measures that address the identified gaps and inconsistencies. Although inconsistencies in language were assessed to be immaterial and thus consistent with the PFMI, Switzerland is still recommended to consider providing clarity to FMIs with respect to minimum standards to address these inconsistencies.

Principle with the rating of not consistent

- Communication procedures and standards (Principle 22) – the implementation measures for CSDs are not consistent with Principle 22. While the intent of the Swiss regulations is to be in line with the PFMI, there is no explicit requirement for FMIs that would provide sufficient anchor for the Swiss authorities to rely on the Swiss Regulatory Notes in order to require FMIs to use or accommodate internationally accepted communications procedures and standards.

Principle with the rating of partly consistent

- Liquidity risk (Principle 7) – the implementation measures for CSDs are partly consistent with Principle 7. The overall rating has been influenced by the gaps, shortcomings or inconsistencies in the implementation measures for KCs 2, 5 and 9. In regard to KC 2, the Swiss regulations do not explicitly address the need for FMIs to monitor and manage its intraday liquidity. In regard to KC 5, the Swiss regulations address what types of resource FMIs can use for the purpose of meeting its minimum liquid resource requirement but do not explicitly specify the requirement for FMIs to put in place pre-arranged and highly reliable funding arrangements for converting FX balances or liquidating non-cash collateral through sales. In regard to KC 9, the Swiss regulations do not explicitly address the need for FMIs to have clear procedures to report the results of its stress tests to appropriate decision-makers at the FMI and to use these results to evaluate and adjust its liquidity risk management framework. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT still considers gaps in KCs 2, 5 and 9 to be material.

Principles with the rating of broadly consistent

- Governance (Principle 2) – the implementation measures for CSDs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 1, 3 and 6. In regard to KC 1 the Swiss regulations do not explicitly address the need for FMIs to have objectives that explicitly support financial stability and other relevant public interest considerations. In regard to KC 3, while there is a requirement for FMIs to assess the board's *overall* performance, the requirement to ask the board to regularly review the performance of its *individual* board members is not explicitly addressed by the Swiss regulations. In regard to KC 6, the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources and access to the board. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers these gaps to be minor.
- Participant-default rules and procedures (Principle 13) – the implementation measures for CSDs are broadly consistent with Principle 13. The overall rating has been influenced by the minor gaps or shortcomings identified for KC 4. In regard to KC 4, there is a minor gap as the Swiss regulations do not explicitly address the requirement to involve relevant stakeholders in the testing and review of the FMI's default procedures. In addition, the requirement to conduct such testing and review

following material changes to the rules and procedures of the CSD/SSS is not addressed explicitly in the Swiss regulations. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers these gaps to be minor.

- General business risk (Principle 15) – the implementation measures for CSDs are broadly consistent with Principle 15. The overall rating has been influenced by the gap identified for KC 3. The Swiss regulations state FINMA’s authority to ease the capital requirement for FMIs. This discretionary power of FINMA is given by the law in a generic way. Therefore, the Swiss regulations do not provide specificities of circumstances when FINMA may exercise this power. Even if FINMA does not have the intention to do so, the relevant requirement of the Swiss regulation is open to interpretation, giving the indication that the easing may go below the minimum requirement in general, which would not be in accordance with KC 3 of the Principle.
- Custody and Investment Risk (Principle 16) – the implementation measures for CSDs are broadly consistent with Principle 16. The overall rating has been influenced by the minor gaps or shortcomings observed regarding KC 1 and KC 2. KC 1 requires an FMI to hold its own and its participants’ assets at “supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets”. The Swiss regulations require such action only “in so far as possible”. The inclusion of the phrase “in so far as possible” could potentially be interpreted to allow an FMI to hold assets at an unsupervised entity which would set a lower expectation than KC 1 and could put the FMI’s and its participant’s assets at risk. At the same time, the Swiss authorities rely on the Swiss Regulatory Notes to interpret the Swiss regulations consistently with the PFMI. In particular, during their oversight and supervisory activities, the Swiss authorities do not allow for FMIs to use entities that are not regulated and supervised, unless those custodians are central banks. Based on their statement, Swiss authorities have sufficient control over the FMIs’ custodian policy as any significant change to the risk profile of custodians would need to be approved by the Swiss authorities. For this reason, the gap found for KC 1 is eventually considered as minor. With regard to KC 2, the Swiss regulations do not explicitly address the need for prompt access to the FMI’s own assets. This gap is also assessed to be minor, having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight.
- Tiered participation arrangements (Principle 19) – the implementation measures for CSDs are broadly consistent with Principle 19. The overall rating has been influenced by the gaps and shortcomings regarding KCs 1, 2, 3 and 4. In regard to KCs 1, 2 and 3, there is a gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about all indirect participation, regardless of the type of the indirect participant. The Swiss regulations require FMIs to gather this information only for indirect participants that are identifiable to the FMI, which has the potential to limit an FMI’s application of this requirement. In regard to KC 4, there is a gap in the Swiss regulations regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, there are general risk provisions that may capture this. Therefore, having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, the AT considers this gap with respect to KC 4 to be minor.
- Efficiency and effectiveness (Principle 21) – the implementation measures for CSDs are broadly consistent with Principle 21. The overall rating has been influenced by the gaps or shortcomings regarding KC 2 and KC3. In regard to KC 2, while the Swiss regulations require appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for these to be measurable and achievable. In regard to KC 3, while the Swiss

regulations require appropriate corporate management rules and organisation, and that the board's work should be evaluated regularly, there is a gap regarding explicit requirements on mechanisms for the regular review of an FMI's efficiency and effectiveness. Having taken into consideration that the Swiss regulations do require appropriate corporate management rules and organisation with related objective- and goal-setting and the regular evaluation of such a governance, the missing aspects are assessed as having only a minor impact on the completeness and/or consistency of the Swiss implementation of the PFMI.

Principles with the rating of consistent, but with gaps and inconsistencies identified at the KC level

- Legal basis (Principle 1) – the implementation measures for CSDs are consistent with Principle 1, although there are some gaps or shortcomings with KC 5 that have no material impact on completeness or consistency. In regard to KC 5, the Swiss regulations do not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions. However, this is addressed via the requirement that the operator shall regularly review the effectiveness and enforceability of the contractual framework in all relevant jurisdictions. The enforceability of the contractual framework in all relevant jurisdictions practically implies that the risks from conflict of laws across jurisdictions are identified and mitigated. Furthermore, there is a requirement that the CSDs shall take the necessary measures to limit any legal risks. Moreover, the Swiss Regulatory Notes indicate that the overarching objective is to apply a regulatory framework for FMIs consistent with international standards, including the PFMI.
- Collateral (Principle 5) – the implementation measures for CSDs are consistent with Principle 5, although there are some gaps or shortcomings with KC 6 that have no material impact on completeness or consistency. In regard to KC 6, the Swiss regulations do not explicitly address the need for FMIs to use a collateral management system and do not explicitly require that such a collateral management system be well designed and operationally flexible. Rather, the Swiss regulations, among other things, require the FMI to provide tools and incentives for the participants to continuously contain risks and manage risks through the appropriate procedures and tools. These stipulations, in conjunction with the requirement for the FMI to manage credit risk via appropriate tools and procedures, in essence, assume the establishment of a well designed and operationally flexible collateral management system by the FMI that can be checked by the Swiss authorities during their oversight and supervisory activities.
- Money settlement (Principle 9) – the implementation measures for CSDs are consistent with Principle 9, although there are some minor gaps or shortcomings with KC 3 that have no material impact on completeness or consistency. In regard to KC 3, the Swiss regulations require FMIs to monitor credit risks vis-à-vis commercial settlement banks but do not otherwise explicitly address the need for FMIs to establish and monitor adherence to criteria for settlement banks, or to monitor and manage concentration of exposures to settlement banks. The identified gaps and shortcomings were assessed to be not material, taking into consideration that the CSD in Switzerland does commercial bank money settlement in its own books, thus obviating the need for a commercial settlement bank arrangement. Having considered the role of the Swiss Regulatory Notes for FINMA and the SNB to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision and oversight, as well as the fact that the Swiss Regulatory Notes indicate that the overarching objective is to apply a regulatory framework for FMIs consistently with international standards, including the PFMI, the AT has assessed this gap as having no material impact.
- Physical deliveries (Principle 10) – the implementation measures for CSDs are consistent with Principle 10, although there are some gaps or shortcomings with KC 2 that have no material impact on completeness or consistency. In regard to KC 2, the Swiss regulations do not explicitly state that an FMI should manage the risks and costs associated with the "storage and delivery" of physical

instruments or commodities. Nevertheless, the regulations include general risk requirements that should cover all risks. Furthermore, the identified gaps and shortcomings were assessed to be immaterial, in particular taking into consideration that physically deliverable instruments are uncommon in Switzerland and also that the Swiss regulations include general risk requirements that should cover all risks.

- Operational risk (Principle 17) – the implementation measures for CSDs are consistent with Principle 17. However, there is a minor gap or shortcoming with KC 2 that has no material impact on completeness or consistency. In regard to KC 2, the Swiss regulations do not explicitly require FMIs to periodically, and after significant changes, test systems, operational policies and controls. However, the Swiss Authorities' audit strategy and plan cover this aspect with the aim of ensuring that tests are conducted.

4.1.6 Trade repositories

The Swiss regulatory framework for TRs is considered broadly or partly consistent with the majority of the Principles in the PFMI. The Swiss legal and regulatory basis for TRs is less comprehensive in detail than for other types of FMI, as neither the provisions for systemically important FMIs in FMIA and FMIO, nor the NBO apply to TRs. This is in a few places reflected in some deviations in ratings assigned to TRs as compared to other types of FMI.

While TRs are supervised by FINMA, the SNB does not have the power to designate TRs as systemically important FMIs (Art. 22 (1) of the FMIA and Art. 18–20 of the NBO), and therefore TRs are not subject to SNB oversight. Given the Swiss authorities, in their Level 1 assessment, considered the PFMI to apply to Swiss TRs, the Swiss TR regime has been included in this Level 2 assessment.⁵¹

In assessing the Swiss TR regime, it was not possible to rely on supervisory practices, as SIX-TR only began its operations on 1 October 2017 when the Swiss reporting obligation for OTC derivatives transactions came into effect. Therefore, SIX-TR was not yet operational as of the 30 June 2017 cut-off date for this Level 2 assessment report. Given this recent launch date, it is also difficult to assess the importance and scale of future TR activities in Switzerland.

Of the 12 Principles applicable to TRs, the AT has concluded that the regulatory framework is consistent with two, broadly consistent with three and partly consistent with seven, as summarised in Table 5.

Ratings summary ⁵² for TRs		Table 5
Assessment category	Principle	
<i>Consistent</i>	<i>Principles 18 and 23</i>	
<i>Broadly consistent</i>	<i>Principles 2, 19 and 21</i>	
<i>Partly consistent</i>	<i>Principles 1, 3, 15, 17, 20, 22 and 24</i>	
<i>Not consistent</i>	<i>None</i>	
<i>Not applicable</i>	<i>None</i>	

Based on the review and assessment of the FMIA, FMIO, and the Swiss Regulatory Notes, a number of gaps and language inconsistencies were identified regarding the Swiss implementation of the PFMI. These gaps relate to implementation of Principles 1, 2, 3, 15, 17, 19, 20, 21, 22 and 24.

⁵¹ See the Third update to Level 1 assessment report (available at www.bis.org/cpmi/publ/d145.pdf and www.iosco.org/library/pubdocs/pdf/IOSCOPD534.pdf).

⁵² The ratings summary only lists those Principles that are applicable to the given type of FMI as defined in paragraphs 1.10 to 1.14 and shown in Table 1 of the PFMI.

This section of the report describes the identified gaps and shortcomings. The assessment tables for each of the types of FMI annexed to this report contain a detailed account of the identified gaps and language inconsistencies (Section 4.2).

Switzerland is recommended to implement measures which address the identified gaps and inconsistencies. Further, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to the TR with respect to minimum standards to address the inconsistencies.

Principles with the rating of partly consistent

- Legal basis (Principle 1) – the implementation measures for TRs are partly consistent with Principle 1. The overall rating has been influenced in particular by a significant gap regarding KC 1 as well as minor gaps in KCs 2, 3, 4 and 5. As TRs are not considered to be systemically important, they are subject to a narrower legal and regulatory basis as systemically important FMIs. In regard to KC 1, a significant gap is created by the absence of requirements to provide for a high degree of legal certainty in each material aspect of a TR's activities in all relevant jurisdictions. In regard to KCs 2, 3, 4 and 5, a range of minor gaps were identified in relation to (i) the lack of a requirement to fully (and directly) require that contracts are clear, understandable and consistent with relevant laws and regulations; (ii) the absence of explicit requirements for the articulation in a clear and understandable way of the legal basis by the TR; (iii) the lack of regulations to ensure that rules, procedures, and contracts are enforceable in all relevant jurisdictions; and (iv) not explicitly addressing the need for TRs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions. However, there is a requirement that TRs shall take the necessary measures to limit any legal risks.
- Framework for the comprehensive management of risks (Principle 3) – the implementation measures for TRs are partly consistent with Principle 3. The overall rating has been influenced by a significant gap regarding KC 4 as well as minor gaps in KCs 1 and 3. In regard to KC 4, there is a significant gap as the Swiss regulations do not explicitly address the need for TRs to identify multiple scenarios that may potentially prevent the TR from being able to provide its critical operations and services as a going concern, prepare appropriate plans for its recovery or orderly wind-down, and also provide relevant authorities with the information needed for purposes of resolution planning. The Swiss regulations address the need for TRs to have a risk management framework, but minor gaps in KC 1 are created as the regulations neither explicitly address the need for the risk management framework to be subject to periodic review nor, in KC 3, require TRs to “regularly review the material risks” or “interdependencies”.
- General business risk (Principle 15) – the implementation measures for TRs are partly consistent with Principle 15. The overall rating has been influenced by the gaps and shortcomings in KCs 1–5. Significant gaps were identified (i) for KC 2 as the current Swiss regulations lack requirements that TR's should hold liquid net assets funded by equity of an amount determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken; (ii) for KC3 regarding maintaining a viable recovery or orderly wind-down plan and holding sufficient liquid net assets funded by equity to implement this plan; (iii) for KC 4 regarding the need for a TR to have rules, procedures and a time table in the event that it needs assets beyond the minimum equity capital; and (iv) for KC 5 concerning the need for TRs to maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed, and that this plan should be approved by the board of directors and updated regularly. There is also a minor gap in the Swiss regulations regarding KC 1 since there is no reference to including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.
- Operational risk (Principle 17) – the implementation measures for TRs are partly consistent with Principle 17. The overall rating has been influenced by gaps and shortcomings regarding KCs 1, 2,

5 and 6. In regard to KC 2, a significant gap stems from the absence of requirements in legislation that systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes, that the board should endorse the FMI's operational risk management framework, and that a review of the business impact analysis is not the same as reviewing the FMI's operational risk management framework as a whole. In regard to KC 6, there is an absence of requirements referring to the use of a secondary site, the objective to resume operations within two hours following disruptive events, and that the FMI should regularly test these arrangements. The lack of these requirements is assessed to be significant by the AT. In regard to KC 1 and KC 5, minor gaps stem from the absence of requirements referring to the need to have (i) a specific framework for operational risk management and (ii) physical security policies and measures, respectively.

- FMI links (Principle 20) – the implementation measures for TRs are partly consistent with Principle 20. The overall rating has been influenced by the significant gaps and shortcomings in KCs 1, 2 and 9, as there are no requirements in Swiss regulations that refer to managing FMI link-related risks for TRs. However, the catch-all requirements on risk management (Art. 8 (3) of the FMIA and Art. 9 of the FMIO) may partly capture the missing aspects.
- Communication procedures and standards (Principle 22) – the implementation measures for TRs are partly consistent with Principle 22. The overall rating has been influenced by the gaps and shortcomings regarding KC 1. While the intent of the Swiss authorities is to rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI, there is a significant gap in the requirements on TRs to use or accommodate internationally accepted communications procedures and standards.
- Disclosure of market data by trade repositories (Principle 24) – the implementation measures for TRs are partly consistent with Principle 24. The overall rating has been influenced by the gaps and shortcomings regarding KCs 2 and 3. In regard to KC 2, a significant gap and shortcoming is created by the absence of requirements for a TR to provide data to relevant authorities in a timely and appropriate manner to enable them to meet their respective regulatory mandates and legal responsibilities. In regard to KC 3, a significant gap and shortcoming is created by the absence of requirements in the current Swiss regulations that the TR should have robust information systems that provide accurate current and historical data and that data should be provided in a timely manner and in a format that permits it to be easily analysed.

