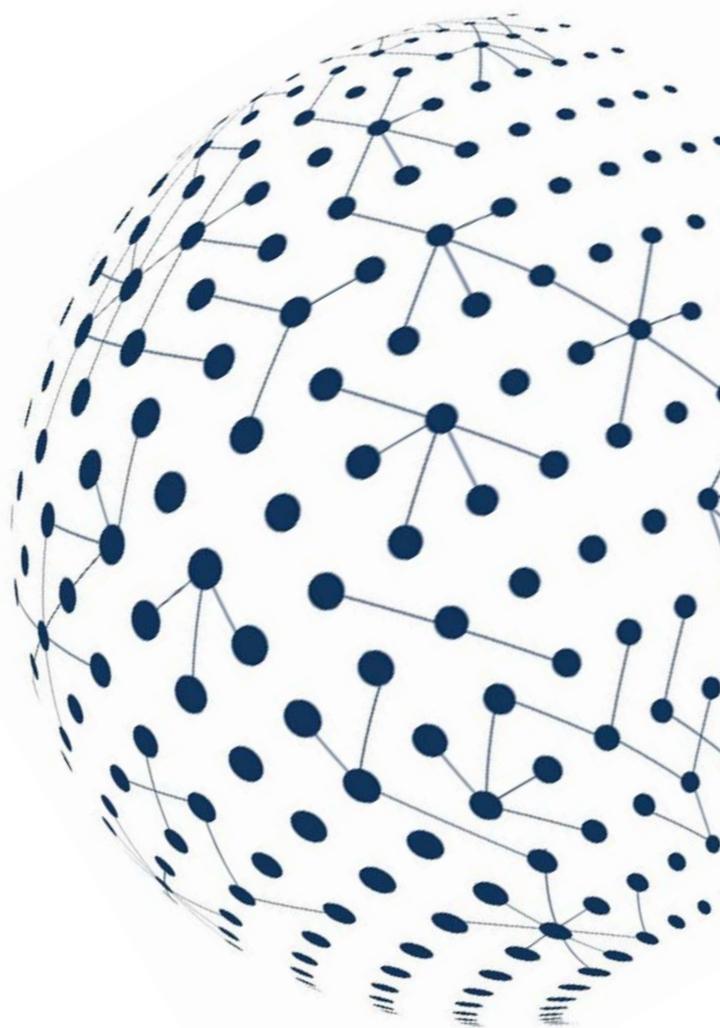


G20 Roadmap for Enhancing Cross-border Payments

First consolidated progress report

13 October 2021



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Executive summary

The Roadmap for Enhancing Cross-border Payments is a priority initiative of the G20. Work in 2020-2021 has so far primarily focused on laying the foundational elements for the future Roadmap actions.

A key part of that foundation has been the publication of specific targets at the global level that quantify the Roadmap's goal of addressing the challenges of cost, speed, transparency and access faced by cross-border payments. These targets play an important role in defining the ambition of the work, creating accountability. The targets, which are summarised in this report, have benefited from responses to a public consultation earlier this year, and will be made fully operational in 2022 through the development of the implementation approach to monitoring progress toward them.

The foundational work during the first year of the G20 Roadmap has also included stocktakes and analysis of both existing and emerging systems and arrangements. These stocktakes have covered topics as diverse as existing international standards and guidance, existing national and regional data frameworks, operating hours of and access to payment systems, common elements of service level agreements/schemes, the use of payment-versus-payment mechanisms, the interlinking of payment systems, and CBDC design. This work will provide a strong basis and guide for the operational improvements to come.

Most of the milestones set by the roadmap for 2021 have been successfully completed or are close to finalisation. The breadth of the work underway and the recognition of the importance of conducting sufficient external outreach has led some of the timelines to be extended. But the end-goals of the overall roadmap remain firmly on-track. Taking forward the Roadmap's 19 interrelated Building Blocks simultaneously is a major exercise for participating authorities. While the more exploratory building blocks (e.g. on central bank digital currencies (CBDCs) and stablecoins) understandably have triggered particular outside attention, it is equally important to make progress on the more fundamental operational and technical areas (e.g. liquidity bridges or ISO 20022 message format).

The Roadmap will not be achieved merely on paper through analyses and recommendations. The next stage of work in 2022 comprises not only further analysis but the development of specific proposals for material improvements of underlying systems and arrangements (e.g. for increased adoption of payment-versus-payment), as well as the development of new systems. Making these practical improvements and taking advantage of new developments will require global coordination and sustained political support. It will also require investment in systems, processes and technologies.

The success of this work will depend heavily on the commitment of public authorities and the private sector, working together. Their collective effort and actions will be required in order to implement the agreed changes in the coming years and to achieve the targets that have been set for the Roadmap. Central banks must improve their own core payment systems and thus enable the private sector that often relies on their systems to follow suit. At the same time, private sector development of new payment systems and arrangements, and enhancements to existing services, will contribute to the improvements required. In order to achieve progress in a timely manner to meet the targets, the public and private sector will need to begin their planning and budgeting for the needed enhancements very soon.

Introduction

The G20 has made enhancing cross-border payments a priority. Faster, cheaper, more transparent and more inclusive cross-border payment services, including remittances, while maintaining their safety and security, would have widespread benefits for citizens and economies worldwide, supporting economic growth, international trade, global development and financial inclusion. The FSB, in coordination with the Committee on Payments and Market Infrastructures (CPMI) and other relevant international organisations and standard-setting bodies, developed a roadmap to address these challenges.¹ The G20 Leaders endorsed the roadmap at their November 2020 Summit.

The FSB coordinates the implementation of the roadmap through its Cross-Border Payments Coordination group (CPC), and reports on progress to the G20. Each individual building block is being taken forward by the body or bodies specified in the roadmap – notably the CPMI, FSB and other relevant international organisations and standard-setting bodies (SSBs).

The roadmap is designed to allow for flexibility and adaptation in the path to get there as the work progresses and the cross-border payment landscape evolves. It encompasses a variety of approaches and time horizons, in order to achieve practical improvements in the shorter term while acknowledging that other initiatives will need to be implemented over longer time periods.

This report summarises progress to date during the first year of the roadmap, bringing together in one place the work under the wide-ranging but interconnected set of initiatives. The report also confirms the next steps in the roadmap for 2022 and beyond.

Involving a wide range of stakeholders

Regular engagement between the public and private sectors is necessary to ensure the building blocks produce recommendations and actions that command industry support, secure timely investment where needed, and deliver tangible enhancements to cross-border payments by end-2027.

Over the course of the year, the work involved close collaboration with the private sector and the involvement of a wide range of private and public sector stakeholders who shared their insights and expertise. This involvement and experience forms an important input to the work on the different building blocks and has been incorporated into the first progress report. Stakeholder engagement in 2021 has included:

- international conferences, such as the CPMI's March 2021 conference "Pushing the frontiers of payments" and the September 2021 Banca d'Italia international webinar on 'Enhancing Digital and Global Infrastructures in Cross-border Payments' held in the context of its G20 presidency;

¹ FSB, *Enhancing Cross-border Payments - Stage 1 report to the G20*, April 2020. CPMI, *Enhancing cross-border payments: building blocks of a global roadmap*, July 2020. FSB, *Enhancing Cross-border Payments - Stage 3 report to the G20*, October 2020

- workshops both with the private sector (such as the FSB workshop on international standards, guidance and principles in July 2021) and with the wider official sector (for instance with the FSB's Regional Consultative Groups);
- as well as surveys, publications and bilateral discussions.

The bodies taking forward individual building blocks or individual actions under the building blocks are committed to publicly consulting at the appropriate points, as demonstrated for example by the public consultation on setting quantitative targets for the Roadmap that took place in May 2021 and that has contributed to the finalisation of the targets report in October 2021.

Design of the roadmap

The roadmap is structured according to the 19 building blocks in the CPMI's Stage 2 report in July 2020, which span the following five focus areas:



Source: CPMI: Enhancing cross-border payments: building blocks of a global roadmap - Stage 2 report to the G20 (July 2020)

The tables in Annex 1 describe, for each individual building block, the updated actions that FSB member authorities, standard-setters and international organisations have agreed to take and the indicative timelines for achieving them. These actions and timelines comprise the roadmap.