Principles with the rating of broadly consistent

- Governance (Principle 2) – the implementation measures for TRs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 1, 3 and 6. In regard to KC 1, the Swiss regulations do not explicitly address the need for FMIs to have objectives that explicitly support financial stability and other relevant public interest considerations. In regard to KC 3, while there is a requirement for FMIs to assess the board's *overall* performance, the requirement to ask the board to regularly review the performance of its *individual* board members is not explicitly addressed by the Swiss regulations. In regard to KC 6, the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources and access to the board. Having considered the role of the Swiss Regulatory Notes for FINMA to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision, the AT considers these gaps to be minor. Also, there is an immaterial gap in KC 4 as the regulations do not explicitly refer to the inclusion of non-executive board member(s).
- Tiered participation arrangements (Principle 19) – the implementation measures for TRs are broadly consistent with Principle 19. The overall rating has been influenced by the minor gaps and shortcomings in KCs 3 and 4. In KC 3 there is a gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about

all indirect participation, regardless of the type of indirect participant. The Swiss regulations require FMIs to gather this information only for indirect participants that are identifiable to the FMI, which has the potential to limit an FMI's application of this requirement. In regard to KC 4, there is a gap in the Swiss regulations regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, there are general risk provisions that may capture this. Having considered the role of the Swiss Regulatory Notes for FINMA to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision, the AT considers these gaps to be minor. In addition, there is a non-material gap in KC 1 created by the absence of requirements in legislation that tiered participation can be viewed as applicable, since a reporting entity could delegate its reporting to a third party which may or may not be a direct participant to a TR.

- Efficiency and effectiveness (Principle 21) – the implementation measures for TRs are broadly consistent with Principle 21. The overall rating has been influenced by the minor gaps or shortcomings regarding KCs 1, 2 and 3. In regard to KC 1, a minor gap stems from the absence of requirements in legislation referring to meeting the needs of the market it serves and in relation to the use of technology and procedures of a TR. In regard to KC 2, while the Swiss regulations require appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for these to be measurable and achievable. In regard to KC 3, while the Swiss regulations require appropriate corporate management rules and organisation, and that the board's work should be evaluated regularly, there is a gap regarding explicit requirements on a mechanism for the regular review of an FMI's efficiency and effectiveness. Having considered the role of the Swiss Regulatory Notes for FINMA to interpret the Swiss requirements consistently with the PFMI in their day-to-day supervision, the AT considers these gaps to be minor.

4.2 Switzerland's completeness and consistency with the Principles – Review and recommendations

4.2.1 Payment systems

1. Text of applicable Principles and Key Considerations (KCs) ⁵³	2. Implementation measures of the jurisdiction	3. Key conclusions for Principle	4. Recommendations and comments
<p>Principle 1: Legal basis</p> <p>An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.</p>	<p>Art. 23 National Bank Ordinance (NBO)</p> <p>Art. 23a NBO</p> <p>Art. 27 NBO</p> <p>Art. 32d NBO</p> <p>Art. 36 NBO</p> <p>Additional rules in various articles in FMIA, FMIO, and BA (for specific articles see answers to the KCs below).⁵⁴</p>	<p>Consistent</p> <p>The implementation measures for PSs are consistent with Principle 1, although there is a minor gap or shortcoming for KC 5 that has no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the gaps or identified inconsistencies related to KC 5.</p> <p>Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to PSs with respect to minimum standards.</p>
<p>1. The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.</p>	<p>Art. 23 NBO</p> <p>Art. 32d(4) NBO</p> <p>Art. 88 and 92 FMIA</p> <p>Art. 73–75 FMIO</p> <p>Art. 24–37 and 37d–37g BA</p> <p>Art. 89–91 FMIA and Art. 73–75 FMIO</p> <p>Art. 28 NBO</p> <p>Art. 29 NBO</p> <p>Art. 32 NBO</p>	<p>Inconsistency in language:</p> <p>The Swiss regulations address the need for legal basis to provide a high degree of certainty, but do not explicitly address the need for a high degree of certainty in all relevant jurisdictions. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their</p>	

⁵³ Only the relevant principles for PSs (as set forth in the annex E of the PFMI) are included.

⁵⁴ An unofficial translation of the BA is available on the KPMG website.

	SNB's explanatory note to the NBO	interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
2. An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.	Art. 23 NBO Art. 23a NBO Art. 28 NBO Art. 29 NBO Art. 32 NBO Art. 36 NBO SNB's explanatory note to the NBO		
3. An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.	Art. 23 NBO Art. 23a NBO Art. 28 NBO Art. 29 NBO Art. 32 NBO Art. 36 NBO SNB's explanatory note to the NBO		
4. An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.	Art. 23(2) NBO Art. 27(1) NBO Art. 89(2–3) FMIA Art. 92 FMIA Art. 88(1) FMIA Art. 24–37 and 37d–37g BA	Inconsistency in language: The Swiss regulations do not explicitly address the need for a high degree of certainty that actions of the FMI will not be voided, reversed or subject to stays in all relevant jurisdictions. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their	

		interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
5. <i>An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.</i>	Art. 23(2) NBO Art. 27(1) NBO	There is a minor gap as the NBO does not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions.	
Principle 2: Governance An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.	Art. 22 NBO Art. 22a NBO Art. 22b NBO Art. 23a NBO Art. 27 NBO Art. 620 et seq. Swiss Code of Obligations (CO)	Broadly consistent The implementation measures for PSs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 3 and 6.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 3 and 6.
1. <i>An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.</i>	Art. 22(1) NBO Art. 22(2) NBO	The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.	
2. <i>An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.</i>	Art. 22(1) NBO Art. 22a(4) NBO Art. 22b NBO Art. 23a NBO Art. 620 et seq. CO		

	Art. 716b CO		
3. <i>The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.</i>	Art. 22(1)(a) NBO Art. 22a(1) NBO Art. 22b NBO Art. 620 et seq. CO Art. 716 et seq. CO SNB's explanatory note to the NBO	There is a minor gap due to the fact that while there is a requirement for FMIs to assess the board's overall performance, the requirement to ask the board to regularly review the performance of its individual board members is not explicitly addressed by the Swiss regulations.	
4. <i>The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).</i>	Art. 22a(1–2)		
5. <i>The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.</i>	Art. 22(1)(a) NBO Art. 22a(1) NBO		
6. <i>The board should establish a clear, documented risk management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision-making in crises and emergencies. Governance arrangements should ensure that the risk management and internal control functions have sufficient authority, independence, resources, and access to the board.</i>	Art. 22(1)(b) NBO Art. 22a(3–4) NBO Art. 26 NBO Art. 31(4) NBO Art. 32b(4) NBO Art. 22b NBO Art. 27(1) NBO Art. 620 et seq. CO Art. 716 et seq. CO	There is a minor gap as the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources, and access to the board.	
7. <i>The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect</i>	Art. 22(1–2) NBO SNB's explanatory note to the NBO	The approach taken by the SNB for the central bank-owned RTGS is	

<p><i>appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.</i></p>	<p>Art. 27(2) NBO Art. 23a NBO Art. 30(3) NBO Art. 32b(5) NBO</p>	<p>consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>Principle 3: Framework for the comprehensive management of risks</p> <p>An FMI should have a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.</p>	<p>Art. 22(1) NBO Art. 24a(3) NBO Art. 26 NBO Art. 27 NBO Art. 28(2) NBO Art. 28a(2) NBO Art. 29(6) NBO Art. 32a(4) NBO Art. 32b(5) NBO Art. 32d NBO Art. 34(1) NBO Art. 37 NBO</p>	<p>Consistent</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to PSs with respect to minimum standards.</p>
<p>1. <i>An FMI should have risk management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk management frameworks should be subject to periodic review.</i></p>	<p>Art. 22(1)(b) NBO Art. 27(1) NBO Art. 37(1) NBO Art. 28(2) NBO Art. 28a(2) NBO Art. 29(6) NBO Art. 24a(3) NBO Art. 32a(4) NBO</p>	<p>Inconsistency in language: The Swiss regulations address the need for FMIs to have a risk management framework, but do not explicitly address the need for FMIs to manage the material risks that they pose to other entities. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss</p>	

	Art. 32b(5) NBO	Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
2. <i>An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.</i>	Art. 27(3) NBO		
3. <i>An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk management tools to address these risks.</i>	Art. 27(1) NBO Art. 27(2) NBO Art. 34(1) NBO Art. 32b(5) NBO Art. 32d(2) NBO	Inconsistency in language: The Swiss regulations address the need for FMIs to have a risk management framework, but do not explicitly address the need for FMIs to manage the material risks that they pose to other entities. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
4. <i>An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.</i>	Art. 26 NBO Note: Due to the nature of SIC as a payment system partly operated by SNB and partly operated by SIC AG on behalf of SNB, there is no requirement for an authority to establish a resolution plan for SIC. Hence, the last sentence of KC4 is not applicable.		

<p>Principle 4: Credit risk</p> <p>An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.</p>	<p>Art. 22 NBO</p> <p>Art. 24a NBO</p> <p>Art. 26 NBO</p> <p>Art. 27 NBO</p> <p>Art. 28 NBO</p> <p>Art. 31 NBO</p> <p>Art. 34(2) NBO</p>	<p>Consistent</p>	
<p>1. An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.</p>	<p>Art. 22(1)(b) NBO</p> <p>Art. 27(1) NBO</p> <p>Art. 28 NBO</p> <p>Art. 28a NBO</p>		
<p>2. An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk management tools to control these risks.</p>	<p>Art. 27 NBO</p> <p>Art. 28 NBO</p>		
<p>3. A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial</p>	<p>Art. 28(2) NBO</p> <p>Art. 28a NBO</p> <p>Also refer to Principle 5 below</p>		

<p>resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.</p>			
<p>7. An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.</p>	<p>Art. 28(2) NBO Art. 24a(1–2) NBO Art. 24a(3) NBO Art. 26 NBO Art. 31(2–4) NBO Art. 26 NBO</p>		
<p>Principle 5: Collateral An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.</p>	<p>Art. 27 NBO Art. 28 NBO Art. 28a NBO Art. 30 NBO</p>	<p>Consistent The implementation measures for PSs are consistent with Principle 5, although there are some minor gaps or shortcomings with KC 6 that have no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 6.</p>
<p>1. An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.</p>	<p>Art. 28a(1) NBO</p>		
<p>2. An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.</p>	<p>Art. 28a(2) NBO</p>		

3. In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.	Art. 27(2) NBO Art. 28a(2) NBO		
4. An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.	Art. 28a(3) NBO		
5. An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.	Art. 28a(4) NBO		
6. An FMI should use a collateral management system that is well-designed and operationally flexible.	Art. 27(3) NBO Art. 28(1) NBO Art. 30(3) NBO Art. 30(3) NBO SNB's explanatory note to the NBO	There is a minor gap as the NBO does not explicitly address the need for FMIs to use a collateral management system and does not explicitly require that such a collateral management system be well-designed and operationally flexible. Rather, the NBO, among other things, requires an FMI to provide tools and incentives for the participants to continuously contain risks and manage risks through the appropriate procedures and tools.	
Principle 7: Liquidity risk An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not	Art. 22(1)(b) NBO Art. 24a NBO Art. 25 NBO Art. 25a(2) NBO Art. 27 NBO Art. 29 NBO	Partly consistent The implementation measures for PSs are partly consistent with Principle 7. The overall rating has been influenced by the gaps or shortcomings in the implementation measures for KCs 2, 5 and 9.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 2, 5 and 9.

<p>be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.</p>	<p>Art. 50(1) FMIO Art. 58(1) FMIO</p>		
<p>1. An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.</p>	<p>Art. 22(1)(b) NBO Art. 27 NBO Art. 29(1–2) and (6) NBO</p>		
<p>2. An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.</p>	<p>Art. 27 NBO Art. 29(1–2) and (6) NBO Art. 29(1) NBO</p>	<p>The NBO does not explicitly address the need for FMIs to monitor and manage their intraday liquidity.</p>	
<p>3. A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.</p>	<p>Art. 29(2–3) and (6) NBO Art. 25a(2) NBO</p>		
<p>5. For the purpose of meeting its minimum liquid resource requirement, an FMI’s qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it</p>	<p>Art. 29(4) NBO Art. 50(1) FMIO Art. 58(1) FMIO</p>	<p>The Swiss regulations explicitly address the types of resources an FMI can use for the purpose of meeting its minimum liquid resource requirement, but do not explicitly specify the requirement for FMIs to put in place pre-arranged and highly reliable funding arrangements for converting FX balances or liquidating non-cash collateral through sales. This shortcoming is assessed to be material.</p>	<p>Switzerland is recommended to make explicit that its definition of qualifying liquid resources includes only those that have corresponding “prearranged and highly reliable” funding arrangements.</p>

<p>has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.</p>			
<p>6. An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.</p>	<p>Art. 29(4) NBO Art. 50(1) and Art. 58(1) FMIO Art. 64 FMIA</p>		
<p>7. An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.</p>	<p>Art. 29(3) and (5–6) NBO Art. 29(2) NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>8. An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.</p>	<p>Art. 25 NBO</p>		

<p>9. An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision-makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.</p>	<p>Art. 29(2) NBO Art. 29(6) NBO Art. 29(3) NBO SNB's explanatory note to the NBO</p>	<p>The NBO does not explicitly address the need for FMIs to have clear procedures to report the results of their stress tests to appropriate decision-makers at the FMI and to use these results to evaluate and adjust their liquidity risk management framework.</p> <p>Inconsistency in language:</p> <p>In addition, it was found that the language of Swiss regulations is not entirely consistent with the PFMI, in particular, not all parameters of liquidity stress testing are explicitly mentioned in the Swiss regulations. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>10. An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may</p>	<p>Art. 24a NBO Art. 25a(2) NBO</p>		

employ during a stress event, so that it can continue to operate in a safe and sound manner.			
Principle 8: Settlement finality An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.	Art. 25a NBO Art. 89 FMIA Art. 73 FMIO	Consistent	
1. An FMI's rules and procedures should clearly define the point at which settlement is final.	Art. 25a(1) Art. 89(2) FMIA Art. 89(3) FMIA Art. 73(1) FMIO		
2. An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.	Art. 25a(2) NBO		
3. An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.	Art. 25a(1) NBO		
Principle 9: Money settlements An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.	Art. 23(1) NBO Art. 25 NBO Art. 25a NBO	Consistent	
1. An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.	Art. 25(1) NBO		

<p>2. If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.</p>	<p>Art. 25(2) NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>3. If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.</p>	<p>Art. 25(2) NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>4. If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.</p>	<p>Art. 25(2) NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>5. An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.</p>	<p>Art. 23(1) NBO Art. 25(2) NBO Art. 25a NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	

<p>Principle 12: Exchange-of-value settlement systems</p> <p>If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.</p>	<p>Art. 25b NBO</p>	<p>Consistent</p>	
<p>1. An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.</p>	<p>Art. 25b NBO</p>		
<p>Principle 13: Participant-default rules and procedures</p> <p>An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.</p>	<p>Art. 23 National Bank Ordinance (NBO)</p> <p>Art. 23a(1) NBO</p> <p>Art. 24a NBO</p>	<p>Broadly consistent</p> <p>The implementation measures of the Swiss authorities are broadly consistent with Principle 13. The overall rating has been influenced by the minor gaps or shortcomings identified for KC 4.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 4.</p>
<p>1. An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.</p>	<p>Art. 24a(1–2) NBO</p>		
<p>2. An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.</p>	<p>Art. 23 NBO</p> <p>Art. 24a(3) NBO</p>		
<p>3. An FMI should publicly disclose key aspects of its default rules and procedures.</p>	<p>Art. 23a(1) NBO</p>		

<p>4. An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.</p>	<p>Art. 24a(3) NBO Art. 27(2) NBO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the requirement to involve relevant stakeholders in the testing and review of the FMI's default procedures. In addition, the requirement to conduct such testing and review following material changes to the rules and procedures of the PS is also not addressed explicitly in the Swiss regulations.</p>	
<p>Principle 15: General business risk An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.</p>	<p>Art. 2(1)(r) NBO Art. 22(1)(b) NBO Art. 22a(3) NBO Art. 26 NBO Art. 27(1) NBO Art. 31 NBO Art. 21–26 Capital Adequacy Ordinance (CAO)</p>	<p>Consistent</p>	
<p>1. An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.</p>	<p>Art. 22(1)(b) NBO Art. 27(1) NBO Art. 31(1) NBO</p>		
<p>2. An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or</p>	<p>Art. 31(2–3) NBO Art. 26 NBO</p>		

<p>orderly wind-down, as appropriate, of its critical operations and services if such action is taken.</p>			
<p>3. An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.</p>	<p>Art. 26 NBO Art. 31(2-3) NBO</p>		
<p>4. Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.</p>	<p>Art. 31(2) NBO Art. 26 NBO Art. 2(1)(q) and (1)(r) NBO Art. 21–26 CAO SNB’s explanatory note to the NBO</p>	<p>The NBO requires systemically important PSs to identify scenarios that might jeopardise their viability, but does not explicitly address the need for the PS’s assets held to cover general business risk sufficient to meet their needs under those scenarios. However, this shortcoming may be addressed in the Swiss Regulatory Notes that the Swiss authorities rely on to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>5. An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.</p>	<p>Art. 31(4) NBO Art. 31(2) NBO Art. 22a(4) NBO Art. 26 NBO Art. 31(4) NBO</p>		

<p>Principle 16: Custody and investment risks</p> <p>An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.</p>	<p>Art. 24a NBO</p> <p>Art. 28a NBO</p> <p>Art. 30 NBO</p>	<p>Broadly consistent</p> <p>The implementation measures of the Swiss regulators are broadly consistent with Principle 16. The overall rating has been influenced by the minor gaps or shortcomings regarding KC 1.</p>	<p>Switzerland is recommended to implement measures that address the identified gaps or inconsistencies, related to KC 1.</p>
<p>1. An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.</p>	<p>Art. 30(1) NBO</p> <p>Art. 30(2) NBO</p> <p>Art. 30(3) NBO</p>	<p>There is a minor gap in the Swiss regulations, which do not require assets to be held at "supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets." The regulations only require this in so far as possible. This shortcoming is assessed to be minor, having taken into consideration that the Swiss authorities during their oversight and supervisory activities do not allow FMIs to use entities that are not regulated and supervised, unless those custodians are central banks.</p>	
<p>2. An FMI should have prompt access to its assets and the assets provided by participants, when required.</p>	<p>Art. 30(2) NBO</p> <p>Art. 28a(4) NBO</p> <p>Art. 24a(1) NBO</p>		
<p>3. An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.</p>	<p>Art. 30(1–2) NBO</p>		
<p>4. An FMI's investment strategy should be consistent with its overall risk management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors.</p>	<p>Art. 30(3) NBO</p>		

<p>These investments should allow for quick liquidation with little, if any, adverse price effect.</p>			
<p>Principle 17: Operational risk</p> <p>An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.</p>	<p>Art. 22 NBO</p> <p>Art. 22a (3) NBO</p> <p>Art. 27(1) NBO</p> <p>Art. 32 NBO</p> <p>Art. 32a NBO</p> <p>Art. 32b NBO</p> <p>Art. 32c NBO</p> <p>Art. 32d NBO</p> <p>Art. 34 NBO</p> <p>Art. 37 NBO</p>	<p>Consistent</p> <p>The implementation measures are consistent with Principle 17, however, there are minor gaps or shortcomings with KC 2 that have no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistency related to KC 2.</p>
<p>1. An FMI should establish a robust operational risk management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.</p>	<p>Art. 22(1)(b) NBO</p> <p>Art. 27(1) NBO</p> <p>Art. 32 NBO</p>		
<p>2. An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.</p>	<p>Art. 22(1) NBO</p> <p>Art. 22a(3) NBO</p> <p>Art. 32b(4) NBO</p> <p>Art. 32b(4-5) NBO</p> <p>Art. 32b(3) NBO</p> <p>Art. 32a(4) NBO</p> <p>Art. 32a(2) NBO</p> <p>Art. 37(3) NBO</p>	<p>There is a minor gap stemming from the absence of an explicit requirement to periodically, and after significant changes, test systems, operational policies and controls.</p>	

3. An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.	Art. 32a(2–3) NBO		
4. An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.	Art. 32a(3) NBO		
5. An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.	Art. 32 NBO Art. 32a(1) NBO Art. 32a(3) NBO Art. 32c NBO		
6. An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.	Art. 32b NBO Art. 32c NBO Art. 32a and 32b NBO Art. 25a(2) NBO		
7. An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.	Art. 27(1) NBO Art. 27(3) NBO Art. 32 NBO Art. 32b NBO Art. 32d NBO Art. 34(1) NBO		

<p>Principle 18: Access and participation requirements</p> <p>An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.</p>	<p>Art. 23 NBO</p> <p>Art. 23a NBO</p> <p>Art. 24 NBO</p>	<p>Consistent</p>	
<p>1. An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.</p>	<p>Art. 24(1) NBO</p> <p>Art. 23(1)(a) NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>2. An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.</p>	<p>Art. 24(2–3) NBO</p> <p>Art. 23a(1d) NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of the Principles for financial market infrastructures to central bank FMIs.</p>	
<p>3. An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.</p>	<p>Art. 24(4) NBO</p> <p>Art. 24(5) NBO</p> <p>Art. 24(6) NBO</p> <p>Art. 23(1) NBO</p> <p>Art. 23a(1d) NBO</p>		
<p>Principle 19: Tiered participation arrangements</p> <p>An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.</p>	<p>Art. 22(2) NBO</p> <p>Art. 33 NBO</p>	<p>Partly consistent</p> <p>The implementation measures of the Swiss regulators are partly consistent with Principle 19. The overall rating has been influenced by the significant</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 2, 3 and 4.</p>

		gaps or shortcomings regarding KCs 1, 2, 3 and 4.	
1. An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.	Art. 33 NBO Art. 22(2) NBO	There is a significant gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about all indirect participation, regardless of the type of indirect participant. The NBO only requires FMIs to gather this information for indirect participants that are identifiable to the FMI. Further, SNB only requires SIC AG to gather information and monitor and manage indirect participation insofar as SIC AG can identify the sender/receiver in the payment message.	
2. An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.	Art. 33 NBO SNB's explanatory note to the NBO	There is a significant gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about all indirect participation, regardless of the type of indirect participant. The NBO only requires FMIs to gather this information for indirect participants that are identifiable to the FMI. Further, SNB only requires SIC AG to gather information and monitor and manage indirect participation insofar as SIC AG can identify the sender/receiver in the payment message.	
3. An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose	Art. 33 NBO SNB's explanatory note to the NBO	There is a significant gap regarding the requirement that FMIs should ensure that their rules, procedures,	

<p>transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.</p>		<p>and agreements allow them to gather basic information about all indirect participation, regardless of the type of indirect participant. The NBO only requires FMIs to gather this information for indirect participants that are identifiable to the FMI. Further, SNB only requires SIC AG to gather information and monitor and manage indirect participation insofar as SIC AG can identify the sender/receiver in the payment message.</p>	
<p>4. An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.</p>	<p>Art. 33 NBO</p>	<p>There is a gap in the NBO regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, there are general risk provisions that may capture this.</p>	
<p>Principle 21: Efficiency and effectiveness An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.</p>	<p>Art. 22 NBO Art. 22a NBO Art. 22b NBO</p>	<p>Broadly consistent The implementation measures of the Swiss regulators are broadly consistent with Principle 21. The overall rating has been influenced by the minor gaps or shortcomings regarding KC 2 and KC 3.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 2 and 3.</p>
<p>1. An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.</p>	<p>Art. 22(2) NBO SNB's explanatory note to the NBO</p>	<p>The approach taken by the SNB for the central bank-owned RTGS is consistent with paragraph 1.23 of the PFMI, as elaborated in the CPMI-IOSCO guidance note Application of</p>	

		the Principles for financial market infrastructures to central bank FMIs.	
2. An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk management expectations, and business priorities.	Art. 22(1) NBO Art. 22b NBO	While the Swiss regulations require appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for these to be measurable and achievable.	
3. An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.	Art. 22(1) NBO Art. 22a(1) NBO Art. 22a(4) NBO	While the Swiss regulations require appropriate corporate management rules and organisation, and that the boards work should be evaluated regularly, there is, however, a minor gap regarding explicit requirements on mechanisms for the regular review of an FMI's efficiency and effectiveness.	
Principle 22: Communication procedures and standards An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.	Art. 22(2) NBO Art. 32 NBO	Not consistent While the intent of the Swiss authorities is that the NBO be interpreted in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs to accommodate internationally expected communications procedures and standards.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to Principle 22.
1. An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.	Art. 22(2) NBO SNB's explanatory note to the NBO Art. 32 NBO	While the intent of the Swiss authorities is to rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs to accommodate internationally expected	

		communications procedures and standards.	
<p>Principle 23: Disclosure of rules, key procedures, and market data</p> <p>An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.</p>	<p>Art. 23 NBO</p> <p>Art. 23a NBO</p> <p>Art. 27(3) NBO</p>	<p>Consistent</p> <p>The implementation measures are consistent with Principle 23, although there are gaps or shortcomings with KC 3 that have no material impact on completeness or consistency.</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to PSs with respect to minimum standards.</p>
<p>1. An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.</p>	<p>Art. 23(1) NBO</p> <p>Art. 23a NBO</p>		
<p>2. An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.</p>	<p>Art. 23(1) NBO</p> <p>Art. 23a NBO</p>		
<p>3. An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.</p>	<p>Art. 23(1) NBO</p> <p>Art. 23a(1) NBO</p> <p>Art. 27(3) NBO</p>	<p>The Swiss regulation does not require a PS to provide training to facilitate participants' understanding of rules and procedures and risks they face from participating in the FMI. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations</p>	

		in a manner that is consistent with the PFMI.	
4. An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.	Art. 23a NBO		
5. An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.	Art. 23a NBO SNB's explanatory note to the NBO Art. 23a(2) NBO		

4.2.2 Central counterparties

1. Text of applicable Principles and Key Considerations (KCs) ⁵⁵	2. Implementation measures of the jurisdiction	3. Key conclusions for Principle	4. Recommendations and comments
<p>Principle 1: Legal basis</p> <p>An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.</p>	<p>Art. 23, Art. 27(1) National Bank Ordinance (NBO)</p> <p>Art. 4(1), Art. 5, Art. 6, Art. 21, Art. 22, Art. 60, Art. 88–92 Financial Market Infrastructure Act (FMIA)</p> <p>Art. 19, Art. 51 Financial Market Infrastructure Ordinance (FMIO)</p> <p>Art. 27, Art. 30a Swiss Federal Act on Banks and Saving Banks (BA)</p>	<p>Consistent</p> <p>The implementation measures for CCPs are consistent with Principle 1, although there is a minor gap or shortcoming for KC 5 that has no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the gaps or identified inconsistencies related to KC 5.</p> <p>Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to FMIs with respect to minimum standards.</p>
<p>1. The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.</p>	<p>Art. 21a–34 NBO</p> <p>Art. 4(1), Art. 4(3), Art. 5, Art. 6, Art. 8–24, Art. 48–60, Art. 60, Art. 88–92 FMIA</p> <p>Art. 4–21, Art. 44–51, Art. 73–75 FMIO</p> <p>Art. 24–37 and 37d–37g BA</p>	<p>Inconsistency in language:</p> <p>The Swiss regulations address the need for legal basis to provide a high degree of certainty, but do not explicitly address the need for a high degree of certainty <u>in all relevant jurisdictions</u>. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	

⁵⁵ Only the relevant Principles for CCPs (as set forth in the annex E of the PFMI) are included.

<p>2. An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.</p>	<p>Art. 23(1), Art. 23(2) NBO Relevant requirements in FMIA/FMIO and NBA/NBO (e.g. Art. 28, Art. 29, Art. 32 NBO) Art. 4, 5, 7, 21 and 25 FMIA. Art. 19 FMIO</p>		
<p>3. An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.</p>	<p>Art. 23(1), Art. 23(2) NBO Relevant requirements in FMIA/FMIO and NBA/NBO (e.g. Art. 28, Art. 29, Art. 32 NBO) Art. 4, 5, 7, 21 and 25 FMIA. Art. 19 FMIO</p>		
<p>4. An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.</p>	<p>Art. 23(2), 27(1) NBO Art. 51(1)(a) FMIO Art. 88(1), 89(2–3), Art. 90, Art. 90(3), Art. 92 FMIA Art. 24–37 and 37d–37g BA</p>	<p>Inconsistency in language: The Swiss regulations do not explicitly address the need for a high degree of certainty that actions of the FMI will not be voided, reversed or subject to stays in all relevant jurisdictions. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>5. An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.</p>	<p>Art. 23(2), 27(1) NBO Art. 8(3) FMIA Art. 9 FMIO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from</p>	

		potential conflict of laws across jurisdictions.	
<p>Principle 2: Governance</p> <p>An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.</p>	<p>Art. 1(2), Art. 8–9, Art. 19–21, Art. 23 FMIA</p> <p>Art. 4–5, Art. 8–10, Art. 18–19, Art. 45 FMIO</p> <p>Art. 36 NBO</p> <p>Art. 620 et seq. Swiss Code of Obligations (CO)</p> <p>FINMA Circular 2017/01 on Corporate Governance – banks</p> <p>FINMA Circular 2013/03 Auditing</p>	<p>Broadly consistent</p> <p>The implementation measures for CCPs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 1, 3 and 6.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 3 and 6.</p>
<p>1. An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.</p>	<p>Art. 1(2), (Art. 8(1), Art. 23(1) FMIA</p> <p>Art. 4(2) FMIO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs to have objectives that explicitly support financial stability and other relevant public interest considerations.</p>	
<p>2. An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.</p>	<p>Art. 8(2), Art. 19, Art. 21(1) FMIA</p> <p>Art. 4(1), Art. 4(2), Art. 5(1), Art. 5(2), Art. 6–10, Art. 13, Art. 48, 49, 56, 57 and 69; Art. 71 FMIO</p> <p>Art. 36(1), Art. 36(2) NBO</p> <p>In addition to these rules, general rules of the company law apply to FMIs (e.g. Art. 620 et seq. CO or Art. 716b of the CO).</p> <p>FINMA requires FMIs to comply with substantial parts of the FINMA Circular on Corporate Governance.</p>		

<p>3. The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.</p>	<p>Art. 8(2) FMIA Art. 8(1), Art. 8(2) Art. 8(3) Art. 8(4) FMIO Art. 20 FMIA FINMA Circular on Governance</p>	<p>There is a minor gap due to the fact that while there is a requirement for FMIs to assess the board's overall performance, the requirement to ask the board to regularly review the performance of its individual board members is not explicitly addressed by the Swiss regulations.</p>	
<p>4. The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).</p>	<p>Art. 8(1), Art. 8(2), Art. 8(4), Art. 10(1) FMIO Art. 9(1–3) FMIA See also response to KC 3</p>		
<p>5. The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.</p>	<p>Art. 8(1), Art. 8(2), Art. 8(3), Art. 10(1) FMIO Art. 8(2–3), Art. 9(1–3) FMIA</p>		
<p>6. The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.</p>	<p>Art. 8(3) FMIA Art. 8(3), Art. 9(4–6), Art. 45(1) FMIO FINMA Circular on auditing</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources, and access to the board.</p>	
<p>7. The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.</p>	<p>Art. 8(5), Art. 18, Art. 19, Art. 45(1) FMIO, See also responses under Principles 18 and 23 for full disclosure requirements</p>		