Report on progress in 2021 and next steps

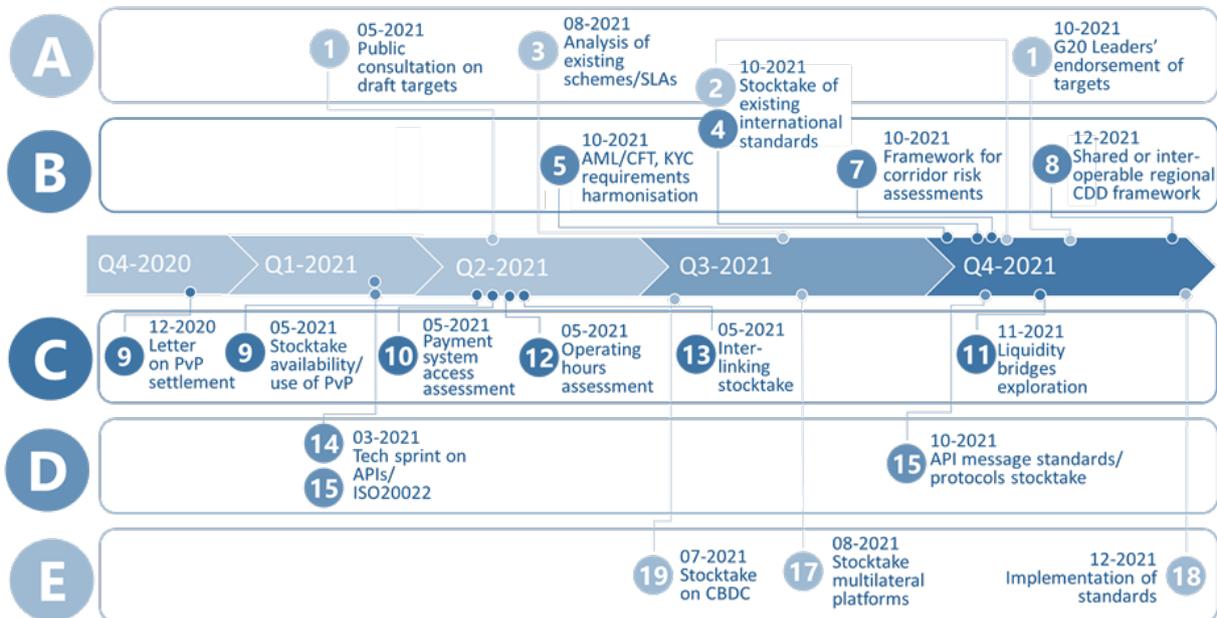
This section of the progress report:

- Provides an update on progress on all actions underway (both those scheduled to be completed by October 2021 and those with longer completion horizons), summarised by focus area and building block
- Presents updates to next steps and timings for the roadmap, in cases where these are needed in response either to experience gained through implementation of the Roadmap or to developments in the payments market:

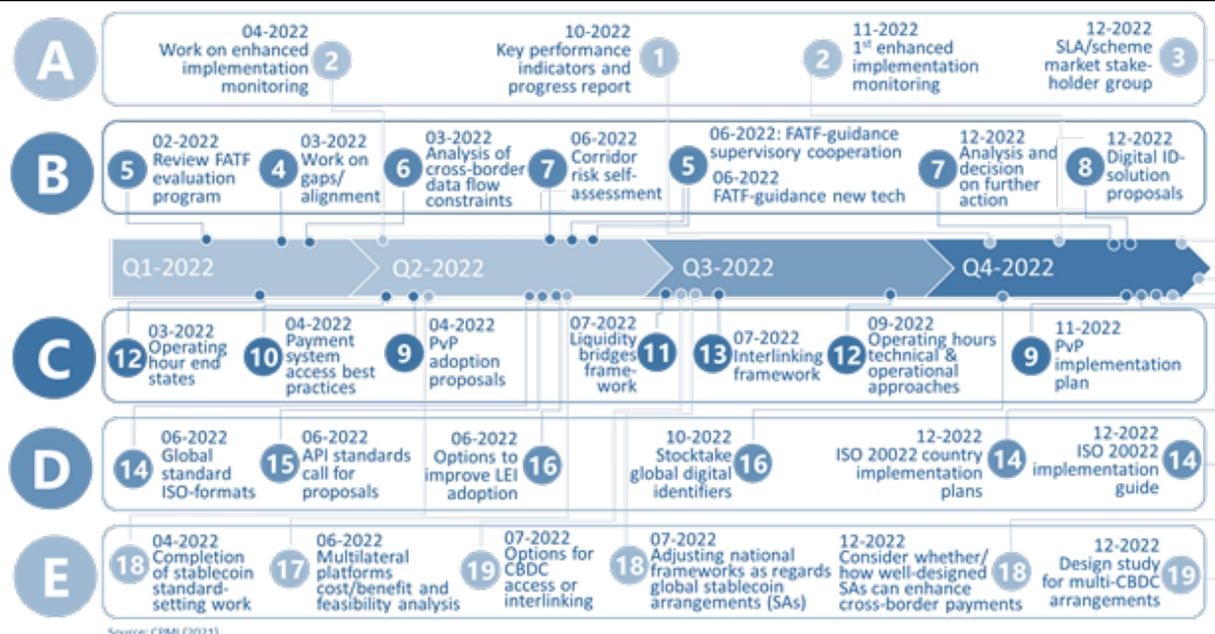
- **For all actions in 2022:** actions and dates (as updated where necessary) are committed dates.
- **For all actions beyond 2022:** actions and timelines (as updated where necessary) are more indicative (in both content and timing). Next steps and timings will continue to be adjusted if needed in response to new information and confirmed for 2023 as part of the second overall roadmap review to be delivered to the 2022 G20 Summit.

The following two charts provide an overview of the actions that have taken place in 2021 and that are planned in 2022.

Taking forward the roadmap – milestones achieved during 2021 Figure 2



Source: CMPI (2021)



Source: CPMI (2021)

Focus area A: Committing to a joint public and private sector vision to enhance cross-border payments

Building block 1 - Developing a common cross-border payments vision and targets

A foundational step in the roadmap in 2021 has been the setting of quantitative targets at the global level for addressing the challenges of cost, speed, transparency and access faced by cross-border payments, thus playing an important role in defining the ambition of the work and creating accountability. The targets provide a common vision for the improvements that are being sought under the Roadmap. Private and public sector involvement and action will be key in achieving these targets. These targets have been set in an inclusive manner, including through a public consultation that was launched in May 2021.²

These ambitious targets set the expectations for the outcomes to be delivered by the overall roadmap. For instance, the targets of lowering the global average cost of cross-border retail payments to 1% or ensuring that recipients receive the funds within one hour by end-2027 will require ongoing public and private sector commitment, as well as substantial upgrades of the underlying payments infrastructure. At the same time, development of new payment systems and arrangements may contribute to improvements required.

The targets were developed based on the following principles: the targets should be directly related to the challenges, provide a clear indication of the extent of progress, be appropriately

² FSB, *Targets for Addressing the Four Challenges of Cross-Border Payments: Consultation Report*, May 2021.

ambitious, be able to be readily communicated, and be meaningful to the wide range of stakeholders. Targets would be set at a global level.

Following the review of the consultation responses, the FSB agreed final targets for submission to the G20 Leaders for endorsement at the October 2021 Summit. Table 1 summarises the targets. The full report explaining the targets and outlining the proposed approach for how progress against them will be monitored over time is being published alongside this report.³

Measuring progress toward these targets will not be straightforward, as there are few existing data sources that measure the current state of play. This requires extending the timeline for the development of the implementation approach for progress monitoring through a group of data experts. **As a next step**, in October 2022, the FSB will provide a report to the G20 and the public with further details of the implementation approach for progress monitoring, and with Key Performance Indicators providing estimates of current performance of cross-border payments to provide a baseline against which future progress toward the targets can be monitored. This report will be developed with input from external stakeholders. The FSB will publish an interim report in June 2022 on progress in developing the implementation approach.

³ FSB (2021), *Targets for addressing the four challenges of cross-border payments: Final report*, October.

Table 1: Targets for the Cross-Border Payments Roadmap

	Challenge	Payment Sector	
	Wholesale	Retail (e.g. B2B, P2B/ B2P, other P2P)	Remittances
Cost	No target set	Global average cost of payment to be no more than 1%, with no corridors with costs higher than 3% by end-2027	Reaffirm UN SDG: Global average cost of sending \$200 remittance to be no more than 3% by 2030, with no corridors with costs higher than 5%
Speed	75% of cross-border wholesale payments to be credited within one hour of payment initiation or within one hour of the pre-agreed settlement date and time for forward-dated transactions and for the remainder of the market to be within one business day of payment initiation, by end-2027. Payments to be reconciled by end of the day on which they are credited, by end-2027.	75% of cross-border retail payments to provide availability of funds for the recipient within one hour from the time the payment is initiated and for the remainder of the market to be within one business day of payment initiation, by end-2027	75% of cross-border remittance payments in every corridor to provide availability of funds for the recipient within one hour of payment initiation and for the remainder of the market to be within one business day, by end-2027
Access	All financial institutions (including financial sector remittance service providers) operating in all payment corridors to have at least one option and, where appropriate, multiple options (i.e. multiple infrastructures or providers available) for sending and receiving cross-border wholesale payments by end-2027	All end-users (individuals, businesses (including MSMEs) or banks) to have at least one option (i.e. at least one infrastructure or provider available) for sending or receiving cross-border electronic payments by end-2027	More than 90% of individuals (including those without bank accounts) who wish to send or receive a remittance payment to have access to a means of cross-border electronic remittance payment by end-2027
Transparency	All payment service providers to provide at a minimum the following list of information concerning cross-border payments to payers and payees by end-2027: total transaction cost (showing all relevant charges, including sending and receiving fees including those of any intermediaries, FX rate and currency conversion charges); the expected time to deliver funds; tracking of payment status; and terms of service.)		