<p>Principle 3: Framework for the comprehensive management of risks</p> <p>An FMI should have a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.</p>	<p>Art. 8, Art. 13, Art. 14, Art. 24, Art. 84 FMIA</p> <p>Art. 9, Art. 14, Art. 15, Art. 20, Art. 45, Art. 72 FMIO</p> <p>Art. 27, Art. 37 NBO</p> <p>Art. 9(1) Federal Act on the Licensing and Oversight of Auditors (Auditor Oversight Act, AOA)</p> <p>FINMA Circular 2013/03 Auditing</p>	<p>Consistent</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to FMIs with respect to minimum standards.</p>
<p>1. An FMI should have risk management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.</p>	<p>Art. 8(3), Art. 84(1), Art. 84(3) FMIA</p> <p>Art. 9(1), Art. 9(4), Art. 9(5), Art. 9(6) FMIO</p> <p>Art. 9a(1) AOA</p> <p>Art. 24 Federal Act of 22 June 2007 on the Swiss Financial Market Supervision Authority (FINMASA)</p> <p>Art. 27(1), Art. 37(1) NBO</p>	<p>Inconsistency in language:</p> <p>The Swiss regulations address the need for FMIs to have a risk management framework, but do not explicitly address the need for FMIs to manage the material risks that they pose to other entities. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>2. An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.</p>	<p>Art. 9(2), Art. 9(3), Art. 45(1) FMIO</p> <p>Art. 27(2–3) NBO</p>		
<p>3. An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop</p>	<p>Art. 45(1–2) FMIO</p> <p>Art. 27(1–2) NBO</p> <p>See also responses under Principle 20</p>	<p>Inconsistency in language:</p> <p>The Swiss regulations address the need for FMIs to have a risk management framework, but do not</p>	

<p>appropriate risk management tools to address these risks.</p>		<p>explicitly address the need for FMIs to manage the material risks that they pose to other entities. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>7. An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.</p>	<p>Art. 13(1–2), Art. 14(1), Art. 14(2), Art. 24 FMIA Art. 14(1), Art. 14(2), Art. 14(3), Art. 15(1), (Art. 15(2), Art. 20–21, Art. 45(2), Art. 72 FMIO Article 26 of the NBO</p>		
<p>Principle 4: Credit risk</p> <p>An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP</p>	<p>Art. 8(3), Art. 24(1), Art. 49(1–2) FMIA Art. 8(3), Art. 9(1), Art. 46(1) and (3) FMIO Art. 24a, Art. 27, Art. 28, Art. 28b(1) and (3), Art. 28c, Art. 28d NBO</p>	<p>Consistent</p> <p>The implementation measures for CCPs are consistent with Principle 4, although there are some minor gaps or shortcomings with KC 5 that have no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 5.</p> <p>Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to CCPs with respect to minimum standards.</p>

<p>in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.</p>			
<p>1. An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.</p>	<p>Art. 8(3) FMIA Art. 9(1) FMIO Art. 27(1), Art. 28 NBO</p>		
<p>2. An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.</p>	<p>Art. 27, Art. 28, Art. 28b(3), Art. 28c(1), Art. 28d(1), Art. 28d(2) NBO Art. 46(1) FMIO</p>		
<p>4. A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a</p>	<p>Art. 28(2), Art. 28a, Art. 28b(1), Art. 28b(3), Art. 28d, Art. 28d(1) NBO Art. 49(1), Art. 49(2) FMIA Art. 8(3), Art. 9(5), Art. 46(3) FMIO</p>		

<p>CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.</p>			
<p>5. A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.</p>	<p>Art. 46(3) FMIO Art. 24a(1) and (3), Art. 28(2), Art. 28a, Art. 28b(3), Art. 28c(1), Art. 28d(1), Art. 28d(2) NBO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for CCPs to have clear procedures to report the results of their stress tests to appropriate decision-makers at the CCP, although the regulation is clear that that CCPs should conduct daily stress tests to assess financial resource adequacy and make any necessary adjustments in the event of a shortcoming so as to meet the requirements.</p>	<p>Switzerland is recommended to make explicit the need for CCPs to have clear procedures to report the results of their stress tests to appropriate decision-makers at the CCP.</p>
<p>6. In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress</p>	<p>Art. 28b(3), Art. 28d NBO SNB's explanatory note to the NBO</p>	<p>Inconsistency in language: It was found that the language of Swiss regulations is not entirely consistent with the PFMI, in particular not all parameters of credit risk stress testing are explicitly mentioned in the Swiss regulations. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial,</p>	

scenarios in a variety of extreme but plausible market conditions.		having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
7. An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.	Art. 24a(1), Art. 24a(2), Art. 24a(3), Art. 28(2) NBO Art. 24(1) FMIA		
Principle 5: Collateral An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.	Art. 49(3) FMIA Art. 27(2), Art. 28(1), Art. 28a, Art. 28b, Art. 46(2) and (4) FMIO Art. 30(3) NBO	Consistent The implementation measures for CCPs are consistent with Principle 5, although there are some minor gaps or shortcomings with KC 6 that have no material impact on completeness or consistency.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 6.
1. An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.	Art. 49(3) FMIA Art. 28a(1) NBO		
2. An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.	Art. 46(3) FMIO Art. 49(3) FMIA Art. 28a(2) NBO		

3. In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.	Art. 49(3) FMIA Art. 27(2), Art. 28a(2) NBO		
4. An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.	Art. 46(2) FMIO Art. 28a(3) NBO		
5. An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.	Art. 46(4) FMIO Art. 28a(4) NBO		
6. An FMI should use a collateral management system that is well-designed and operationally flexible.	Art. 27(3), Art. 28(1), Art. 28b(2) and (4), Art. 30(3) NBO SNB's explanatory note to the NBO	There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs to use a collateral management system and do not explicitly require that such a collateral management system be well-designed and operationally flexible. Rather, the regulations, among other things, require the FMI to provide tools and incentives for the participants to continuously contain risks and manage risks through the appropriate procedures and tools.	
Principle 6: Margin A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.	Art.49(1–2) FMIA Art. 46 FMIO Art. 27(2), Art. 28, Art. 28a(2), Art. 28b(2), Art. 28c, Art. 28d NBO	Consistent The implementation measures for CCPs are consistent with Principle 6, although there are some minor gaps or shortcomings with KC 2 that have no material impact on completeness or consistency.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 2. Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to

			consider providing clarity to CCPs with respect to minimum standards.
1. A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.	Art. 49(1), Art. 49(2) FMIA Art. 46(1–2) FMIO Art. 28c(1) and (4) NBO		
2. A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.	Art. 28a(2), Art. 28b(2) NBO	There is a minor gap as the Swiss regulations do not explicitly address the requirement that a CCP should have (i) a reliable source of timely price data for its margin system or (ii) alternative procedures and valuation models, if pricing data are not readily available or reliable. However, there are general risk provisions in relation to margining that may capture these aspects.	
3. A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an	Art. 27(2), Art. 28(2), Art. 28c, Art. 28c(1) NBO		

<p>appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.</p>			
<p>4. A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.</p>	<p>Art. 28b(2), Art. 28c(5)NBO</p>		
<p>5. In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-management systems.</p>	<p>Art. 28–28d NBO</p>		
<p>6. A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily backtesting and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.</p>	<p>Art. 28b(3), Art. 28c(1), Art. 28d NBO</p>	<p>Inconsistency in language: It was found that the language of Swiss regulations is not entirely consistent with the PFMI, in particular, not all aspects of CCP sensitivity testing are explicitly mentioned in the Swiss regulations. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	

7. A CCP should regularly review and validate its margin system.	Art. 46(3) FMIO Art. 28(2), Art. 28a, Art. 28a(2), Art. 28b(3), Art. 28c(1), Art. 28d(1), Art. 28d(2) NBO		
<p>Principle 7: Liquidity risk</p> <p>An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.</p>	Art. 8(3), Art. 50, Art.52, Art. 53 FMIA Art. 9(1), Art. 46, Art. 50 FMIO Art. 24a, Art. 27, Art. 29 NBO	<p>Partly consistent</p> <p>The implementation measures for CCPs are broadly consistent with Principle 7. The overall rating has been influenced by the gaps or shortcomings in the implementation measures for KCs 2, 5 and 9.</p>	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 2, 5 and 9.
1. An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.	Art. 8(3), Art. 9(1) FMIO Art. 27 NBO		
2. An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.	Art. 27, Art. 29(1), (2) and (6) NBO	The Swiss regulations do not explicitly address the need for FMIs to monitor and manage their intraday liquidity.	
4. A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate	Art. 52(1) FMIA Art. 50(2) FMIO Art. 29(2), (3) and (6) NBO		

<p>payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.</p>			
<p>5. For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.</p>	<p>Art. 49, Art. 52(1) FMIA Art. 50(1) FMIO Art. 29(4) NBO</p>	<p>While the Swiss regulations explicitly address what types of resources an FMI can use for the purpose of meeting its minimum liquid resource requirement, they do not explicitly specify the requirement for FMIs to put in place pre-arranged and highly reliable funding arrangements for converting FX balances or liquidating non-cash collateral through sales. This shortcoming is assessed to be material.</p>	<p>Switzerland is recommended to make explicit that its definition of qualifying liquid resources includes cash balances in foreign currencies only if they have corresponding "prearranged and highly reliable" funding arrangements.</p>
<p>6. An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant</p>	<p>Art. 49, Art. 52(1) FMIA Art. 50(1) FMIO Art. 29(4) NBO</p>		

<p>central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.</p>			
<p>7. An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.</p>	<p>Art. 29(2), Art. 29(3), Art. 29(5) and (6) NBO Art. 50(1)(d) and (e) FMIO</p>	<p>Inconsistency in language: The Swiss regulations address the need for FMIs to conduct due diligence on liquidity providers' creditworthiness and ability to meet their obligations, but do not explicitly address the need to conduct due diligence to obtain a high degree of confidence that liquidity providers have sufficient information to understand and manage their associated risks. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>8. An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.</p>	<p>Art. 50 FMIA</p>		
<p>9. An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision-makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk management framework. In conducting</p>	<p>Art. 8(3), Art. 52(1) FMIA Art. 8(3), Art. 50(2) FMIO Art. 29(2), Art. 29(6), Art. 29(2) NBO SNB's explanatory note to the NBO</p>	<p>The Swiss regulations do not explicitly address the need for FMIs to have clear procedures to report the results of their stress tests to appropriate decision-makers at the FMI and to use these results to evaluate and adjust</p>	

<p>stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.</p>		<p>their liquidity risk management framework.</p> <p>Inconsistency in language:</p> <p>In addition, it was found that the language of Swiss regulations is not entirely consistent with the PFMI, in particular, not all parameters of liquidity stress testing are explicitly mentioned in the Swiss regulations. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>10. An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.</p>	<p>Art. 53(1) FMIA Art. 24a NBO</p>		

<p>Principle 8: Settlement finality</p> <p>An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.</p>	<p>Art. 62, Art. 89, Art. 90 FMIA</p> <p>Art. 53, Art. 66, Art. 73 FMIO</p>	<p>Consistent</p>	
<p>1. An FMI's rules and procedures should clearly define the point at which settlement is final.</p>	<p>Art. 62(4), Art. 89, Art. 90(1) FMIA</p> <p>Art. 53, Art. 66(2), Art. 66(3), Art. 73(1) FMIO</p>		
<p>2. An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.</p>	<p>Art. 62(5) FMIA</p> <p>Art. 66(4) FMIO</p>		
<p>3. An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.</p>	<p>Art. 62(4) FMIA</p> <p>Art. 66(2), Art. 73(2) FMIO</p>		
<p>Principle 9: Money settlements</p> <p>An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.</p>	<p>Art. 10, Art. 50, Art. 62 FMIA</p> <p>Art. 49, Art. 66 FMIO</p> <p>Art. 25, Art. 25a NBO</p> <p>Section 4 of Chapter 1 of Title 4 Capital Adequacy Ordinance (CAO)</p>	<p>Consistent</p> <p>The implementation measures for CCPs are consistent with Principle 9, although there are some minor gaps or shortcomings with KCs 3 and 5 that have no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 3 and 5.</p>
<p>1. An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.</p>	<p>Art. 50(1) FMIA</p>		
<p>2. If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.</p>	<p>Art. 50(2) FMIA</p>		

<p>3. If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.</p>	<p>Art. 50(2) FMIA Section 4 of Chapter 1 of Title 4 CAO (Art. 49 FMIO). Art. 103–111 CAO</p>	<p>There is a minor gap as the Swiss regulations require an FMI to monitor credit risks vis-à-vis commercial settlement banks but do not otherwise explicitly address the need for FMIs to establish and monitor adherence to criteria for settlement banks, or to monitor and manage concentration of exposures to settlement banks.</p>	
<p>4. If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.</p>	<p>Art. 10(1) FMIA</p>		
<p>5. An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.</p>	<p>Art. 50(2), Art. 62(4–5) FMIA Art. 66(2–4) FMIO Art. 25a NBO</p>	<p>There is a minor gap as the Swiss regulations do not require from the CCP that its arrangements with any settlement banks should (i) clearly state the specific points of the payment and settlement process and (ii) explicitly address those aspects of KC 5 regarding finality and transferability.</p>	
<p>Principle 10: Physical deliveries An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.</p>	<p>Art. 23, Art. 25c NBO Art. 973a–973c Swiss Code of Obligations (CO) Art. 7(2) Federal Act on Intermediated Securities (FISA)</p>	<p>Consistent The implementation measures for CCPs are consistent with Principle 10, although there are some gaps or shortcomings with KC 2 that have no material impact on completeness or consistency.</p>	
<p>1. An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.</p>	<p>Art. 23(1) NBO Please also refer to the response to KC 2 under Principle 1</p>		

<p>2. An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.</p>	<p>Art. 25c(2) NBO Art. 973a–973c CO Art. 7(2) FISA Message of the Federal Council dated 15 November 2006 on the Federal Act on Intermediated Securities and the Hague Securities Convention (p. 931) Please also refer to the response to Principle 3 and Principle 17</p>	<p>The Swiss regulations do not explicitly state that an FMI should manage the risks and costs associated with the “storage and delivery” of physical instruments or commodities. Nevertheless, the regulations include general risk requirements that should cover all risks.</p>	
<p>Principle 12: Exchange-of-value settlement systems If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.</p>	<p>Art. 47 FMIO</p>	<p>Consistent</p>	
<p>1. An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.</p>	<p>Art. 47 FMIO</p>		
<p>Principle 13: Participant-default rules and procedures An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.</p>	<p>Art. 21, Art. 52, Art.53, Art. 55 FMIA Art. 19, Art. 45, Art. 48, Art. 51 FMIO Art. 23, Art. 24a, Art. 27 NBO Title 3 Capital Adequacy Ordinance (CAO)</p>	<p>Broadly consistent The implementation measures of the Swiss authorities are broadly consistent with Principle 13. The overall rating has been influenced by the minor gaps or shortcomings identified for KC 4.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 4.</p>

<p>1. An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.</p>	<p>Art. 52(2), Art. 53(1–3), Art. 55(2), Art. 59(3) FMIA Art. 24a(1–2) NBO Art. 48(1–6) FMIO Title 3 CAO</p>		
<p>2. An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.</p>	<p>Art. 53(2) and (3), Art. 59(3) FMIA Art. 23 Art. 24a(3) NBO Art. 45(1), Art. 45(2), Art. 51(2) FMIO</p>		
<p>3. An FMI should publicly disclose key aspects of its default rules and procedures.</p>	<p>Art. 21 FMIA Art. 19 FMIO</p>		
<p>4. An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.</p>	<p>Art. 24a(3), Art. 27(2) NBO Art. 45(1) FMIO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the requirement to involve relevant stakeholders in the testing and review of the FMI's default procedures. In addition, the requirement to conduct such testing and review following material changes to the rules and procedures of the CCP is also not addressed explicitly in the Swiss regulations.</p>	
<p>Principle 14: Segregation and portability A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.</p>	<p>Art. 54, Art. 55, Art. 59 FMIA Art. 19, Art. 44, Art. 51 FMIO</p>	<p>Consistent</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to CCPs with respect to minimum standards.</p>
<p>1. A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral</p>	<p>Art. 54, Art. 55(1), Art. 59 FMIA</p>		