Table 2: Change to building block 1 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed changes
3	<p>Old action: The FSB CPC to report to the G20 and the public progress against key performance indicators (KPIs) that will have been developed for the agreed targets.</p> <p>Old timeline: October 2021 – June 2022 and yearly</p>	<p>New action: The FSB CPC to report to the G20 and the public with key performance indicators (KPIs) providing estimates of current performance of cross-border payments to provide a baseline against which future progress towards the targets can be monitored.</p> <p>New timeline: October 2021 – October 2022 and yearly</p>

Building block 2 - Implementing international guidance and principles, and Building block 4 - Aligning regulatory, supervisory and oversight frameworks for cross-border payments

Another foundational step taken in 2021 was a stocktake of existing international standards, principles and guidance relevant to the safe and efficient performance of cross-border payments (as a joint exercise across BB2 and BB4), in order to identify potential areas (if any) for alignment of standards for BB4 and enhancement of implementation monitoring for BB2. The stocktake is based on information collected through a questionnaire circulated to issuers of such standards and guidance (both in the public and private sector) and from public and private sector users of standards, bilateral conversations and a virtual outreach event organised in July 2021.

The stocktake, to be published later in October, has identified three policy areas that will be further explored: (i) supervision of banks versus non-banks, (ii) transparency of information provided to end-users about payment transactions, and (ii) cyber/technology risk regulation.

The stocktake identified the importance of a level playing field between banks and non-banks to ensure entities involved in the same business activities and offering the same payment services are subject to the same or similar rules and supervision (“same activities, same risk, same rules”). At the same time, the application of regulation and supervision to non-banks should be proportionate to the risk they pose. If standards are not aligned proportionately to risks, or implication is inconsistent, this may lead to the concern that non-bank entities engaging in cross-border payment services may be less likely (or at least may be perceived to be less likely) to have appropriate controls in place (for instance for AML/CFT), leading to blind spots about potential risks or risk management gaps within the financial system. Concerns about consistent supervision of non-bank remittance service providers is a case in point. **As a next step**, a focused workstream will be launched to work with other SSBs to consider, by March 2022, how to address gaps or areas of further alignment (if any) in this area.

The issue of transparency of information provided to end-users about payment transactions arises from the parallel work taking place under BB1 to develop quantitative targets for the Roadmap. One target is to improve transparency to end-users by providing them with a minimum set of information about their payment transactions. **As a next step**, the FSB will explore the

scope for international standards to play a role in meeting that target by achieving greater international consistency in that information that is provided.

Risks in relation to cyber security and technology particularly arise in the case of fast or instant payments, and can become greater as cross-border volumes for fast or instant payments grow. Consistency of implementation of international standards at national level is an important consideration as interlinking between such systems is explored for the purpose of making cross-border payments faster. **As a next step**, the FSB will explore with BCBS, CPMI and IOSCO how international standards, principles, and guidance relevant to cross-border payments, including those relating to cyber risk, affect the timely prevention and management of fraud in payments and whether there is a need to evolve standards or their implementation in this area in light of the transition to real-time cross-border payments.

These next stages of work will, for the time being, continue to be taken forward jointly for BB2 and BB4.

Building block 3 - Defining common features of cross-border payment levels

Agreed service levels establish consistency and certainty for all cross-border payment stakeholders based on a common binding framework. They have the potential to alleviate cross-border payment frictions and advance the targets set under BB1.

The CPMI conducted an analysis of existing multilateral service level agreements (SLAs) and payment schemes. 14 domestic, regional and global SLAs and scheme owners responded to a survey on the various features of relevance to cross-border payments. Based on the analysis several significant elements for SLAs for cross-border payments were identified. These are sound legal basis, governance structure, access and membership criteria, use of (international) technical standards, processing rules, clearing and settlement, and security and risk management.

While characteristics of these elements can vary, certain commonalities were identified in existing multilateral SLAs and schemes. Designing these common elements in a way that addresses the frictions inherent in current cross-border payments and/or by facilitating their convergence across different SLAs and schemes would further enhance cross-border payments.

Action 2 originally set out the publication of a framework to support cross-border payment service level agreements/schemes self-assessments by August 2022. This timeline, however, does not allow sufficient time to appropriately consider the outcomes of these self-assessments for the subsequent action. **As a next step**, the CPMI will rather establish an industry group (as Action 2), which is expected to increase engagement among SLA and scheme owners, provide timely input for the development of the template (Action 3) as well as help ensure industry focus in meeting the cross-border payment targets.

Table 2: Change to building block 3 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
2	<p>Action: CPMI (in consultation with public and private sector stakeholders) to develop and publish a self-assessment framework that can help cross-border payment providers to identify and analyse common elements in cross border payment service level agreements/schemes they have in place and/or plan to establish.</p> <p>Old timeline: September 2021 – August 2022</p>	<p>New action: CPMI to convene market stakeholders to analyse how service level agreements/schemes and their common elements can contribute to achieve the cross-border payment targets across the different payment market segments.</p> <p>New timeline: September 2021 – December 2022</p>

Focus area B: Coordinating on regulatory, supervisory and oversight frameworks

Building block 4 – Aligning regulatory, supervisory and oversight frameworks for cross-border payments – next steps

The stocktake of existing international standards, principles and guidance described in Building Block 2 was a joint exercise for BB2 and BB4, and the findings of the stocktake are described there. (Focus Area A) covered the initial work in Building Block 4.

As the follow-up work to the stocktake progresses, by mid-2022 it will be possible to separate the work into identification of potential areas (if any) for enhancement of implementation monitoring (BB2), and identification of gaps or areas for further alignment (if any) across jurisdictions or in policy areas or types of institutions that standards or guidance cover (BB4).

Building block 5: Applying AML/CFT rules consistently and comprehensively

The FATF finalised, in collaboration with the BCBS, a survey report on areas where divergence in implementation of AML/CFT standards cause frictions for cross-border payments.⁴ The report was drafted based on information gathered from the private sector institutions (e.g. banks, remittance and payment service providers, FinTech) thorough an online questionnaire and virtual technical dialogues, with participation of public and private sectors, organised in May 2021.

The survey response and the subsequent discussions in outreach events identified four particular areas of interest for the private sector for further exploration and analysis: (i) identifying and verifying customers and beneficial owners, (ii) sanctions screening, (iii) sharing customer and transaction information and (iv) establishing and maintaining correspondent banking relationships. Issues identified in these areas are not mutually exclusive and there is a significant overlap among them. Further, many of these challenges (e.g. correspondent banking and

⁴ <https://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/Cross-Border-Payments-Survey-Results.pdf>

information sharing) have also been considered by the FATF previously. In addition, some of the issues identified do not relate to cross-border payments only, and might have an impact on adding to cost and reducing the speed, transparency and access in the broader context.

The FATF in collaboration with BCBS is developing options for further work to encourage further harmonisation in AML/CFT requirements in order to help address challenges to cross-border payments. These options include proposals for review of the relevant FATF standards, development of best practices or consolidated Guidance on cross-border payments and consideration of cross-border payments aspects in other workstreams being pursued by the FATF and other relevant bodies.

Another key element of Building Block 5 was for the FATF to conduct a Strategic Review of the FATF Mutual Evaluation programme, which will provide an updated basis for evaluations of national customer due diligence (CDD) measures and supervision. During 2021, the FATF has continued discussions on the Strategic Review, which will shape the next round of mutual evaluations. This will ensure that evaluations will remain comprehensive and be based on a level playing field, but will be more timely, have greater emphasis on effectiveness and will strengthen the risk-based elements of the assessment process, including on national preventive measures on AML/CFT and their supervision. The FATF expects to complete this Strategic Review, including the revisions to the Methodology for assessments and Procedures, in February 2022.

Finally, the FATF published a report on opportunities and challenges of new technology for AML/CFT in July 2021⁵ and a stocktake on data pooling, collaborative analytics and data protection in July 2021.⁶

Table 3: Change to building block 5 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
2	Action 2: FATF to conduct Strategic Review of FATF Mutual Evaluation programme, which will provide an updated basis for evaluations of national CDD measures and supervision.	No change to description of action
	Old timeline: October 2020 – October 2021	New timeline: October 2020 – February 2022

Building block 6: Reviewing the interaction between data frameworks and cross-border payments

Work under this building block is beginning with a stocktake of national and regional data frameworks relevant to cross-border payments. While data privacy/protection frameworks are included in the stocktake, the exercise is not restricted to data privacy concerns only but allows for wider consideration of interactions between data frameworks and cross-border payment

⁵ <https://www.fatf-gafi.org/media/fatf/documents/reports/Opportunities-Challenges-of-New-Technologies-for-AML-CFT.pdf>

⁶ <https://www.fatf-gafi.org/media/fatf/documents/Stocktake-Datapooling-Collaborative-Analytics.pdf>

arrangements. International arrangements or agreements that jurisdictions may implement in their domestic data frameworks or that may affect cross-border data flows are also being considered.