<p>from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.</p>			
<p>2. A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.</p>	<p>Art. 44 FMIO See response to KC 1</p>		
<p>3. A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.</p>	<p>Art. 51 FMIO</p>		
<p>4. A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.</p>	<p>Art. 19 FMIO Art. 21 FMIA</p>	<p>The Swiss regulations do not explicitly address the requirement to disclose any constraints, such as legal or operational constraints, by the CCP regarding its ability to segregate or port a participant's customers' positions and collateral. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	

<p>Principle 15: General business risk</p> <p>An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.</p>	<p>Art. 22, Art. 24(1), Art. 25(2), Art. 51, Art. 52 FMIA</p> <p>Art. 9, Art. 20, Art. 48, Art. 72(1) FMIO</p> <p>Art. 27(1), Art. 30 NBO</p> <p>Title 3 Capital Adequacy Ordinance (CAO)</p>	<p>Broadly consistent</p> <p>The implementation measures are broadly consistent with Principle 15. The overall rating has been influenced by the significant gaps or shortcomings regarding KC 3.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 3.</p>
<p>1. An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.</p>	<p>Art. 27(1) NBO</p> <p>Art. 9 FMIO</p>		
<p>2. An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.</p>	<p>Art. 51(1), Art. 53(2)(c) FMIA</p> <p>Art. 48, Art. 52(2), Art. 72 FMIO</p> <p>Art. 42, Art. 45, Titles 1 to 3 CAO</p>		
<p>3. An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.</p>	<p>Art. 22(2), Art. 24(1), Art. 25(2), Art. 53(2)(c) FMIA</p> <p>Art. 20, Art. 48, Art. 72 FMIO</p> <p>Art. 42, Art. 45, Titles 1 to 3 CAO</p>	<p>There is a significant gap in the Swiss regulation which allows the FINMA to ease the capital requirement on FMIs. The easing may go below the minimum requirement which is not in line with the PFMI requirement that, “at a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses.”</p>	<p>Swiss authorities are recommended to clarify the circumstances in which FINMA is permitted to ease the capital requirement on FMIs in a manner that is consistent with the Principle.</p> <p>Swiss authorities are recommended to clarify that the definition of capital is consistent with the key consideration.</p>

<p>4. Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.</p>	<p>Art. 30(3) NBO See also the response to KC 2 above</p>		
<p>5. An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.</p>	<p>Art. 20(2), Art. 20(4), Art. 48(1–6) FMIO</p>		
<p>Principle 16: Custody and investment risks An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.</p>	<p>Art. 52(2) FMIA Art. 46(4) FMIO Art. 24a, Art. 28a, Art. 30 NBO</p>	<p>Broadly consistent The implementation measures of the Swiss regulators are broadly consistent with Principle 16. The overall rating has been influenced by the minor gaps or shortcomings regarding KC 1 and KC 2.</p>	<p>Switzerland is recommended to implement measures that address the identified gaps or inconsistencies related to KCs 1 and 2.</p>
<p>1. An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.</p>	<p>Art. 46(4) FMIO Art. 30(1), Art. 30(3) NBO</p>	<p>There is a minor gap in the Swiss regulations, which do not require assets to be held at "supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets". The regulations only require this in so far as it is possible. This shortcoming is assessed to be minor, having taken into consideration that the Swiss authorities during their oversight and supervisory activities do not allow for FMIs to use entities that are not regulated and supervised, unless those custodians are central banks.</p>	

2. An FMI should have prompt access to its assets and the assets provided by participants, when required.	Art. 46(2), Art. 46(4) FMIO Art. 28a(4), Art. 24a(1) NBO	There is a minor gap in the Swiss regulations since there is no reference to having prompt access to the FMI's own assets; there is, however, reference to having prompt access to participants' assets.	
3. An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.	Art. 30(1) NBO Art. 46(4) FMIO		
4. An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.	Art. 30(3) NBO Art. 52(2) FMIA		
<p>Principle 17: Operational risk</p> <p>An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.</p>	Art. 8, Art. 11, Art. 13, Art. 14, Art. 18 FMIA Art. 8(3), Art. 9(1), Art. 11, Art. 14, Art. 15, Art. 17, Art. 45(2) FMIO Art. 27(1), Art.32, Art. 32a, Art. 32b, Art. 32c, Art. 34, Art. 37 NBO	<p>Consistent</p> <p>The implementation measures are consistent with Principle 17, however, there are minor gaps or shortcomings with KC 2 that have no material impact on completeness or consistency.</p>	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 2.
1. An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.	Art. 27(1), Art. 32 NBO Art. 9(1) FMIO Art. 13(1) FMIA		
2. An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-	Art. 8(2), Art. 13(1) FMIA Art. 8(3), Art. 14(1), (2) and (4) FMIO	There is a minor gap stemming from the absence of an explicit requirement to periodically, and after	

	management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.	Art. 32a(2), Art. 32a(4), Art. 32b(3–5), Art. 37(3) NBO	significant changes, test systems, operational policies and controls.	
3.	An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.	Art. 14(2) and (3) FMIO Art. 32a(2) and (3) NBO		
4.	An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.	Art. 45(2) FMIO Art. 32a(3) NBO		
5.	An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.	Art. 32, Art. 32a(1), Art. 32a(3), Art. 32c NBO Art. 14 FMIA Art. 15 FMIO		
6.	An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.	Art. 32a, Art. 32b, Art. 32c NBO		
7.	An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.	Art. 8(3), Art. 11, Art. 17(2) FMIO Art. 27(1), Art. 27(3), Art. 32, Art. 32b, Art. 34(1) NBO Art. 11, Art. 18(2) FMIA		

<p>Principle 18: Access and participation requirements</p> <p>An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.</p>	<p>Art. 18, Art. 21, Art. 56 FMIA Art. 23(1), Art. 24 NBO Art. 17, Art. 19 FMIO</p>	<p>Consistent</p>	
<p>1. An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.</p>	<p>Art. 18(1), Art. 21(1), Art. 56(2) FMIA Art. 17(2) FMIO Art. 23(1) NBO</p>		
<p>2. An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.</p>	<p>Art. 18(2) FMIA Art. 17 FMIO</p>		
<p>3. An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.</p>	<p>Art. 23(1), Art. 24(4), Art. 24(5) NBO Art. 19 FMIO</p>		
<p>Principle 19: Tiered participation arrangements</p> <p>An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.</p>	<p>Art. 9(3–4) Art. 45 FMIO</p>	<p>Broadly consistent</p> <p>The implementation measures of the Swiss regulators are broadly consistent with Principle 19. The overall rating has been influenced by the minor gaps or shortcomings regarding KCs 1, 2, 3 and 4.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 2, 3 and 4.</p>
<p>1. An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and</p>	<p>Art. 45(1) FMIO Art. 9(3), Art. 9(4) FMIO</p>	<p>There is a minor gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather</p>	

<p>manage any material risks to the FMI arising from such tiered participation arrangements.</p>		<p>basic information about indirect participation, regardless of the type of the indirect participant. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.</p>	
<p>2. An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.</p>	<p>Art. 9(3), Art. 9(4), Art. 45(1) FMIO</p>	<p>There is a minor gap regarding the requirement that FMIs should identify material dependencies between direct and indirect participants that might affect the FMI. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.</p>	
<p>3. An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.</p>	<p>Art. 9(3), Art. 9(4) FMIO Art. 27(1) NBO</p>	<p>There is a minor gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about indirect participation, regardless of the type of the indirect participant. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.</p>	
<p>4. An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.</p>	<p>Art. 9(3) FMIO Art. 27(1) NBO</p>	<p>There is a minor gap in the Swiss regulations regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, there are general risk provisions that may capture this.</p>	

<p>Principle 20: FMI links</p> <p>An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.</p>	<p>Art. 56, Art. 57 FMIA</p> <p>Art. 23, Art. 34 NBO</p>	<p>Consistent</p>	
<p>1. Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.</p>	<p>Art. 28a, Art. 34(1), Art. 34(3) NBO</p> <p>Art. 11, Art. 56(2), Art. 57(1–2) FMIA</p> <p>Art. 11 and 12 FMIO</p>		
<p>2. A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.</p>	<p>Art. 23(1–2) NBO</p> <p>Art. 57(1–2) FMIA</p>		
<p>3. Before entering into a link with another CCP, a CCP should identify and manage the potential spill-over effects from the default of the linked CCP. If a link has three or more CCPs, each CCP should identify, assess, and manage the risks of the collective link arrangement.</p>	<p>Art. 56(2), Art. 57 FMIA</p> <p>Art. 23, Art. 28a, Art. 34 NBO</p>		
<p>4. Each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfil its obligations to its own participants at any time.</p>	<p>Art. 57(2) FMIA</p> <p>Art. 28a, Art. 34(3) NBO</p>		
<p>Principle 21: Efficiency and effectiveness</p>	<p>Art. 8 FMIA</p> <p>Art. 6, Art. 8, Art. 45(1) FMIO</p>	<p>Broadly consistent</p> <p>The implementation measures of the Swiss regulators are broadly consistent with Principle 21. The</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 2 and 3.</p>

<p>An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.</p>		<p>overall rating has been influenced by the minor gaps or shortcomings regarding KC 2 and KC 3.</p>	
<p>1. An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.</p>	<p>Art. 8(2) FMIA Art. 6, Art. 8(5), Art. 45(1)FMIO</p>		
<p>2. An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.</p>	<p>Art. 8(2) FMIA Art. 6 FMIO</p>	<p>While the Swiss regulations require appropriate corporate management rules and organisation there is a minor gap since there are no explicit requirements for these to be measurable and achievable.</p>	
<p>3. An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.</p>	<p>Art. 8(2), Art. 8(3) FMIA Art. 8(3) FMIO</p>	<p>While the Swiss regulations require appropriate corporate management rules and organisation and that the boards work should be evaluated regularly, there is, however, a minor gap regarding explicit requirements on mechanisms for the regular review of an FMI's efficiency and effectiveness.</p>	
<p>Principle 22: Communication procedures and standards An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.</p>	<p>Art. 14 FMIA Art. 8(5), Art. 15 FMIO Art. 32 NBO</p>	<p>Not consistent While the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs to accommodate internationally</p>	<p>Switzerland is recommended to implement measures which address the identified gaps and inconsistencies related to Principle 22.</p>

		expected communications procedures and standards.	
1. An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.	Art. 14 FMIA Art. 8(3), Art. 15 FMIO Art. 32 NBO	While the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs to accommodate internationally expected communications procedures and standards.	
Principle 23: Disclosure of rules, key procedures, and market data An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.	Art. 21 FMIA Art. 19 FMIO Art. 23 NBO	Consistent The implementation measures are consistent with Principle 23, although there are gaps or shortcomings with KC 3 that have no material impact on completeness or consistency.	Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to FMIs with respect to minimum standards.
1. An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.	Art. 23(1) NBO Art. 21 FMIA Art. 19 FMIO		
2. An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.	Art. 21 FMIA Art. 19 FMIO		
3. An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.	Art. 21 FMIA Art. 19 FMIO	The Swiss regulation does not require a CCP to provide training to facilitate participants' understanding of rules and procedures and risks they face	

		from participating in the FMI. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
4. An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.	Art. 19 FMIO Art. 21 FMIA		
5. An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.	Art. 21 FMIA Art. 19 FMIO		

4.2.3 Central securities depositories and securities settlement systems

1. Text of applicable Principles and Key Considerations (KCs) ⁵⁶	2. Implementation measures of the jurisdiction	3. Key conclusions for Principle	4. Recommendations and comments
<p>Principle 1: Legal basis</p> <p>An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.</p>	<p>Art. 23, Art. 27(1), National Bank Ordinance (NBO)</p> <p>Art. 4(1), Art. 5, Art. 6, Art. 21, Art. 22, Art. 88, 89 and 92 Financial Market Infrastructure Act (FMIA)</p> <p>Art. 19 Financial Market Infrastructure Ordinance (FMIO)</p> <p>Art. 27, Art. 30a, Swiss Federal Act on Banks and Saving Banks (BA)</p>	<p>Consistent</p> <p>The implementation measures for CSDs are consistent with Principle 1, although there is a minor gap or shortcoming for KC 5 that has no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the gaps or identified inconsistencies related to KC5.</p> <p>Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to CSD/SSSs with respect to minimum standards.</p>
<p>1. The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.</p>	<p>Art. 21a–34 NBO</p> <p>(Art. 4(1), Art. 4(3), Art. 5, Art. 6, Art. 8–21, Art. 22, Art. 23, Art. 24, Art. 61–73, Art. 88, Art. 89 and 92 FMIA)</p> <p>Art. 4–19, Art. 20, Art. 21, Art. 52–58, Art. 73–75 FMIO</p> <p>Art. 24–37 and 37d–37g BA</p>	<p>Inconsistency in language:</p> <p>The Swiss regulations address the need for legal basis to provide a high degree of certainty, but do not explicitly address the need for a high degree of certainty <u>in all relevant jurisdictions</u>. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	

⁵⁶Only the relevant principles for CSDs or SSSs (as set forth in the annex E of the PFMI) are included.

<p>2. An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.</p>	<p>Art. 23(1), Art. 23(2) NBO Relevant requirements in FMIA/FMIO and NBA/NBO (eg, Art. 28, Art. 29, Art. 32 NBO Art. 4, 5, 7, Art. 21 and 25 FMIA Art. 19 FMIO</p>		
<p>3. An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.</p>	<p>Art. 23(1), Art. 23(2) NBO Relevant requirements in FMIA/FMIO and NBA/NBO (eg Art. 28, Art. 29, Art. 32 NBO Art. 4, 5, 7, Art. 21 and 25 FMIA Art. 19 FMIO</p>		
<p>4. An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.</p>	<p>Art. 27(1), Art. 23(2) NBO Art. 88(1), 89(2–3), Art. 92 FMIA Art. 24–37 and 37d–37g BA</p>	<p>Inconsistency in language: The Swiss regulations do not explicitly address the need for a high degree of certainty that actions of the FMI will not be voided, reversed or subject to stays in all relevant jurisdictions. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	

<p>5. An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.</p>	<p>Art. 23(2), Art. 27(1) NBO Art. 8(3) FMIA Art. 9 FMIO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions.</p>	
<p>Principle 2: Governance An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.</p>	<p>Art. 1(2), Art. 8, Art. 9, Art. 19, Art. 20, Art. 21, Art. 23, Financial Market Infrastructure Act (FMIA) Art. 4, Art. 5, Art. 8, Art. 9, Art. 10, Art. 18, Art. 19, Art. 52 Financial Market Infrastructure Ordinance (FMIO) Art. 36 National Bank Ordinance (NBO) Art. 620 et seq. Swiss Code of Obligations (CO) FINMA Circular 2017/01 on Corporate Governance - banks FINMA Circular 2013/03 Auditing</p>	<p>Broadly consistent The implementation measures for CSDs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 1, 3 and 6.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 1, 3 and 6.</p>
<p>1. An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.</p>	<p>(Art. 1(2) FMIA), (Art. 8(1) FMIA), Art. 23(1) FMIA (Art. 4(2) FMIO)</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs to have objectives that explicitly support financial stability and other relevant public interest considerations.</p>	
<p>2. An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.</p>	<p>Art. 8(2), Art. 19 FMIA, Art. 21(1) FMIA Art. 4(1), 4(2), Art. 5(1), Art. 5(2), Art. 6–10, Art. 13, Art. 48, 49, 56, 57, 69; Art. 71 FMIO Art. 36(1), Art. 36(2) NBO</p>		

	<p>In addition to these rules, general rules of the company law apply to FMIs (e.g. Art. 620 et seq. CO or Art. 716b of the CO)</p> <p>FINMA requires FMIs to comply with substantial parts of the FINMA Circular on Corporate Governance</p>		
<p>3. The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.</p>	<p>Art. 8(2), Art. 20 FMIA</p> <p>Art. 8(1), Art. 8(2) Art. 8(3) Art. 8(4) FMIO</p> <p>FINMA Circular on Governance</p>	<p>There is a minor gap due to the fact that, while there is a requirement for FMIs to assess the board's <i>overall</i> performance, the requirement to ask the board to regularly review the performance of its <i>individual</i> board members is not explicitly addressed by the Swiss regulations.</p>	
<p>4. The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).</p>	<p>Art. 8(1), Art. 8(2), Art. 8(4), Art. 10(1) FMIO</p> <p>Art. 9(1–3) FMIA</p> <p>See also response to KC 3</p>		
<p>5. The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.</p>	<p>Art. 8(1), Art. 8(2), Art. 8(3), Art. 10(1) FMIO</p> <p>Art. 8(2–3), Art. 9(1–3) FMIA</p>		
<p>6. The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.</p>	<p>Art. 8(3) FMIA</p> <p>Art. 8(3) FMIO Art. 9(4–6) FMIO</p> <p>FINMA Circular on auditing</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources, and access to the board.</p>	

<p>7. The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.</p>	<p>Art. 8(5), Art. 18, Art. 19, Art. 52(1) Art. 52(2) FMIO Art. 21 FMIA See also responses under Principles 18 and 23 for full disclosure requirements</p>		
<p>Principle 3: Framework for the comprehensive management of risks An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.</p>	<p>Art. 8, Art. 13, Art. 14, Art. 24, Art. 84 FMIA Art. 9, Art. 14, Art. 15, Art. 20, Art. 52, Art. 72 FMIO Art. 27, Art. 37 NBO Art. 9(1) Federal Act on the Licensing and Oversight of Auditors (Auditor Oversight Act, AOA) FINMA Circular 2013/03 Auditing</p>	<p>Consistent</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to CSD/SSSs with respect to minimum standards.</p>
<p>1. An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.</p>	<p>Art. 8(3), Art. 84(1), Art. 84(3) FMIA Art. 9(1), Art. 9(4), Art. 9(5), Art. 9(6) FMIO Art. 9a(1) AOA Art. 24 Federal Act of 22 June 2007 on the Swiss Financial Market Supervision Authority (FINMASA) Art. 27(1), Art. 37(1) NBO</p>	<p>Inconsistency in language: The Swiss regulations address the need for FMIs to have a risk management framework but do not explicitly address the need for FMIs to manage the material risks that they pose to other entities. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	

<p>2. An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.</p>	<p>Art. 9(2), Art. 9(3), Art. 52(1) FMIO Art. 52(2) FMIO Art. 27(2–3) NBO</p>		
<p>3. An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.</p>	<p>Art. 52(1), Art. 52(2) FMIO Art. 27(1–2) NBO See also responses under Principle 20</p>	<p>Inconsistency in language: The Swiss regulations address the need for FMIs to have a risk management framework, but do not explicitly address the need for FMIs to manage the material risks that they pose to other entities. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>4. An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.</p>	<p>Art. 13(1–2), Art. 14(1), Art. 14(2), Art. 24 FMIA Art. 14(1), Art. 14(2), Art. 14(3), Art. 15(1), (Art. 15(2), Art. 20–21, Art. 45(2), Art. 72 FMIO Article 26 of the NBO</p>		
<p>Principle 4: Credit risk An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement</p>	<p>Art. 8(3), Art. 24(1), Art. 62(5), Art. 64(1) FMIA Art. 9(1), Art. 54(1) FMIO</p>	<p>Consistent</p>	

<p>processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.</p>	<p>Art. 24a, Art. 27, Art. 28, Art. 34(2) NBO</p>		
<p>1. An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.</p>	<p>Art. 8(3), Art. 64(1) FMIA Art. 9(1), Art. 54(1) FMIO Art. 27(1), Art. 28, Art. 28a NBO</p>		
<p>2. An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.</p>	<p>Art. 27, Art. 28 NBO</p>		
<p>3. A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures</p>	<p>Art. 28, Art. 34(2) NBO Art. 62(5) FMIA</p>		

of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.			
7. An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.	Art. 54(1) FMIO Art. 24a NBO, Art. 28(2) NBO Art. 24(1) FMIA		
Principle 5: Collateral An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.	Art. 64 FMIA Art. 54 FMIO Art. 27, Art. 28 NBO, Art. 28a NBO, Art. 30 NBO	Consistent The implementation measures for CSDs are consistent with Principle 5, although there are minor gaps or shortcomings with KC 6 that have no material impact on completeness or consistency.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 6.
1. An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.	Art. 64(2) FMIA Art. 28a(1)NBO		
2. An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.	Art. 54(3)FMIO Art. 64(2) FMIA Art. 28a(2)NBO		
3. In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of	Art. 64(2) FMIA Art. 27(2), Art. 28a(2) NBO		

stressed market conditions, to the extent practicable and prudent.			
4. An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.	Art. 54(2) FMIO Art. 28a(3) NBO		
5. An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.	Art. 54(4) FMIO Art. 28a(4) NBO		
6. An FMI should use a collateral management system that is well-designed and operationally flexible.	Art. 27(3), Art. 28(1), Art.30(3) NBO	There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs to use a collateral management system and do not explicitly require that such a collateral management system be well-designed and operationally flexible. Rather, the regulations, among other things, require the FMI to provide tools and incentives for the participants to continuously contain risks and manage risks through the appropriate procedures and tools.	

<p>Principle 7: Liquidity risk</p> <p>An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.</p>	<p>Art. 8(3), Art. 62(5), Art. 65, Art. 67, Art. 68 FMIA</p> <p>Art. 9(1), Art. 58 FMIO</p> <p>Art. 24a, Art. 27, Art. 29 NBO</p>	<p>Partly consistent</p> <p>The implementation measures for CSDs are broadly consistent with Principle 7. The overall rating has been influenced by gaps or shortcomings in the implementation measures for KCs 2, 5 and 9.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 2, 5 and 9.</p>
<p>1. An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.</p>	<p>Art. 8(3) FMIA</p> <p>Art. 9(1) FMIO</p> <p>Art. 27 NBO</p>		
<p>2. An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.</p>	<p>Art. 27 NBO</p> <p>Art. 29(1–2), (6) NBO</p> <p>Art. 62(5) FMIA</p>	<p>The Swiss regulations do not explicitly address the need for FMIs to monitor and manage their <u>intraday</u> liquidity.</p>	
<p>3. A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.</p>	<p>Art. 62(5) FMIA, Art. 67(1) FMIA</p> <p>Art. 58(2) FMIO</p> <p>Art. 29(2) and (6) NBO</p>		
<p>5. For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks,</p>	<p>Art. 67(1) FMIA</p> <p>Art. 58(1) FMIO</p> <p>Art. 29(4) NBO</p>	<p>While the Swiss regulations explicitly address what types of resources an FMI can use for the purpose of meeting its minimum liquid resource</p>	<p>Switzerland is recommended to make explicit that its definition of qualifying liquid resources includes cash balances in foreign currencies only if</p>

<p>committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.</p>		<p>requirement, they do not explicitly specify the requirement for FMIs to put in place pre-arranged and highly reliable funding arrangements for converting FX balances or liquidating non-cash collateral through sales. This shortcoming is assessed to be material.</p>	<p>that have corresponding “prearranged and highly reliable” funding arrangements.</p>
<p>6. An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.</p>	<p>Art. 67(1) FMIA Art. 58(1) FMIO</p>		
<p>7. An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider’s performance reliability with respect to a particular currency, a liquidity provider’s potential access to credit from the central bank of issue may be taken into</p>	<p>Art. 29(3) NBO</p>	<p>Inconsistency in language: The Swiss regulations address the need for FMIs to conduct due diligence on liquidity providers’ creditworthiness and ability to meet their obligations, but do not explicitly address the need to conduct due diligence to obtain a high degree of confidence that liquidity providers have sufficient information to</p>	

<p>account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.</p>		<p>understand and manage their associated risks. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.</p>	
<p>8. An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.</p>	<p>Art. 65 FMIA</p>		
<p>9. An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate</p>	<p>Art. 8(3), Art. 67(1) FMIA Art. 8(3), Art. 58(2) FMIO Art. 29(2), Art. 29(6) NBO</p>	<p>The Swiss regulations do not explicitly address the need for FMIs to have clear procedures to report the results of their stress tests to appropriate decision-makers at the FMI, and to use these results to evaluate and adjust their liquidity risk management framework.</p> <p>Inconsistency in language:</p> <p>In addition, it was found that the language of Swiss regulations is not entirely consistent with the PFMI, in particular, not all parameters of liquidity stress testing are explicitly mentioned in the Swiss regulations. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss</p>	

governance arrangements relating to, the amount and form of total liquid resources it maintains.		Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
<p>10. An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.</p>	<p>Art.62(5) FMIA Art. 68 FMIA Art. 24a NBO</p>		
<p>Principle 8: Settlement finality An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.</p>	<p>Art. 62, Art. 89 FMIA Art. 53, Art. 66, Art. 73 FMIO</p>	Consistent	
<p>1. An FMI's rules and procedures should clearly define the point at which settlement is final.</p>	<p>Art. 62, Art. 89(2), 89(3) FMIA Art. 53, Art. 66, Art. 73 FMIO</p>		
<p>2. An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.</p>	<p>Art. 62(5) FMIA</p>		

3. An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.	Art. 62(4) FMIA Art. 66(2)(a), Art. 73(2) FMIO		
<p>Principle 9: Money settlements</p> <p>An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.</p>	Art. 10 FMIA, Art. 62 FMIA, Art. 65 FMIA Art. 49 FMIO Art. 23(1) NBO Section 4 of Chapter 1 of Title 4 Capital Adequacy Ordinance (CAO)	<p>Consistent</p> <p>The implementation measures for CSDs are consistent with Principle 9, although there are some minor gaps or shortcomings with KC 3 that have no material impact on completeness or consistency.</p>	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 3.
1. An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.	Art. 65(1) FMIA		
2. If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.	Art. 65(2) FMIA		
3. If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.	Art. 65(2) FMIA Section 4 of Chapter 1 of Title 4 CAO. The relevant Art. 103–111 CAO Art. 49 FMIO	There is a minor gap as the Swiss regulations require FMIs to monitor credit risks vis-à-vis commercial settlement banks but do not otherwise explicitly address the need for an FMI to establish and monitor adherence to criteria for settlement banks, or to monitor and manage concentration of exposures to settlement banks.	

4. If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.	Art. 65(2) FMIA		
5. An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.	Art. 65(2) FMIA Art. 23(1) NBO Art. 62(4), Art. 62(5) FMIA		
<p>Principle 10: Physical deliveries</p> <p>An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.</p>	<p>Art. 23 NBO, Art. 25c NBO</p> <p>Art. 973a–973c Swiss Code of Obligations (CO)</p> <p>Art. 7(2) Federal Act on Intermediated Securities (FISA)</p>	<p>Consistent</p> <p>The implementation measures for CSDs are consistent with Principle 10, although there are some gaps or shortcomings with KC 2 that have no material impact on completeness or consistency.</p>	
1. An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.	23(1) NBO		
2. An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.	Art. 25c(2) of the NBO Art. 973a–973c CO Art. 7(2) FISA	The Swiss regulations do not explicitly state that an FMI should manage the risks and costs associated with the “storage and delivery” of physical instruments or commodities. Nevertheless, the regulations include general risk requirements that should cover all risks.	

<p>Principle 11: Central securities depositories</p> <p>A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.</p>	<p>Art. 8, Art. 10, Art. 62, Art. 63, Art. 69, Art. 71 FMIA</p> <p>Art. 53 (FMIO)</p> <p>Art. 25c, Art. 27 NBO, Art. 30 NBO, Art. 34 NBO</p> <p>Art. 973a–973c Swiss Code of Obligations (CO)</p> <p>Art. 7(2) Federal Act on Intermediated Securities(FISA)</p> <p>FINMA Circular 2015/1 Accounting – banks</p>	<p>Consistent</p>	
<p>1. A CSD should have appropriate rules, procedures, and controls, including robust accounting practices, to safeguard the rights of securities issuers and holders, prevent the unauthorised creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains.</p>	<p>Art. 25c(1) NBO, Art. 30(1), Art. 34(2), Art. 34(2) NBO</p> <p>Art. 62(1) and (3) FMIA, Art. 63 FMIA</p> <p>Art. 53 FMIO</p> <p>FINMA Circular 2015/1 Accounting – banks</p>		
<p>2. A CSD should prohibit overdrafts and debit balances in securities accounts.</p>	<p>Art. 62(2) FMIA, Art. 62(3) FMIA)</p>		
<p>3. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry. Where appropriate, a CSD should provide incentives to immobilise or dematerialise securities.</p>	<p>Art. 25c(2) NBO</p> <p>Art. 973a–973c CO</p> <p>Art. 7(2) FISA</p>		
<p>4. A CSD should protect assets against custody risk through appropriate rules and procedures consistent with its legal framework.</p>	<p>Art. 25c(1), Art. 30(1) NBO</p> <p>Art. 62 FMIA</p>		
<p>5. A CSD should employ a robust system that ensures segregation between the CSD’s own assets and the securities of its participants and segregation among the</p>	<p>Art. 69 FMIA</p>		

securities of participants. Where supported by the legal framework, the CSD should also support operationally the segregation of securities belonging to a participant's customers on the participant's books and facilitate the transfer of customer holdings.			
6. A CSD should identify, measure, monitor, and manage its risks from other activities that it may perform; additional tools may be necessary in order to address these risks.	Art. 10 FMIA, Art. 1 FINMASA Art. 8(3) FMIA Art. 27(1) NBO		
Principle 12: Exchange-of-value settlement systems If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other	Art. 55 FMIO	Consistent	
1. An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.	Art. 55 FMIO		
Principle 13: Participant-default rules and procedures An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.	Art. 21, Art. 63, Art. 68 FMIA Art. 19 FMIO, Art. 48, Art. 52, Art. 56 FMIO Art. 23, Art. 24a NBO, Art. 27 NBO Title 3 Capital Adequacy Ordinance (CAO)	Broadly consistent The implementation measures of the Swiss authorities are broadly consistent with Principle 13. The overall rating has been influenced by the minor gaps or shortcomings identified for KC 4.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 4.
1. An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in	Art. 68 FMIA Art. 24a(1-2) NBO		

<p>the event of a participant default and that address the replenishment of resources following a default.</p>	<p>Art. 48(1–6) FMIO, Art. 56, Art. 72 FMIO Art. 42 CAO. Art. 45 CAO. Titles 1 to 3 CAO</p>		
<p>2. An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.</p>	<p>Art. 68 FMIA Art. 23, Art. 24a(3) NBO Art. 52(1), Art. 52(2) FMIO Art. 63 FMIA</p>		
<p>3. An FMI should publicly disclose key aspects of its default rules and procedures.</p>	<p>Art. 21 FMIA Art. 19 FMIO</p>		
<p>4. An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.</p>	<p>Art. 24a(3), Art. 27(2) NBO Art. 52(1), Art. 52(2) FMIO</p>	<p>There is a minor gap as the Swiss regulations do not explicitly address the requirement to involve relevant stakeholders in the testing and review of the FMI's default procedures. In addition, the requirement to conduct such testing and review following material changes to the rules and procedures of the CSD/SSS is also not addressed explicitly in the Swiss regulations.</p>	
<p>Principle 15: General business risk An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.</p>	<p>Art. 22, Art. 24(1), Art. 25(2), Art. 66 FMIA Art. 9, Art. 20, Art. 48, Art. 56. Art. 72(1) FMIO Art. 27(1), Art. 30 NBO Title 3 Capital Adequacy Ordinance (CAO)</p>	<p>Broadly consistent The implementation measures are broadly consistent with Principle 15. The overall rating has been influenced by the minor gaps or shortcomings regarding KC 3.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KC 3.</p>