In July 2021, a survey of FSB member jurisdictions was launched in order to gather information on existing national and regional data frameworks. The aim is to capture how those data frameworks affect (either enabling or impeding) cross-border payments, taking into consideration regulatory, supervisory and oversight aspects. The stocktake aims to capture interactions between different jurisdictions' data frameworks that could affect cost, speed, access, or security of cross-border payments, or interoperability of cross-border payment networks. The responses to the survey will provide the basis for a discussion on whether there are issues relating to cross-border use of those data by national authorities and by the private sector. The stocktake will also be complemented by engagement with external stakeholders, including with academics, non-governmental organisations, non-financial government authorities, and the private sector.

Resource constraints have meant that the stocktake is taking longer than expected. **As a next step**, the expected completion date for the stocktake has been extended from December 2021 to March 2022, and subsequent milestones under this Building Block accordingly extended by 3 months also. Following the stocktake, the FSB, in cooperation with the CPMI and other SSBs, domestic data protection and other data governance bodies, will begin the next stage of work to issue by March 2023 recommendations to facilitate cross border payments through improved cross-border data flows and information sharing.

Table 4: Change to building block 6 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
1	<p>Action: FSB (in cooperation with CPMI and other SSBs, domestic data protection bodies and other data governance bodies) to conduct a stocktake of existing national and regional data frameworks relevant to the functioning, regulation and supervision of cross-border payment arrangements, and to identify issues relating to cross-border use of those data by national authorities and by the private sector.</p> <p>Old timeline: October 2020 – December 2021</p>	<p>No change to description of action</p> <p>New timeline: October 2020 – March 2022</p>
2	<p>Subsequent milestones for Action 2 are similarly delayed by 3 months:</p> <p>Action 2, first milestone, old timeline: December 2021 – December 2022</p> <p>Action 2, second milestone, old timeline: December 2022 – December 2023</p>	<p>No change to description of action</p> <p>New timeline: March 2022 – March 2023</p> <p>New timeline: March 2023 – March 2024</p>

Action 2, third milestone, old timeline
December 2023 – December 2024

New timeline:
March 2024 – March 2025

Building block 7: Promoting safe payment corridors

The first action in the roadmap for BB7- developing and publishing a draft methodology for the assessment of the money laundering and terrorist financing risks in remittance corridors – was completed in November 2021.⁷ To inform the development of the methodology, the IMF/WB team consulted with relevant stakeholders, which included review by CPMI and FSB members and a closed-door workshop as part of the IMF/WB Spring Meetings that comprised representatives of national authorities, FATF and financial institutions. This process was also informed by the outcomes of the Australia/South Pacific Islands and New Zealand/South Pacific Islands corridor risk assessments, including with regard to regulatory and policy steps needed to effectively implement safe payment corridors.

The next step in the roadmap is for the volunteer national authorities to conduct the remittance corridor risk assessment. The goal of the assessment is to identify lower risk corridors where simplified AML/CFT measures can be applied to lower the associated costs. The IMF/WB have initiated discussions to identify pilot cases. As the completion of the draft methodology took 3 months longer than originally scheduled, the timeframes for completing future milestones under this building block have been extended by three months.

Table 5: Change to building block 7 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
2	Milestones for Action 2 are delayed by 3 months:	No change to description of action
	Action 2, first milestone, old timeline: August 2021 – March 2022	New timeline: October 2021 – June 2022
	Action 2, second milestone, old timeline: April 2022 – September 2022	New timeline: July 2022 – December 2022
	Action 2, third milestone, old timeline: December 2022	New timeline: March 2023

Building block 8: Fostering KYC and identity sharing

The South Pacific central banks are investigating a possible regional Know-Your-Customer (KYC) facility, targeted at low risk, retail remittances. Governors in the South Pacific region⁸ agreed in November 2020⁹ to continue this work, but no commitment has been made to

⁷ IMF-WB, [A Draft Framework for Money Laundering/Terrorist Financing Risk Assessment of a Remittance Corridor](#), 5 November 2021

⁸ Governors of: the Reserve Bank of Australia, Reserve Bank of Fiji, Reserve Bank of New Zealand, Bank of Papua New Guinea, Central Bank of Samoa, Central Bank of Solomon Islands, Banco Central de Timor-Leste, National Reserve Bank of Tonga, and the Reserve Bank of Vanuatu.

⁹ [South Pacific Central Bank Governors Committed to Cost Effective Remittances](#), 20 November 2020

implement a regional KYC facility as yet. The central banks of Australia, New Zealand, Tonga, Samoa, Solomon Islands, Vanuatu, Papua New Guinea, Timor and Fiji and several multinational agencies are helping to support this work.

During 2021, the project team has been consulting with key banks and money transfer organisations in Australia, New Zealand and the Pacific about the design requirements and general viability of the KYC facility. The project team has also been consulting with government organisations in the Pacific and with the World Bank, the IMF and other international organisations that are doing work on digital ID databases in the region.

The next step under this building block is for South Pacific central banks to decide whether they want to move to the implementation stage of a regional KYC facility, with this decision likely to be made in late 2021. If the South Pacific central banks decide to proceed with their KYC facility, it could act as the pilot that could be explored by volunteering national authorities wishing to establish a shared or interoperable regional CDD infrastructure in other regions.

Focus area C: Improving existing payment infrastructures and arrangements to support the requirements of the cross-border payments market

Building blocks within focus area C centre on technical and operational improvements to existing domestic and international payment infrastructures that cross-border payments depend upon. Based on guidance and recommendations for improving existing payment infrastructures under focus area C, national authorities and operators are expected to start advancing and implementing upgrades (possibly with technical assistance from relevant bodies). Such enhancements would expand coverage of payment infrastructures (operating hours, access of non-banks, interlinking across borders), and reduce risks (such as foreign exchange (FX) settlement risk). It will be important to leverage operators' regular system upgrades and take domestic requirements into consideration. Improvements in these areas will require significant investment from public and private sector bodies. Work comprises not only further analysis but also material improvements of underlying systems and arrangements. To achieve progress in a timely manner in line with the proposed targets, the planning and budgeting of such enhancements will need to begin very soon.

Building block 9 - Facilitating increased adoption of PvP

Cross-border payments typically involve two or more currencies, resulting in foreign exchange (FX) settlement risk. Payment versus payment (PvP) mechanisms can mitigate this risk. However, the proportion of FX trades not settled on a PvP basis has increased in recent years, exposing FX market participants to substantial FX settlement risk. This development has been driven primarily by an increase in the turnover of non-PvP settled trades in emerging market currencies.

To encourage observance of existing international guidance on the use of PvP and on ways to identify, measure, monitor, and control remaining FX settlement risk, the BCBS and CPMI Chairs issued a ¹⁰joint letter encouraging the observance of the expectations agreed to in the 2013

¹⁰ Available here: https://www.bis.org/press/201217_letter.pdf

BCBS Supervisory Guidance on managing FX settlement risk in December 2020. The CPMI and BCBS held a workshop on FX settlement risk on 18 August 2021, updating supervisors on recent developments and focusing on the use of FMIs that provide PvP protection. Additional measures include (1) the launch of an online tutorial for supervisors; (2) engagement with industry through the GFXC, which has resulted in strengthening the settlement risk aspects of the Global FX Code; and (3) agreement to collect further data on FX settlement risk through the next BIS Triennial Central Bank Survey of FX and over-the-counter (OTC) Derivatives Markets in 2022.

Expanding the availability of PvP to a wider range of currencies and actors can mitigate FX settlement risk and, where PvP mechanisms employ multilateral netting, reduce liquidity requirements. This can ultimately lower the costs of cross-border payments. The CPMI took stock of existing and in-development PvP arrangements to explore options that could increase adoption of PvP. Actual and potential PvP operators and FX market participants provided important input to the analysis through a survey and discussions in industry outreach sessions.

FX market participants identified three categories of barriers to the use of existing PvP arrangements: (1) the currency pair is not eligible for PvP settlement; (2) the relevant FX product is not supported; and (3) the arrangement is inaccessible to or does not meet the specific needs and cost requirements of the counterparty. The stocktake showed that there is scope to increase adoption of PvP through enhancements to existing arrangements as well as new solutions, both of which could benefit from public sector support, be it as facilitator, overseer or even operator. **As a next step**, the CPMI will develop proposals for increased adoption of PvP by encouraging (i) enhancements to existing PvP arrangements and/or (ii) the design of new public sector and/or private-sector solutions for PvP arrangement that currently do not exist by April 2022.

Building block 10 - Improving (direct) access to payment systems by banks, non-banks and payment infrastructures

Real-time gross settlement (RTGS) systems are key payment infrastructures for the processing cross-border payments. Improving direct access to these relevant payment systems and central bank settlement accounts, by banks, non-bank payment service providers (NBPSPs) and payment infrastructures is the focus of BB10. To support the assessment of direct access objectives, benefits and barriers, the CPMI conducted a survey covering 82 jurisdictions and held focused discussions with selected NBPSPs. A total of 179 payments systems that require or expect settlement in central bank money were assessed in terms of access.

The survey findings contributed to the understanding of potential benefits of expanding the access criteria to relevant payment systems arrangements for banks, NBPSPs and payment infrastructures, and the challenges and risks associated with doing so. Direct access to payment systems and central banks settlement accounts was found to be generally granted to resident banks, but eligibility is more restricted for other potential providers of cross border payment services. Demand for access seems to be increasing, but in general no substantial changes have taken place recently or are expected in the short run.