<p>1. An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.</p>	<p>Art. 27(1) NBO Art. 9 FMIO</p>		
<p>2. An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.</p>	<p>Art. 66(1) FMIA Art. 42, Art. 45, Titles 1 to 3 CAO Art. 48, Art. 52(2), Art. 56(2), Art. 72 FMIO</p>		
<p>3. An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.</p>	<p>Art. 22(2), Art. 24(1), Art. 25(2), FMIA Art. 20 FMIO Art. 48, Art. 56, Art. 72 FMIO Art. 42, Art. 45, Titles 1 to 3 CAO</p>	<p>There is a minor gap in the Swiss regulation which allows the FINMA to ease the capital requirement on FMIs. The easing may go below the minimum requirement which is not in line with the PFMI requirement that, "At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses."</p>	<p>Swiss authorities are recommended to clarify the circumstances in which FINMA is permitted to ease the capital requirement on FMIs in a manner that is consistent with the Principle.</p> <p>Swiss authorities are recommended to clarify that the definition of capital is consistent with the key consideration.</p>
<p>4. Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.</p>	<p>Art. 30(3) NBO</p>		
<p>5. An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.</p>	<p>Art. 20(2), Art. 20(4), Art. 48(1–6), 56(2) FMIO</p>		

<p>Principle 16: Custody and investment risks</p> <p>An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.</p>	<p>Art. 24a(4), Art. 28a(1), Art. 30 NBO</p> <p>Art. 67 FMIA</p> <p>Art. 54 FMIO</p>	<p>Broadly consistent</p> <p>The implementation measures of the Swiss regulators are broadly consistent with Principle 16. The overall rating has been influenced by the minor gaps or shortcomings regarding KC 1 and KC 2.</p>	<p>Switzerland is recommended to implement measures that address the identified gaps or inconsistencies, related to KCs 1 and 2.</p>
<p>1. An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.</p>	<p>Art. 54(4) FMIO</p> <p>Art. 30(1), Art. 30(3) NBO</p>	<p>There is a minor gap in the Swiss regulations, which do not require assets to be held at "supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets." The regulations only require this in so far as it is possible. This shortcoming is assessed to be minor, having taken into consideration that the Swiss authorities during their oversight and supervisory activities do not allow for FMIs to use entities that are not regulated and supervised, unless those custodians are central banks.</p>	
<p>2. An FMI should have prompt access to its assets and the assets provided by participants, when required.</p>	<p>Art. 54(2), Art. 54(4) FMIO</p> <p>Art. 24a(1) NBO Art. 28a(4) NBO</p>	<p>There is a minor gap in the Swiss regulations since there is no reference to having prompt access to the FMI's own assets, there is, however, reference to having prompt access to participants' assets.</p>	
<p>3. An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.</p>	<p>Art. 30(1) NBO</p> <p>Art. 54(4) FMIO</p>		
<p>4. An FMI's investment strategy should be consistent with its overall risk management strategy and fully disclosed to its participants, and investments should be secured</p>	<p>Art. 30(3) NBO</p> <p>Art. 67(2) FMIA</p>		

<p>by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.</p>			
<p>Principle 17: Operational risk</p> <p>An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.</p>	<p>Art. 8, Art. 11, Art. 13, Art. 14, Art. 18, Art. 62(5) FMIA</p> <p>Art. 8(3), Art. 9(1), Art. 11, Art. 14, Art. 15, Art. 17 FMIO</p> <p>Art. 27(1), Art.32, Art. 32a, Art. 32b, Art. 32c, Art. 34, Art. 37 NBO</p>	<p>Consistent</p> <p>The implementation measures are consistent with Principle 17, however, there are minor gaps or shortcomings with KC 2 that have no material impact on completeness or consistency.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistency related to KC 2.</p>
<p>1. An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.</p>	<p>Art. 27(1), Art. 32 NBO</p> <p>Art. 9(1) FMIO</p> <p>Art. 13(1) FMIA</p>		
<p>2. An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.</p>	<p>Art. 8(2), Art. 13(1) FMIA</p> <p>Art. 8(3), Art. 14(1), (2) and (4) FMIO</p> <p>Art. 32a(2), Art. 32a(4), Art. 32b(3–5), Art. 37(3) NBO</p>	<p>There is a minor gap stemming from the absence of an explicit requirement to periodically, and after significant changes, test systems, operational policies and controls.</p>	
<p>3. An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.</p>	<p>Art. 14(2) and (3) FMIO</p> <p>Art. 32a(2) and (3) NBO</p>		
<p>4. An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</p>	<p>Art. 32a(3) NBO</p>		

<p>5. An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.</p>	<p>Art. 32 NBO Art. 32, Art. 32a(1), Art. 32a(3), Art. 32c NBO Art. 14(1), Art. 14(2) FMIA Art. 15(1), Art. 15(2) FMIO</p>		
<p>6. An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.</p>	<p>Art. 32a, Art. 32b, Art. 32c NBO</p>		
<p>7. An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.</p>	<p>Art. 8(3), Art. 11, Art. 17(2) FMIO Art. 27(1), Art. 27(3), Art. 32, Art. 32b, Art. 34(1) NBO Art. 11, Art. 18(2) FMIA</p>		
<p>Principle 18: Access and participation requirements An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.</p>	<p>Art. 18, Art. 21 FMIA Art. 23(1), Art. 24 NBO Art. 17, Art. 19 FMIO</p>	<p>Consistent</p>	
<p>1. An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.</p>	<p>Art. 18(1), Art. 21(1) FMIA Art. 17(2) FMIO Art. 23(1) NBO</p>		

<p>2. An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.</p>	<p>Art. 18(2) FMIA 17 FMIO</p>		
<p>3. An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.</p>	<p>Art. 23(1), Art. 24(4), Art. 24(5) NBO Art. 19 FMIO</p>		
<p>Principle 19: Tiered participation arrangements An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.</p>	<p>Art. 9(3–4) (FMIO)</p>	<p>Broadly consistent The implementation measures of the Swiss regulators are broadly consistent with Principle 19. The overall rating has been influenced by the minor gaps regarding KC 1, 2, 3 and 4.</p>	<p>Switzerland is recommended to implement measures which address the identified gap or inconsistency related to KC 1, 2, 3 and 4.</p>
<p>1. An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.</p>	<p>Art. 9(3), Art. 9(4) FMIO</p>	<p>There is a minor gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about indirect participation, regardless of the type of indirect participant. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.</p>	

<p>2. An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.</p>	<p>Art. 9(3), Art. 9(4) FMIO</p>	<p>There is a minor gap regarding the requirement that FMIs should identify material dependencies between direct and indirect participants that might affect the FMI. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.</p>	
<p>3. An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.</p>	<p>Art. 9(3), Art. 9(4) FMIO Art. 27(1) NBO</p>	<p>There is a minor gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about indirect participation, regardless the type of indirect participant. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.</p>	
<p>4. An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.</p>	<p>Art. 9(3) FMIO Art. 27(1) NBO Art. 8(3) FMIA</p>	<p>There is a minor gap in the Swiss regulations that regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, there are general risk provisions that may capture this.</p>	
<p>Principle 20: FMI links An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.</p>	<p>Art. 70, Art. 71 FMIA Art. 54(4) FMIO Art. 23, Art. 34(1–2) NBO</p>	<p>Consistent</p>	

1. Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.	Art. 34(1), Art. 34(2) NBO Art. 11, Art. 70–72 FMIA Art. 11, Art. 12 FMIO		
2. A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.	Art. 23(1–2) NBO Art. 71(2)(b), Art. 71(2)(c) FMIA		
3. Linked CSDs should measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between CSDs should be covered fully with high-quality collateral and be subject to limits.	Art. 34(1), Art. 34(2)(a), Art. 34(2)(d) NBO Art. 71(2)(a), (Art. 71(2)(b) FMIA		
4. Provisional transfers of securities between linked CSDs should be prohibited or, at a minimum, the retransfer of provisionally transferred securities should be prohibited prior to the transfer becoming final.	Art. 34(2)(b) NBO		
5. An investor CSD should only establish a link with an issuer CSD if the arrangement provides a high level of protection for the rights of the investor CSD's participants.	Art. 54(4) FMIO Art. 71(2)(a) FMIA Art. 34(2)(e) NBO		
6. An investor CSD that uses an intermediary to operate a link with an issuer CSD should measure, monitor, and manage the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.	Art. 34(2)(c) NBO		
Principle 21: Efficiency and effectiveness An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.	Art. 8 FMIA Art. 6, Art. 8, Art. 52 FMIO	Broadly consistent The implementation measures of the Swiss regulators are broadly consistent with Principle 21. The overall rating has been influenced by	Switzerland is recommended to implement measures which address the identified gaps or inconsistency related to KC 2 and 3.

		the minor gaps or shortcomings regarding KC 2 and KC 3.	
1. An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.	Art. 8(2) FMIA Art. 6, Art. 8(5), Art. 52 FMIO		
2. An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.	Art. 8(2) FMIA Art. 6 FMIO	While the Swiss regulations require appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for these to be measurable and achievable.	
3. An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.	Art. 8(2), Art. 8(3) FMIA Art. 8(3) FMIO	While the Swiss regulations require appropriate corporate management rules and organisation, and that the boards work should be evaluated regularly, there is, however, a minor gap regarding explicit requirements on mechanisms for the regular review of an FMI's efficiency and effectiveness.	
Principle 22: Communication procedures and standards An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.	Art. 14 FMIA Art. 8(5), Art. 15 FMIO Art. 32 NBO	Not consistent While the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs to accommodate internationally expected communications procedures and standards.	Switzerland is recommended to implement measures which address the identified gaps and inconsistencies related to Principle 22.

<p>1. An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.</p>	<p>Art. 14 FMIA Art. 8(3), Art. 15 FMIO Art. 32 NBO</p>	<p>While the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI, there is no explicit requirement on FMIs to accommodate internationally expected communications procedures and standards.</p>	
<p>Principle 23: Disclosure of rules, key procedures, and market data</p> <p>An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.</p>	<p>Art. 21 FMIA Art. 19 FMIO Art. 23 NBO</p>	<p>Consistent</p> <p>The implementation measures are consistent with Principle 23, although there are gaps or shortcomings with KC 3 that have no material impact on completeness or consistency.</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to CSDs/SSSs with respect to minimum standards.</p>
<p>1. An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.</p>	<p>Art. 23(1) NBO Art. 21 FMIA Art. 19 FMIO</p>		
<p>2. An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.</p>	<p>Art. 21 FMIA Art. 19 FMIO</p>		
<p>3. An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.</p>	<p>Art. 21 FMIA Art. 19 FMIO</p>	<p>The Swiss regulations do not require the FMI to provide training to facilitate participants' understanding of rules and procedures and risks they face from participating in the FMI. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed</p>	

		to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI.	
4. An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.	Art. 19 FMIO Art. 21 FMIA		
5. An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.	Art. 21 FMIA Art. 19 FMIO		

4.2.4 Trade repositories

1. Text of applicable Principles and Key Considerations (KCs) ⁵⁷	2. Implementation measures of the jurisdiction	3. Key conclusions for Principle	4. Recommendations and comments
<p>Principle 1: Legal basis</p> <p>An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.</p>	<p>Art. 4–21, 74–79, 88, 92 Financial Market Infrastructure Act (FMIA)</p> <p>Art. 4–19, 59–65, 73–75 Financial Market Infrastructure Ordinance (FMIO)</p> <p>Art. 24–37 and 37d–37g of the Swiss Federal Act on Banks and Saving Banks (BA)</p> <p>FINMA Circular on corporate governance</p>	<p>Partly consistent</p> <p>The implementation measures for TRs are partly consistent with Principle 1. The overall rating has been influenced in particular by a significant gap regarding KC 1 as well as minor gaps in KCs 2, 3, 4 and 5.</p> <p>As TRs are not considered to be systemically important, they are subject to a narrower legal and regulatory basis than systemically important FMIs.</p>	<p>Switzerland is recommended to implement measures which address the gaps or identified inconsistencies related to KCs 1 to 5.</p> <p>Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, FINMA is recommended to provide clarity to TRs with respect to minimum standards.</p>
<p>1. The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.</p>	<p>Art. 4(1), 8–21, 74–79, 88, 92 FMIA</p> <p>Art. 4–19, 59–65, 73–75 FMIO</p> <p>Art. 24–37 and 37d–37g BA</p>	<p>There is a significant gap created by the absence of requirements to provide for a high degree of legal certainty in each material aspect of a TR's activities in all relevant jurisdictions.</p>	
<p>2. An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.</p>	<p>Art. 4, 5, 7 and 21 FMIA</p> <p>Art. 19 FMIO</p>	<p>There is a minor gap created by the lack of a requirement to fully (and directly) require that contracts are clear, understandable, and consistent with relevant laws and regulations. However, there are general risk provisions that may help capture this.</p>	
<p>3. An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and,</p>	<p>Art. 4, 5, 7 and 21 FMIA</p> <p>Art. 19 FMIO</p>	<p>There is a minor gap created by the absence of explicit requirements for</p>	

⁵⁷ Only the relevant principles for TRs (as set forth in the annex E of the PFMI) are included.

where relevant, participants' customers, in a clear and understandable way.		the articulation in a clear and understandable way of the legal basis by the TR. However, there are general risk provisions that may help capture this.	
4. An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.	Art. 88, 89(2–3), 90, 92 FMIA Art. 24 to 37 and 37d to 37g of the Banking Act	There is a minor gap created by the lack of requirements to ensure that rules, procedures, and contracts are enforceable in all relevant jurisdictions. However, there are general risk provisions that may help capture this.	
5. An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.	Art. 8 FMIA Art. 9(1) FMIO	There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs conducting business in multiple jurisdictions to identify and manage risks arising from potential conflict of laws across jurisdictions. However there are general risk provisions that may help capture this.	
Principle 2: Governance An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.	Art. 1(2),8, 9, 19–21 FMIA Art. 4, 8–10, 18–19 FMIO	Broadly consistent The implementation measures for TRs are broadly consistent with Principle 2. The overall rating has been influenced by the minor gaps or shortcomings in the implementation measures for KCs 1, 3 and 6.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 3 and 6.
1. An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.	Art. 1(2), 8(1) FMIA Art. 4(2) FMIO	There is a minor gap as the Swiss regulations do not explicitly address the need for FMIs to have objectives that explicitly support financial	

		stability and other relevant public interest considerations.	
2. An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.	Art. 8, 19, 21 FMIA Art.4, 5, 8(1) FMIO		
3. The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.	Art. 8(2), 20 FMIA Art. 8 FMIO FINMA Circular on Governance	There is a minor gap due to the fact that, while there is a requirement for FMIs to assess the board's overall performance, the requirement to ask the board to regularly review the performance of its individual board members is not explicitly addressed by the Swiss regulations.	
4. The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).	Art. 9 FMIA Art. 8–10 FMIO	There is an immaterial gap in KC 4 as the Swiss regulations do not explicitly refer to the inclusion of non-executive board member(s).	
5. The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.	Art. 8–9 FMIA Art. 8–10 FMIO		
6. The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.	Art. 8 FMIA Art. 8–9 FMIO FINMA Circular on auditing	There is a minor gap as the Swiss regulations do not explicitly address the need for the risk management function to have sufficient authority, independence, resources, and access to the board.	