The potential benefits of broadening direct access to central bank settlement accounts and payment systems include improved efficiency, competition, and innovation, which are of most relevance for cross-border payments. However, there are also significant challenges which can be legal, regulatory, financial, operational, and technological in nature, especially for non-

resident banks, NBPSPs and (cross-border) payment infrastructures. Expanding access can also entail risks, since widening the types of entities that can join payment systems may raise concerns about changes in the risk profile of participants and risks to the smooth functioning of the payment system. When evaluating whether access should be broadened, authorities and payment system operators will need to holistically assess the benefits relative to the risks and challenges, and consider indirect participation could also be an option for broadening access, which might be adapted to the needs of certain cross-border payment service providers.

The CPMI is currently developing best practices on (direct) access to payment systems for authorities and operators. **As a next step**, the CPMI will finalise the report by April 2022 (compared to the originally planned date of December 2021). The timelines of subsequent Actions 3 and 4 will be extended accordingly.

Table 5: Change to building block 10 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
2	<p>Action: CPMI, based on the examples of broadened access policies and the assessment in Action 1, to develop and publish best practices for authorities and payment system operators of jurisdictions considering options to expand direct access across all relevant types of payment systems and payment providers.</p> <p>Old timeline: April 2021 - December 2021</p>	<p>No change to description of action</p> <p>New timeline: April 2021 – April 2022</p>
3 and 4	<p>Subsequent milestones for Action 3 and 4 are similarly delayed by 4 months:</p> <p>Action 3, old timeline: January 2022 - December 2022</p> <p>Action 4, old timeline From January 2022 onwards</p>	<p>No change to description of actions</p> <p>New timeline: May 2022 - April 2023</p> <p>New timeline: From May 2022 onwards</p>

Building block 11 - Exploring reciprocal liquidity arrangements across central banks (liquidity bridges)

Central banks can have reciprocal arrangements with each other whereby direct participants in wholesale payment systems in different jurisdictions can post cash or securities in one payment system and use it as collateral to generate central bank money liquidity (typically intraday) in a payment system in another jurisdiction (and typically in reciprocal fashion). These arrangements are sometimes referred to as “liquidity bridges”. BB11 aims to explore the potential risks and benefits of these arrangements, such as reducing banks’ liquidity costs by minimising the need to have multiple cash and collateral buffers across currencies/jurisdictions. In the absence of liquidity bridges, banks need to maintain segregated pools of liquidity in every jurisdiction where they wish to be active in cross-border payments.

As part of an exploratory phase to be completed this year, the CPMI has prepared a conceptual analysis of liquidity bridges and of their benefits and risks, and has conducted a stock-take of central bank liquidity bridges. The CPMI has also consulted central banks that have established reciprocal liquidity arrangements as well as their actual and potential users in the form of an industry workshop. The findings show that the number of concrete implementations of liquidity bridges, as defined in the report, is limited to specific instances. In conducting its analysis, the CPMI considered the challenges and risks associated with establishing and operating a liquidity bridge, including the legal considerations, costs, credit risk, and time zone differences. These considerations may be useful to central banks as they evaluate whether to implement liquidity bridges in the future.

Existing examples of liquidity bridges may provide some direction for future initiatives. The CPMI is in the process of integrating the experience of these liquidity bridges into a framework which is expected to cover aspects such as reciprocal account opening and operational procedures.

As a next step, the CPMI will publish the framework in July 2022. The forthcoming framework is expected to form the basis for relevant bodies to provide technical assistance to central banks considering establishing liquidity bridges. The existing lack of publicly available information on liquidity bridges and limited number of live examples make it difficult for central banks to consider the establishment. It also makes it difficult for international organisations to provide associated technical assistance. Therefore, Action 3 can only meaningfully start in August 2022, i.e. after the framework on how to establish liquidity bridges (Action 2) has been finalised in July 2022. The timeline of Action 3 has been adapted accordingly.

Table 6: Change to building block 11 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
3	<p>Action: Relevant bodies to provide technical assistance to central banks considering establishing liquidity bridges.</p> <p>Old timeline: From August 2021 onwards</p>	<p>No change to description of action</p> <p>New timeline: From August 2022 onwards</p>

Building block 12 - Extending and aligning operating hours of key payment systems to allow overlapping

Payment systems play a key role in the processing of cross border payments, especially RTGS systems, that facilitate settlement in central bank money and, as a result, provide the foundation on which other payment systems and arrangements involved in cross-border payments rely. If key payment systems are closed and payments are not processed, it obviously affects the speed of cross border payments. An extension of RTGS operating hours across jurisdictions can therefore help address such points of friction and contribute to increased speed of cross-border payments, as well as reduced liquidity costs and settlement risk.

For the identification of payment systems relevant for cross-border payments and the stocktake of their operating hours, the CPMI included a special focus on operating hours into the survey

which was conducted in the first quarter of 2021 and covered 82 jurisdictions, including all 27 CPMI jurisdictions and 55 non-CPMI jurisdictions.

The analysis showed that the operating hours vary significantly across the 62 RTGS systems in focus. Gaps in the operating hours of RTGS systems could at least partially explain the delays in the processing of cross-border payments which could also result in increased liquidity costs and settlement risk. Gaps in operating hours exist across all jurisdictions, affecting both CPMI and non-CPMI jurisdictions. Jurisdiction pairs can have relatively large daily gaps in operating hours, often exceeding half of the day. These gaps in operating hours are even greater when considering weekly availability, as only a limited number of RTGS systems are available on weekends.

As part of Action 2, the CPMI developed three potential end states for central banks to consider as they assess their current operating hours and plan for the future. Depending on each jurisdiction’s current operating hours, needs and challenges, each end state will likely require differing levels of effort and paths to implement and have different impact on various stakeholders. Individual jurisdictions have discretion over which precise operating hours they choose to extend, the overall extent of changes and the pace of changes, while being mindful of the impact of their actions. **As a next step**, the CPMI will publish a consultative report on operating hour end states developed in Action 2 to obtain stakeholder feedback and increase stakeholder buy-in. The CPMI will finalise the work on end-states in March 2022 (compared to the originally planned date of September 2021). The timelines of subsequent Action 3 will be extended accordingly.

Table 7: Change to building block 12 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
2	<p>Action: CPMI to set out potential future “end-states” of key payments systems operating hours and how these could enhance cross-border payments and to identify any risks including: operational, cyber and fraud, credit, and liquidity; and monetary policy considerations, financial structure and financial stability considerations, resolution policy considerations for each “end state”. To identify potential solutions to mitigate or address these key risks or policy considerations via a publication.</p> <p>Old timeline: February 2021 – September 2021</p>	<p>No change to description of action</p> <p>New timeline: February 2021 – March 2022</p>
3	<p>Milestones for Action 3 are also delayed:</p> <p>Action 3, first milestone, old timeline: October 2021 – March 2022</p>	<p>No change to description of actions</p> <p>New timeline: April 2022 - September 2022</p>

**Action 3, second milestone, old
timeline:**

April 2022 – March 2023

New timeline:

June 2022 – May 2023

Building block 13 - Pursuing interlinking of payment systems for cross-border payments

Payment systems interlinking directly addresses the friction of long transaction chains and supports a variety of other building blocks. To complete the first action, the CPMI leveraged the survey among central banks mentioned under BB10 and BB12 previously to conduct a stocktake and analysis of existing and potential interlinking models. This study provides a stylised classification / taxonomy of existing and potential models and conducts an evaluation of the risks and benefits of each model of them. Interlinking offers a variety of benefits, but has challenges too, which can vary depending on the specific interlinking model.

Despite their potential benefits, interlinking arrangements are currently relatively rare. Less than 10% of the payment systems reported enabling participants to send or receive payments to or from participants in other payment systems. This can partly be explained by the fact that cross-border payments traditionally have relied on correspondent banking arrangements, which do not require payment system operators to interoperate with each other.

However, in recent years, an increasing number of payment system operators have shown interest in establishing international links, enabling their participants to send or receive payments to or from participants in other payment systems located abroad. Almost 10% of the surveyed payment systems indicated that it is possible that they will establish (additional) links with other payment systems in other jurisdictions in the next five years. This can reduce the number of intermediaries and can increase the speed of the payments, reduce the costs and enhance transparency.

As a next step, the CPMI will develop and publish a framework for interlinking arrangements for central banks and payment system operators considering links to payment systems abroad. The objective of the interlinking framework will be to help those payment system operators already considering the establishment of interlinking to put their plans into practice and support further payment system operators when considering the establishment of new links.

Progress in other building blocks, including those in focus area D on data and market practices would foster technical interoperability between systems. In particular, BB14 can increase the efficiency of interlinking arrangements by making straight through processing possible via common message formats and/or standard rules for conversion between different formats.

Focus area D: Increasing data quality and straight-through processing by enhancing data and market practices

Building block 14 - Adopting a Harmonized ISO 20022 version for message formats (including rules for conversion/mapping)

Building block 15 - Harmonising API protocols for data exchange

BB14 and BB15 are two separate building blocks with individual actions and milestones for implementation. As the first action was a joint exercise of both building blocks, progress is reported jointly for action 1. Going forward, it will be possible to separate the work into adopting a harmonized ISO 20022 version for message formats (including rules for conversion/mapping) (BB14) and harmonising API protocols for data exchange (BB15).

Promoting the adoption of common message formats, such as a harmonised version of ISO 20022 and application programming interface (API) protocols, can play an important role in payment system interlinking and, more generally, in addressing data standards and quality and quantity restrictions in cross-border payments. Common standardised message formats can lead to additional efficiency gains by avoiding workarounds and translation from one implementation to another during integration of systems, thus facilitating interoperability and reducing the implementation costs for new providers and enhancing the ability to achieve fully automated straight through processing functionalities.

ISO 20022 is a common messaging standard for the financial industry, allowing payment systems to share data, particularly across borders, without loss or corruption of payment information. APIs allow participants in the payments processing chain to plug into different services to manage the various steps of a cross-border payment, such as account validation, payment routing, money laundering checks and sanctions screening. Together, ISO 20022 and APIs offer significant benefits for payment service providers, banks, FinTechs, technology providers and corporates.

In a joint effort of BB14 and BB15, the BIS Innovation Hub in cooperation with relevant stakeholders hosted a hackathon¹¹, which was open to all developers and engineers working in financial sector to find ways to leverage ISO 20022 and APIs to enhance cross-border payments (including compatibility with formats other than ISO 20022). 260 participants across 60 teams spent seven days developing solutions based on ISO 20022 and APIs to improve cross-border payments. The three winners were chosen by an international panel of payment experts from the private and the public sector. Further discussions were held with the three winners and teams that had submitted several other promising proposals.

Currently, international work on the development of standard global ISO 20022 formats for cross-border payments is ongoing and BB14 is liaising with relevant stakeholders in this regard, since it is critical to leverage existing global industry group harmonisation efforts which, in some cases, have been ongoing for several years. As regards BB15, a survey to examine the use of APIs for external interfacing with other systems was conducted among CPMI-jurisdictions and beyond.

¹¹ See <https://www.bis.org/press/p210325.htm> for results of the hackathon.

The responses are currently being analysed and feed into the stocktake on the use of APIs for data exchange in payment systems.

As a next step for BB14, a stocktake and analysis of existing message standards and protocols for data exchange supporting cross-border payment is being conducted. Action 3 (country-level adoption plans) will be extended by six months (December 2022 rather than June 2022).

As a next step for BB15, a call for proposals for a set of harmonised APIs/API standards using (existing) API protocols for cross-border payments will be launched. Further, agreeing on a specific set of use cases and API protocols acceptable to all jurisdictions may require extensive discussions that would be essential to facilitate a broad acceptance of harmonised standards for implementation across jurisdictions. Progress in BB14 and BB15 will not only benefit focus areas C, but also focus area E and the future evolution of the infrastructures that the two focus areas relate to.

Table 8: Change to building block 14 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
3	<p>Action:</p> <p>CPMI members, and national authorities of other jurisdictions supporting the adoption of a harmonised version of ISO 20022, to set out publicly plans for adoption of a harmonised version of the ISO20022 standard for cross-border payments.</p> <p>Old timeline:</p> <p>June 2021 – June 2022</p>	<p>New action:</p> <p>CPMI members, and national authorities of other jurisdictions supporting the adoption of a harmonised version of ISO 20022, to continue to work on future plans, and set out publicly their commitment for adoption of a harmonised version of the ISO 20022 standard for cross-border payments. CPMI to take stock of ISO 20022 migration plans of individual jurisdictions.</p> <p>New timeline:</p> <p>June 2021 – December 2022</p>

Building block 16: Establishing unique identifiers with proxy registries

Work on this building block is still at an early stage, reflecting resource constraints, and **the completion date for the initial action** – an exploration of the scope for, and obstacles to develop, a global digital Unique Identifier for cross-border payments, and potentially other financial transactions, **has been extended from December 2021 to October 2022.**

The FSB’s Financial Innovation Network has been conducting a wider analysis of developments in the use of Digital IDs in the financial sector. A series of early bilateral outreach calls took stock of the scope and obstacles for a global digital unique identifier, including the LEI for legal entities. This work will inform the detailed analysis to be conducted by the workstream.

The next steps for this work are to complete the exploration of the scope for a Unique Identifier by the new date of October 2022, to provide the basis for the subsequent stage of the building block, whose deadlines are being correspondingly extended.

Table 8: Change to building block 16 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
1	<p>Action: FSB, in consultation with CPMI, IMF, WB, GLEIF, ISO and other stakeholders, to explore the scope for, and obstacles to develop, a global digital Unique Identifier (UI) for cross-border payments, and potentially other financial transactions, that takes into account existing identifiers, including the LEI for legal entities and identifiers for individuals. The review would also:</p> <ul style="list-style-type: none"> • consider mechanisms to match UIs with payment information, such as via a proxy registry, • take into account the work of relevant standard setting bodies, including the FATF, on technical, governance, or policy issues, • and analyse how to map to existing identifiers. <p>Old timeline: October 2020 – December 2021</p>	<p>No change to description of action</p> <p>New timeline: October 2020 – October 2022</p>
2	<p>Action: If there is consensus that a new identifier is necessary, FSB, in consultation with CPMI, IMF, WB, ISO and other stakeholders, to assess existing proxy databases for personal identifiers, propose standard design principles for these databases, and define minimum requirements for personal identifiers.</p> <p>Old timeline: December 2021 – October 2022</p>	<p>No change to description of action</p> <p>New timeline: October 2022 – June 2023</p>
3	<p>Subsequent milestones for Action 3 are delayed by 8 months:</p> <p>Action 3, first milestone, old timeline: October 2022 – October 2023</p> <p>Action 3, second milestone, old timeline October 2023 – October 2024</p> <p>Action 3, third milestone, old timeline December 2021 – October 2022</p>	<p>No change to description of action</p> <p>New timeline: June 2023 – June 2024</p> <p>New timeline: June 2024 – June 2025</p> <p>New timeline: October 2022 – June 2023</p>

Focus area E: Exploring the potential role of new payment infrastructures and arrangements

Building block 17 - Considering the feasibility of new multilateral platforms and arrangements for cross-border payments

The actions supporting BB17 are designed to explore how multilateral platforms could potentially alleviate some of the frictions related to cross-border payments and to consider the feasibility of such platforms. Multilateral platforms can be characterised as payment systems of multi-jurisdictional nature and typically (but not necessarily) involving multiple currencies. The CPMI, the IMF and the World Bank led a stocktake of existing and potential multilateral platforms.

Based on examples of existing and proposed platforms, the stocktake found that multilateral platforms have the potential to mitigate certain cross-border payment frictions, including long transaction chains, legacy technology platforms, fragmented and truncated data formats, and, depending on how they are designed, funding costs. However, multilateral platforms may also exacerbate other frictions or introduce new risks, depending on their design features and operating model, which require further consideration and a careful assessment of the relevant trade-offs. In addition to such trade-offs, multilateral platforms may face inconsistencies between regulatory frameworks across jurisdictions, the alignment of which may require significant time and effort and is often accompanied by a broader regional economic integration agenda.

As a next step, the CPMI, along with BIS, IMF and World Bank, will complete a cost/benefit and feasibility analysis of one or more new multilateral platforms by June 2022.

Building block 18 - Fostering the soundness of global stablecoin arrangements for cross-border payments

With the emergence of stablecoins, the international regulatory community has sought to further understand these new entrants and the potential risks they may pose to the financial system, as well as the potential role of well-designed global stablecoin arrangements (SAs) in improving global cross-border payments, and have called upon the standard-setting bodies as needed, to make any revisions to standards and principles or provide further guidance supplementing existing standards and principles.

Against this background, the CPMI and IOSCO, as joint standard-setting bodies for systemically important payment systems and other FMIs, have over the past 18 months assessed SAs against the Principles for Financial Market Infrastructures (the PFMI) and produced a consultation report. **As a next step**, CPMI and IOSCO have published the report¹² with the aim to finalise the proposed guidance in Q1 2022.

To date, SAs have not been implemented broadly or on a global scale. From a policy perspective, there is value in assessing whether and how the use of well-designed global SAs could enhance cross-border payments. An action to that extent has been added.

¹² CPMI-IOSCO (2021), [Application of the Principles for Financial Market Infrastructures to stablecoin arrangements](#), October.

Other SSBs are also continuing to assess whether and how existing international standards may apply to stablecoin arrangements and, where appropriate, adjust their standards in light of the FSB High-level Recommendations on the regulation, supervision, and oversight of so-called “global stablecoin” arrangements or GSCs issued in October 2020.¹³ In June 2021, the BCBS published a consultative document that sets out its proposed prudential treatment of banks’ exposures to crypto-assets. In July 2021, the FATF released its second 12-month review of its revised Standards on virtual assets and Virtual Asset Service Providers (VASPs). The FATF will also continue to monitor the virtual asset and VASP sector for any material changes or developments that necessitate further revision or clarification of the FATF Standards considering the business and technological environment of virtual assets and so-called stablecoins.