<p>7. The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.</p>	<p>Art. 8(5), 18–19 FMIO Article 21 FMIA</p>		
<p>Principle 3: Framework for the comprehensive management of risks An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.</p>	<p>Art. 8, 13–14, 84 FMIA Art. 9, 14–15, 20 FMIO Art. 9 (1) Auditor Oversight Act, (AOA)</p>	<p>Partly consistent The implementation measures for TRs are partly consistent with Principle 3. The overall rating has been influenced by a significant gap regarding KC 4, as well as minor gaps in KCs 1 and 3.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 3 and 4. Furthermore, wherever there are inconsistencies in language between the Swiss regulations and the PFMI, FINMA is recommended to consider providing clarity to TRs with respect to minimum standards.</p>
<p>1. An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.</p>	<p>Art. 8(3), 84 FMIA Art. 9 FMIO Art. 9a(1) Auditor Oversight Act (AOA) Article 24 FINMASA</p>	<p>There is a minor gap as the Swiss regulations address the need for TRs to have a risk management framework, but do not explicitly address the need for the risk management framework to be subject to periodic review.</p>	
<p>2. An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.</p>	<p>Art. 9 FMIO</p>		
<p>3. An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.</p>	<p>See KC 1 and Principle 20</p>	<p>There is a minor gap as the Swiss regulations address the need for TRs to have a risk management framework, but do not set requirements to “regularly review the material risks” or “interdependencies.”</p>	

<p>4. An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.</p>	<p>Art. 13(1–2), 14(1) FMIA Art. 14–15 FMIO</p>	<p>There is a significant gap as the Swiss regulations do not explicitly address the need for TRs to: (i) identify multiple scenarios that may potentially prevent the TR from being able to provide their critical operations and services as a going concern, (ii) prepare appropriate plans for their recovery or orderly wind-down, and (iii) also provide relevant authorities with the information needed for purposes of resolution planning.</p>	
<p>Principle 15: General business risk</p> <p>An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.</p>	<p>Art. 12(1), 13(1) letter d FMIA Art. 9 FMIO</p>	<p>Partly consistent</p> <p>The implementation measures are partly consistent with Principle 15. The overall rating has been influenced by gaps or shortcomings regarding all KCs.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to all KCs of Principle 15.</p>
<p>1. An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.</p>	<p>Art. 9 FMIO</p>	<p>There is a minor gap in the Swiss regulations since there is no reference to “including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.”</p>	
<p>2. An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by</p>	<p>Art. 12(1), 13(1) letter d FMIA</p>	<p>There is a significant gap created by the absence of requirements in legislation that refer to “the amount of liquid net assets funded by equity an FMI should hold should be determined by its general business</p>	

<p>its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.</p>		<p>risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken” (in the event the cost of achieving a recovery or orderly wind-down is greater than the minimum equity capital) and regarding rules and time table for the replenishment of the necessary “liquid net assets funded by equity.”</p>	
<p>3. An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.</p>	<p>Art. 13(1) letter d FMIA</p>	<p>A significant gap is created by the absence of legislation requiring a TR to establish and “maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan.”</p>	
<p>4. Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.</p>	<p>Art. 13(1) letter d FMIA</p>	<p>A significant gap is created by the absence of legislation requiring a TR to have rules, procedures and a time table in the event that it needs assets beyond the minimum equity capital.</p>	
<p>5. An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.</p>	<p>Art. 13(1) letter d FMIA</p>	<p>A significant gap is created by the absence of requirements in legislation referring to the need for TRs to maintain a viable plan for raising additional equity should their equity fall close to or below the amount needed, and that this plan should be approved by the board of directors and updated regularly.</p>	

<p>Principle 17: Operational risk</p> <p>An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI’s obligations, including in the event of a wide-scale or major disruption.</p>	<p>Art. 11, 13–14, 18 FMIA</p> <p>Art. 8(3), 9, 11, 14–15, 17 FMIO</p>	<p>Partly consistent</p> <p>The implementation measures are partly consistent with Principle 17. The overall rating has been influenced by the gaps or shortcomings for KCs 1, 2, 5 and 6.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistency related to KCs 1, 2, 5 and 6.</p> <p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to TRs with respect to minimum standards.</p>
<p>1. An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.</p>	<p>Art. 9(1)</p> <p>Art. 13(1)</p>	<p>There is a minor gap created by the absence of requirements in legislation referring to the need to have a specific framework for operational risk management.</p>	
<p>2. An FMI’s board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI’s operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.</p>	<p>Art. 13(1) FMIA</p> <p>Art. 8(3), 14(1) and (4) FMIO</p>	<p>There is a significant gap created by the absence of requirements in legislation specifying that (i) systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes, (ii) the BOD should endorse the FMI’s operational risk management framework, and (iii) a review of the business impact analysis is not the same as reviewing the FMI’s operational risk management framework as a whole.</p>	
<p>3. An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.</p>	<p>Art. 14(2) and (3) FMIO</p>		

<p>4. An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</p>	<p>Art. 14 FMIA Art. 15 FMIO</p>	<p>There is a non-material gap created by the absence of requirements in legislation referring explicitly to ensuring scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</p>	
<p>5. An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.</p>	<p>Art. 14 FMIA Art. 15 FMIO</p>	<p>There is a minor gap created by the absence of requirements in legislation referring to physical security policies and measures.</p>	
<p>6. An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.</p>	<p>Art. 11,13, 18(2) FMIA Art. 11(3), 17(2) FMIO</p>	<p>There is a significant gap created by the absence of requirements in legislation referring to the use of a secondary site, the objective to resume operations within two hours following disruptive events, and that the FMI should regularly test these arrangements.</p>	
<p>7. An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.</p>	<p>Art. 9 (2–3) FMIO</p>		
<p>Principle 18: Access and participation requirements An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.</p>	<p>Art. 18, 21 FMIA Art. 17, 19 FMIO</p>	<p>Consistent</p>	

<p>1. An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.</p>	<p>Art. 18(1), 21(1) FMIA Art. 17(2) FMIO</p>		
<p>2. An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.</p>	<p>Art. 18(2) FMIA Art. 17 FMIO</p>		
<p>3. An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.</p>	<p>Art. 19 FMIO</p>		
<p>Principle 19: Tiered participation arrangements An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.</p>	<p>Art. 8 (3) FMIA Art. 9(3–4) FMIO</p>	<p>Broadly consistent The implementation measures are broadly consistent with Principle 19. The overall rating has been influenced by the minor gaps or shortcomings regarding KCs, 1 3 and 4.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 3 and 4. Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to TRs with respect to minimum standards.</p>
<p>1. An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.</p>	<p>Art. 9(3–4) FMIO</p>	<p>There is a non-material gap created by the absence of legislation noting the potential applicability of tiered participation arrangement requirements, since a reporting entity (or many) could delegate its (their)</p>	

		reporting to a third party which may or may not be a direct participant to a TR.	
2. An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.	Art. 9(3–4) FMIO		
3. An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.	Art. 9(4) FMIO Art. 8 (3) FMIA	There is a minor gap regarding the requirement that FMIs should ensure that their rules, procedures, and agreements allow them to gather basic information about indirect participation, regardless of the type of indirect participant. The Swiss regulations only require FMIs to gather this information for indirect participants that are identifiable to the FMI.	
4. An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.	Art. 9(3) FMIO	There is a minor gap in the Swiss regulations regarding the requirement that FMIs should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate. However, the general risk provisions may help capture this.	
Principle 20: FMI links An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.	Art. 8, 11 FMIA Art. 9, 11, 12 FMIO	Partly consistent The implementation measures of the Swiss regulations are partly consistent with Principle 20. The overall rating has been influenced by gaps or shortcomings regarding KCs 1, 2 and 9.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 2 and 9.

<p>1. Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.</p>	<p>Art. 8(3) FMIA Art. 9, 11–12 FMIO</p>	<p>There is a significant gap created by the absence of requirements in legislation referring to all aspects related to FMI links. However, the catch-all requirements on risk management (Art. 8 (3) FMIA and Art. 9 FMIO) may partly capture this.</p>	
<p>2. A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.</p>	<p>Art. 11 FMIA Art. 9, 11–12 FMIO</p>	<p>There is a significant gap created by the absence of requirements in legislation referring to all aspects related to FMI links. However, the catch-all requirements on risk management (Art. 8 (3) FMIA and Art. 9 FMIO) may partly capture this.</p>	
<p>9. A TR should carefully assess the additional operational risks related to its links to ensure the scalability and reliability of IT and related resources.</p>	<p>Art. 8 (3) FMIA Art. 9 FMIO</p>	<p>There is a significant gap created by the absence of requirements in legislation referring to all aspects related to FMI links. However, the catch-all requirements on risk management (Art. 8 (3) FMIA and Art. 9 FMIO) may partly capture this.</p>	
<p>Principle 21: Efficiency and effectiveness An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.</p>	<p>Art. 8 FMIA Art. 6, 8 FMIO</p>	<p>Broadly consistent The implementation measures of the Swiss regulators are broadly consistent with Principle 21. The overall rating has been influenced by the minor gaps or shortcomings regarding KCs 1, 2 and KC 3.</p>	<p>Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 1, 2 and 3.</p>
<p>1. An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products</p>	<p>Art. 8(2) FMIA Art. 8(5) FMIO</p>	<p>There is a minor gap created by the absence of legislation requiring an FMI to meet the needs of the market it serves, particularly related to the</p>	

cleared, settled, or recorded; and use of technology and procedures.		use of technology and procedures of a TR.	
2. An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk management expectations, and business priorities.	Art. 8(2) FMIA Art. 6 FMIO	While the Swiss regulations require appropriate corporate management rules and organisation, there is a minor gap since there are no explicit requirements for these to be measurable and achievable.	
3. An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.	Art. 8(2–3) FMIA Art. 8(3) FMIO	While the Swiss regulations require appropriate corporate management rules and organisation, and require the board's work to be evaluated regularly, there is, however, a gap with regard to explicit requirements to establish mechanisms for the regular review of an FMI's efficiency and effectiveness.	
Principle 22: Communication procedures and standards An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.	Art. 14 FMIA Art. 8, 15, 61(2), 64(1) FMIO	Partly consistent The implementation measures of the Swiss regulators are partly consistent, as there is a significant gap in the requirement on TRs to accommodate internationally expected communications procedures and standards.	Switzerland is recommended to implement measures which address the identified gaps and inconsistencies related to Principle 22.
1. An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.	Art. 14 FMIA Art. 8, 15, 61(2), 64(1) FMIO	While the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations in a manner that is consistent with the PFMI t, there is a significant gap in the requirement on TRs to accommodate internationally	

		expected communications procedures and standards.	
<p>Principle 23: Disclosure of rules, key procedures, and market data</p> <p>An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.</p>	<p>Art. 21 FMIA</p> <p>Art. 19 FMIO</p>	<p>Consistent</p> <p>The implementation measures are consistent with Principle 23, although there are gaps or shortcomings with KC 3 that have no material impact on completeness or consistency.</p>	<p>Wherever there are inconsistencies in language between the Swiss regulations and the PFMI, Switzerland is recommended to consider providing clarity to TRs with respect to minimum standards.</p>
<p>1. An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.</p>	<p>Art. 21 FMIA</p> <p>Art. 19 FMIO</p>		
<p>2. An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.</p>	<p>Art. 21 FMIA</p> <p>Art. 19 FMIO</p>		
<p>3. An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.</p>	<p>Art. 21 FMIA</p> <p>Art. 19 FMIO</p>	<p>The Swiss regulation does not require a TR to provide training to facilitate participants' understanding of rules and procedures and risks they face from participating in the FMI. However, this inconsistency in the language between the Swiss regulations and the PFMI is assessed to be immaterial, having taken into consideration that the Swiss authorities rely on the Swiss Regulatory Notes to support their interpretation of the Swiss regulations</p>	

		in a manner that is consistent with the PFMI.	
4. An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.	Art. 19 FMIO		
5. An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.	Art. 21 FMIA Art. 19 FMIO		
Principle 24: Disclosure of market data by trade repositories A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.	Art. 13–14, 74–79 FMIA Art. 9, 12, 14–15, 60–65 FMIO	Partly consistent The implementation measures of the Swiss regulators are broadly consistent with Principle 24. The overall rating has been influenced by the gaps or shortcomings regarding KC 2 and KC 3 respectively.	Switzerland is recommended to implement measures which address the identified gaps or inconsistencies related to KCs 2 and 3.
1. A TR should provide data in line with regulatory and industry expectations to relevant authorities and the public, respectively, that is comprehensive and at a level of detail sufficient to enhance market transparency and support other public policy objectives.	Art. 14, 74, 76–79 FMIA Art. 12, 14–15, 61, 63–64 FMIO		
2. A TR should have effective processes and procedures to provide data to relevant authorities in a timely and appropriate manner to enable them to meet their respective regulatory mandates and legal responsibilities.	Art. 13–14 FMIA Art. 15, 59, 63–64 FMIO	There is a significant gap created by the absence of requirements for a TR to provide data to relevant authorities in a timely and appropriate manner to enable them to meet their respective regulatory mandates and legal responsibilities.	

<p>3. A TR should have robust information systems that provide accurate current and historical data. Data should be provided in a timely manner and in a format that permits it to be easily analysed.</p>	<p>Art. 13–14, 75 FMIA Art. 9, 12, 14–15 FMIO</p>	<p>There is a significant gap created by the absence of requirements in legislation that the TR should have robust information systems that provide accurate current and historical data. Data should be provided in a timely manner and in a format that permits it to be easily analysed.</p>	
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Annex A: List of abbreviations

AM	Assessment methodology
AT	Assessment team
BA	Swiss Banking Act of 8 November 1934
CAO	Capital Adequacy Ordinance
CCP	Central counterparty
CO	Swiss Code of Obligations
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payment and Settlement Systems
CSD	Central securities depository
FISA	Federal Act on Intermediated Securities
FMI	Financial market infrastructure
FMIA	Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (<i>Financial Market Infrastructure Act</i>)
FMIO	Ordinance on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (<i>Financial Market Infrastructure Ordinance</i>)
IMSG	Implementation Monitoring Standing Group
IOSCO	International Organization of Securities Commissions
NBA	Swiss National Bank (National Bank Act)
NBO	Ordinance to the Federal Act on the Swiss National Bank (<i>National Bank Ordinance</i>)
PFMI	Principles for financial market infrastructures
PS	Payment system
SSS	Securities settlement system
TR	Trade repository

Annex B: Reference documents

Capital Adequacy Ordinance (CAO)

Circulars on corporate governance, auditing, accounting, market conduct

CPSS-IOSCO, *Principles for financial market infrastructures*, April 2012

www.bis.org/cpmi/publ/d101a.pdf

CPSS-IOSCO, *Principles for financial market infrastructures: disclosure framework and assessment methodology*, December 2012

www.bis.org/publ/cpmi106.pdf

CPMI-IOSCO, *Application of the Principles for financial market infrastructures to central bank FMIs*, August 2015

<http://www.bis.org/cpmi/publ/d130.htm>

CPMI-IOSCO, *Assessment and review of application of Responsibilities for authorities*, November 2015

www.bis.org/cpmi/publ/d139.htm

Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA)

Federal Council's communication on the FMIA

Liquidity Ordinance

Ordinance on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Ordinance, FMIO)

Ordinance to the Federal Act on the Swiss National Bank (National Bank Ordinance, NBO)

Swiss Banking Act of 8 November 1934 (BA)

Swiss Code of Obligations (CO)

Swiss National Bank (National Bank Act, NBA)

Swiss National Bank's explanatory note on the 2013 revision of the NBO.

Annex C: FMIs in Switzerland subject to the Principles

Systemically important PSs

- Swiss Interbank Clearing (SIC)

CCPs

- SIX x-clear (SXC)

CSDs/SSSs

- SIX SIS (SIS)

TRs

- SIX-TR

Annex D: Members of the IMSG and Assessment team

IMSG co-chairs

Bank of France	Emmanuelle Assouan
Securities and Exchange Commission, US	Christian Sabella

IMSG and assessment team members

Reserve Bank of Australia	Matthew Gibson
Bank of Canada	Wade McMahon
Bank of France	Samira Bourahla
Bundesanstalt für Finanzdienstleistungsaufsicht, Germany	Edip Acat
European Central Bank	Tom Kokkola*
	Pierre Marmara (until Sept 2017)**
	Eszter Tanai (from Sept 2017)**
European Securities and Markets Authority	Maud Timon
Hong Kong Monetary Authority	Stephen Pang
Securities and Exchange Board of India	Sanjay Puro* [*]
Bank of Japan	Takashi Hamano
Financial Services Agency, Japan	Fumikazu Nishio
Bank of Korea	Hyung Koo Lee
Central Bank of the Russian Federation	Mikhail Myznikov
Monetary Authority of Singapore	Ken Nagatsuka
	Tze Hon Lau
Sveriges Riksbank	Johanna Stenkula von Rosen*
Capital Markets Board of Turkey	Nalan Sahin Urkan
Bank of England	Hardeep Rai
Board of Governors of the Federal Reserve System	Kathy Wang
Federal Reserve Bank of New York	John Rutigliano
	Joey Patel**
	Hannah Van Demark**
Commodity Futures Trading Commission, US	Andrée Goldsmith
Securities and Exchange Commission, US	Stephanie Kim Park
	Natasha Greiner** (AT lead)
IOSCO Assessment Committee	Amarjeet Singh
IOSCO Secretariat	Josafat De Luna Martínez
	Tajinder Singh
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