The FSB has undertaken a comprehensive stocktake of recent regulatory developments in FSB member jurisdictions as well as those in FSB Regional Consultative Groups (RCGs) to identify (i) any adjustments that jurisdictions have made or are planning to make to their jurisdictions’ frameworks relevant to the regulation, supervision, and oversight of GSCs; and (ii) any challenges to the implementation of the recommendations and remaining financial stability concerns.¹⁴

The stocktake concluded that while the market capitalisation of existing so-called stablecoins has continued to grow over the course of 2020-21, current generation stablecoins are not yet being used for mainstream payments on a significant scale. It further established that implementation of the recommendations across jurisdictions is still at a very early stage while jurisdictions have taken or are considering different approaches towards their implementation.

As jurisdictions are developing their policy frameworks and translate the recommendations into concrete regulatory policy, authorities identified several issues that warrant further consideration. Amongst the areas for further consideration members identified: arrangements and conditions for cross-sectoral and cross-border cooperation and coordination, the terms and conditions for the exercise of redemption rights, prudential and other requirements for issuers, the management of reserve assets, custodians, and other providers of other GSC functions (e.g. wallet providers).

As a next step, the FSB will review, in consultation with other relevant SSBs and international organisations, the FSB high-level recommendations and how any gaps identified could be addressed by existing frameworks, and update recommendations if needed, by July 2023.

¹³ FSB (2020), *Regulation, supervision and oversight of “global stablecoin” arrangements: Final Report and High-Level Recommendations, October*.

¹⁴ FSB (2021), *Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements: Progress Report, October*.

Table 9: Change to building block 18 from the Stage 3 Roadmap

Action #	Roadmap Action and timeline	Proposed change
1	<p>Action: SSBs (CPMI, FATF, IOSCO, BCBS), as needed, to make any revisions to standards and principles or provide further guidance supplementing existing standards and principles in light of the FSB Report and following their review of their existing frameworks, including on cooperation, coordination and information sharing amongst authorities.</p> <p>Old timeline: October 2020 – December 2021</p>	<p>No change to description of action</p> <p>New timeline: October 2020 – April 2022</p>
4	<p>This is a new proposed Action. There was no equivalent Action in the 2021 Roadmap.</p>	<p>New action: CPMI in cooperation with relevant stakeholders and subject to the work on regulation, supervision and oversight of stablecoin arrangements, to consider whether and how the use of well-designed global stablecoin arrangements could enhance cross-border payments. CPMI in cooperation with relevant stakeholders to continue evaluating the impact on central banks' monetary, financial stability and payment functions.</p> <p>New timeline: October 2021 – December 2022</p>

Building block 19 - Factoring an international dimension into CBDC design

To date, no major jurisdiction has launched a central bank digital currency (CBDC) and many design and policy decisions are still unresolved. Nonetheless, central banks recognize that the implications of CBDCs go well beyond national borders, highlighting the need for multilateral collaboration on macro-financial questions and the importance of interoperability between CBDCs.

As an initial action, the CPMI in collaboration with the BIS Innovation Hub, IMF and World Bank conducted a stock-take of provisional domestic CBDC designs and central bank experimentation to determine to which extent they could be used for cross-border payments. Central banks have started collaborating on several projects and studies to consider internationally coordinated CBDC arrangements to enhance cross-border payments. The report goes beyond a simple stocktake and sets out conceptual models of how CBDC could operate beyond borders. In addition, the IMF in cooperation with other relevant stakeholders, analysed international macro-financial implications of cross-border CBDC use.

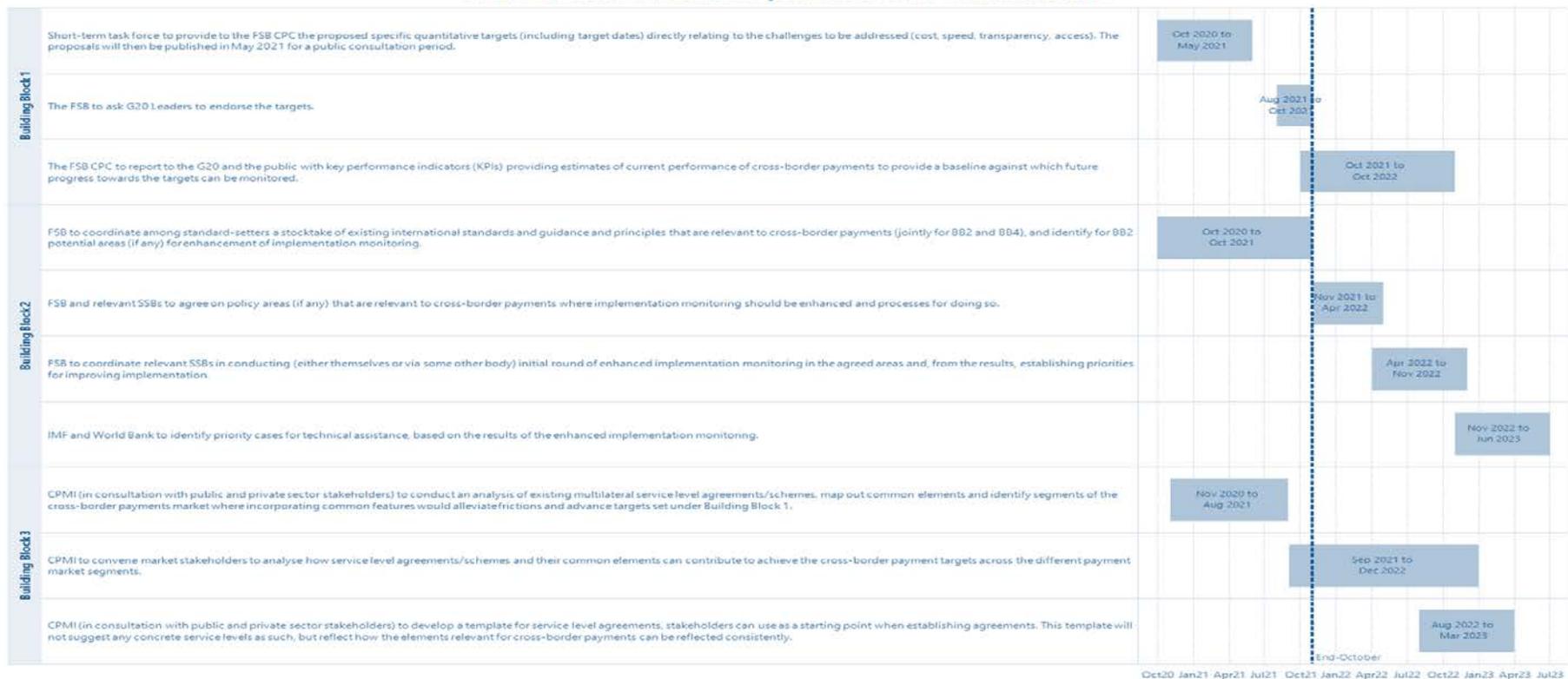
The analysis also concluded that enhancements in, for example, regulatory, supervisory and oversight frameworks for cross-border payments, AMF/CFT consistency, PvP adoption and access to payment systems will be critical for CBDCs to reach their cross-border potential. The resulting report was delivered to the G20 ahead of the Finance Ministers and Central Bank Governors meeting on 10 July 2021.

As a next step, the CPMI in collaboration with BIS Innovation Hub IMF and World Bank will identify and analyse options for access to and interlinking of CBDCs that could improve cross-border payments.

Annex 1: Informal dashboards of roadmap actions and timelines

These five illustrative Gantt charts provide an informal visualisation of the actions and timelines for each of the five Focus Areas, and the bodies that will take the work forward. The detailed descriptions of actions and milestones (as revised) in the individual tables for each building block constitute the roadmap itself]

Focus Area A: Public and private sector commitments



Focus Area B: Coordinate regulatory, supervisory and oversight frameworks

		Oct 2020 to Oct 2021	Oct 2021 to Mar 2022	Mar 2022 to Mar 2023	Mar 2023 to Sep 2023	Oct 2020 to Oct 2021	Oct 2021 to Feb 2022	Oct 2021 to Jan 2022	Oct 2021 to Jun 2022	Oct 2020 to Mar 2022	Mar 2022 to Mar 2023	Mar 2023 to Mar 2024	Mar 2024 to Mar 2025	Jan 2025 to Dec 2025	Oct 2020 to Jul 2021	Oct 2021 to Jan 2022	Jul 2022 to Dec 2022	Mar 2023	Oct 2020 to Jan 2023	Oct 2020 to Dec 2022	Oct 2020 to Dec 2021	Dec 2021 to Jun 2023	Jun 2023 to Sep 2023	End-October	Sep 2023 to Sep 2024		
Building Block 4	FSB to coordinate among standard-setters a stocktake of existing international standards and guidance and principles that are relevant to cross-border payments (jointly for 8B2 and 8B4), and identify for 8B4 gaps or areas for further alignment (if any) across jurisdictions or in policy areas or types of institutions that standards or guidance cover.	■																									
	If gaps or areas for alignment were identified in Action 1, relevant SSB (in cases where this falls within its mandate) or FSB (where gap or area for alignment does not fall within a specific mandate) to launch a workstream to consider how to address the gap or area for alignment.		■																								
	Relevant SSB or FSB to provide report, for public consultation, on how to address gaps or areas for alignment that were identified (outreach activities could be conducted by the SSB or FSB to gather feedback from specific regions).			■																							
	Each relevant national authority to publicly communicate how it plans to addressing gaps or areas for alignment (if any) that were identified.			■																							
Building Block 5	FATF and BCBS to consider where further harmonisation among jurisdictions could remove barriers to cross-border payments, and develop proposals for such further harmonised requirements (without compromising AML/CFT safeguards).	■																									
	FATF to conduct Strategic Review of FATF Mutual Evaluation programme, which will provide an updated basis for evaluations of national CDD measures and supervision.		■																								
	FATF to publish Guidance on international cooperation among AML/CFT supervisors.			■																							
	FATF and other relevant bodies to consider development of Guidance or changes in Standards in order to remove obstacles and promote a more standardised use of new technologies for applying AML/CFT controls.			■																							
Building Block 6	FSB (in cooperation with CPMI and other SSBs, domestic data protection bodies and other data governance bodies) to conduct a stocktake of existing national and regional data frameworks relevant to the functioning, regulation and supervision of cross-border payment arrangements, and to identify issues relating to cross-border use of those data by national authorities and by the private sector.	■																									
	FSB, in cooperation with the CPMI and other SSBs, domestic data protection and other data governance bodies, and after a public consultation has taken place, to issue recommendations to facilitate cross-border payments through improved cross-border data flows and information sharing.			■																							
	SSBs to adapt their regulatory, supervisory and oversight standards or guidance, as needed, in line with the FSB recommendations.				■																						
	National authorities to evaluate what changes to make to their frameworks consistent with the FSB recommendations and international standards and guidance, and report on any such changes.					■																					
	SSBs and national authorities to monitor implementation by the market, including private sector alignment with international and domestic frameworks.													■													
Building Block 7	IMF, WB, FATF and volunteering national authorities to develop and publish a draft framework for conducting corridor risk assessment and identification of potential "low-risk" corridors, in consultation with relevant stakeholders. This would include a methodology, data sources, information sharing infrastructure and MoU elements and follow-up on the Australia/South Pacific Islands corridor risk assessment.	■																									
	Volunteer national authorities to conduct pilot corridor risk assessments and decide whether to publish their results and the corresponding guidance for the respective financial institutions and authorities.			■																							
	National authorities to assess the safe corridor project's impact in the pilot cases and determine whether further action is appropriate.				■																						
	If agreed, IMF/WB/FATF to publish a finalised framework to support ongoing corridor risk assessments, including possible FATF endorsement or clarification of the FATF Standards.					■																					
Building Block 8	SSBs to issue standards, guidance or otherwise take action to foster greater alignment (technical, data governance and policy) for authorities to mutually recognize, for KYC purposes, IDs issued by the beneficiary's country and the issuing bank's country.									■																	
	World Bank to conduct gap analysis and elaborate potential solutions to address the gaps identified (e.g. enrolment, interoperability, regulatory reforms, technology adoption, security and privacy, technical aspects), in coordination with CPMI and based on FATF Digital ID Guidance.							■																			
	Volunteering national authorities develop a shared or interoperable regional CDD framework (e.g. similar to the work underway in the South Pacific), which could be explored for a future pilot project for various regions in the world.							■																			
	Volunteering national authorities establish, where appropriate, a shared or interoperable regional CDD infrastructure.								■																		
	FSB to coordinate the development of a framework for functional, legal and technical requirements that shared or interoperable CDD infrastructure should meet, considering cost efficiency aspects including both individual and legal entities.																										
	BCBS and national supervisors and regulators encourage banks and other financial institutions to use the shared or interoperable CDD infrastructure domestically and on a cross-border basis, where appropriate. The encouragement could be for instance through guidance and updated regulations, or other means.																										

Jan21 Jul21 Jan22 Jul22 Jan23 Jul23 Jan24 Jul24 Jan25 Jul25 Jan26

Focus Area C: Existing payment infrastructures and arrangements

		Oct20	Apr21	Oct21	Apr22	Oct22	Apr23	Oct23
Building Block 9	BCBS and CPMI Chairs to issue joint letter encouraging the observance of the expectations agreed to in the 2013 BCBS Supervisory Guidance on managing FX settlement risk. Relevant authorities to continue guiding supervised entities to observe expectations and to encourage FX committees to support the Global FX Code principles.	Dec 2020						
	CPMI to take stock of existing and in-development PVP arrangements designed to support FX settlement. In addition, drivers for non-PVP settlement should be analysed, leveraging existing analytical work in this field. [The currently paused joint CPMI-BCBS stocktake underway could be taken as starting point.]	Nov 2020 to May 2021						
	CPMI to develop proposals for increased adoption of PVP by encouraging (i) enhancements to existing PVP arrangements and/or (ii) the design of new public sector and/or private-sector solutions for PVP arrangement that currently do not exist.			Jun 2021 to Apr 2022				
	CPMI to conduct public consultation (domestically and/or internationally, as appropriate) on the most feasible option(s) for encouraging greater use of PVP and determine next steps for implementing the BB, based on the results of the consultation.					May 2022 to Nov 2022		
	Relevant bodies to work with CPMI to develop an implementation plan.						Dec 2022 to Dec 2023	
Building Block 10	CPMI, building on existing analysis, to assess objectives, benefits and current barriers to improve direct access to relevant payment systems and central bank money for cross-border payment providers.	Nov 2020 to Apr 2021						
	CPMI, based on the examples of broadened access policies and the assessment in Action 1, to develop and publish best practices for authorities and payment system operators of jurisdictions considering options to expand direct access across all relevant types of payment systems and payment providers.			Apr 2021 to Apr 2022				
	National authorities and payment system operators that are considering expanding access to undertake self-assessments/evaluation of the respective domestic framework against the best practices and identifying any changes required to expand access and development of action plans. Preferably this will not only include G20 countries, but a larger set of jurisdictions.					May 2022 to Apr 2023		
	Relevant bodies to provide technical assistance to authorities and payment system operators of jurisdictions considering expanding access, by supporting the evaluation of the respective domestic framework against the best practice, and the development and implementation of action plans.					May 2022 onwards		
Building Block 11	CPMI to consult central banks that have established, are willing to pilot or are in the process of implementing reciprocal liquidity arrangements on aspects such as (i) reciprocal account opening; (ii) operational procedures to enable robust accounting in real-time for creating (and unwinding) liquidity and accepting (and returning) collateral in foreign currency.	Nov 2020 to Nov 2021						
	CPMI together with relevant authorities, central banks and SSBs to conduct an in-depth analysis of existing/envisaged liquidity bridges and the benefits and risks they can bring to cross-border payments (drawing on examples from Action 1) and publishing a framework and procedures on how a liquidity bridge can be established.			Jul 2021 to Jul 2022				
	Relevant bodies to provide technical assistance to central banks considering establishing liquidity bridges.					Aug 2022 onwards		
Building Block 12	CPMI to consolidate information on current operating hours and planned expansion efforts in order to identify potential remaining gaps in overlap/alignment of operating hours across jurisdictions and collect quantitative data to help identify which payment systems and currency corridors are most relevant.	Nov 2020 to Jan 2021						
	CPMI to set out potential future "end-states" of key payments systems operating hours and how these could enhance cross-border payments and to identify any risks including: operational, cyber and fraud, credit, and liquidity; and monetary policy considerations, financial structure and financial stability considerations, resolution policy considerations for each "end state". To identify potential solutions to mitigate or address these key risks or policy considerations via a publication.		Feb 2021 to Mar 2021					
	CPMI to develop technical and operational approaches on entity-level and/or required industry-wide rule changes to support the respective end states for authorities and operators aiming to extend/align operating hours.					Apr 2022 to Sep 2022		
	Central banks and payment system operators wishing to align/extend operating hours to work with their direct participants and other domestic stakeholders to consider each of the potential end states, along with the associated challenges, risks, and potential solutions that have been identified, with the goal of seeking consensus on if and how best to move forward.					Jun 2022 to May 2023		
Building Block 13	CPMI to conduct an analysis of and survey among selected central banks on existing/envisaged interlinking models, as well as relevant publications on interlinking models, including pros and cons of the various models in relation to the identified frictions.	Nov 2020 to May 2021						
	CPMI to develop and publish a framework for interlinking arrangements (both public owned and private owned) for central banks and payment system operators considering links to payment systems abroad. The framework is likely to include the desirable end state, design, operational, policy and risk considerations.			Jul 2021 to Jul 2022				
	Relevant bodies to provide technical assistance to authorities and payment system operators considering establishing links to other jurisdictions or adapting existing links based on the framework.				End-October		Aug 2022 onwards	

Focus Area D: Data and market practices



Oct20 Apr21 Oct21 Apr22 Oct22 Apr23 Oct23 Apr24 Oct24 Apr25

Focus Area E: New payment infrastructures and arrangements

