



*MIRS:
robust RTGS
back-up solution*

Benefits

- MIRS is a robust RTGS back-up solution run by SWIFT which can be used by MIs in the event of severe operational disruption.
- It serves as an effective, low cost alternative to building a third RTGS platform for resiliency purposes.
- It can be activated in a very short timeframe⁽¹⁾, ensuring operational continuity for the RTGS system.
- It is designed with strong resiliency features, including geographical, technical and staffing diversity.
- It stores data independently and securely, safeguarding against corruption or compromise, while enabling effective retrieval once business operations are resumed.
- It places full operational control in the hands of the RTGS operator.

Market Infrastructure Resiliency Service (MIRS)

Mitigate risk with an effective business continuity solution

Financial market infrastructures operate RTGS systems to ensure effective settlement of transactions. Given the prominent role they play in domestic and global economies, it is vital to safeguard effectively against operational disruption and manage attendant risks.

Operational disruption can stem from a multitude of factors, ranging from natural disasters, staffing shortages, criminal incidents or technology failures. Risk mitigation is high on the agenda of MIs and regulators alike, and effective preparedness is key.

Naturally, RTGS operators have created back-up systems to mitigate the risk of threats. Typically, first line back-up involves a switchover from the primary site to a purpose-built second RTGS system.

Reflecting growing recognition of the importance of resiliency, regulators such as CPSS and IOSCO⁽²⁾ are now recommending that RTGS operators go a step further and ensure they have the capability to restart their service by the end of the day at least in the event of a total loss of operations.

This principle further strengthens 'failure is not an option', equipping MIs to maintain business as usual even in the very unlikely event that their second line of defense also experiences disruption.

Essential requirements of a third RTGS site

An effective third site needs to be capable of taking control of payments quickly in order to avoid any credit risk. In practice this means having the ability to establish accurate account balances at the point of switch over between systems, and ensuring the safe storage of an independent copy of balance and transaction data (as a mandatory feature).

A third site must also have the capacity to service existing transaction volumes, and be able to support transactions for the entire time that the main sites are unavailable. Best practice dictates that the facility must also be geographically distant, technically diverse and operated by a different team to ensure its own resiliency.

Building a bespoke third RTGS system from scratch to serve these purposes can be complex and costly for individual financial market infrastructures.

MIRS – an alternative third site

MIRS is a generic RTGS system developed in-house by SWIFT. It is a shared platform that can be customised to act as an effective recovery site for RTGS operators. It is capable of processing interbank gross payment transactions as well as net transactions generated by ancillary systems. The solution has been tested together with an RTGS operator, and is now in operation.

MIRS provides all the functionality required to achieve the final settlement of payments in real-time, on a transaction by transaction basis. The RTGS operator remains in full control of operations when it is activated, with SWIFT playing a 'behind the scenes' role running the essential infrastructure that keeps payments moving until the original RTGS site is ready to resume business.

MIRS is a generic solution, open to all market infrastructures. You do not have to be an existing SWIFT customer to take advantage of the solution.

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MIRS is a generic RTGS system, developed in-house by SWIFT, which provides effective, cost efficient and fully diversified disaster recovery for RTGS operators.
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Key features

1. MIRS is capable of backing up an RTGS system for an entire crisis period whether that's days, weeks, or months. This relieves time pressure on diagnosing and fixing problems, and getting the primary site back up and running again.
2. It is flexible enough to absorb transaction volumes processed by RTGS systems of any size.
3. It ensures a smooth takeover of transaction processing, minimising delays and the knock-on effect of credit risk.

4. Run by SWIFT, using SWIFT messaging, it can fulfil third-site best practice criteria in terms of geography, technology and staff diversity.
5. It is an offering available to the whole MI community, whether they are existing SWIFT users or not.

How MIRS works

When a financial market infrastructure activates MIRS, the service retrieves relevant transaction messages exchanged by participants and the RTGS, enabling reconstruction of the account balances which existed prior to the operational site becoming unavailable. Once an accurate starting position is established, MIRS provides a status report to the RTGS operator, who then has the option to continue with MIRS or revert back to the primary system if the problems are resolved.

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MIRS leverages the core strengths of SWIFT: secure messaging, safe data storage and the 'failure is not an option' culture.
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When activated, MIRS sends any missing settlement confirmation or notification messages to participants allowing them to reconcile with the latest balances. If FIN Copy is used, unsettled payment requests will be recovered by MIRS thereby avoiding the need for participants to resubmit requests (including Future Value Date Payments). MIRS then processes payment instructions in real-time, transaction by transaction, as normal. Liquidity management functions are also available allowing participants to monitor and control their situation.

MIRS will continue to process payments until the failed RTGS system is restored. At that point, MIRS passes the latest payment balance positions, the archive of settled transactions and the event logs while the service was live, back to the primary RTGS system before reverting to dormant mode.

SWIFT provides the technical infrastructure to run MIRS and guarantees its availability. RTGS operators have full control over their interactions with MIRS via secure web access.

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SWIFT's role is to run the essential infrastructure that keeps payments moving until the primary RTGS site is up and running once again.
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End-to-end project deployment

SWIFT experts from our Consulting Services team provide end-to-end project management throughout the MIRS deployment project. Activities cover all project phases, from analysis and design, implementation and testing right through to the operational phase. This approach ensures that MIRS addresses the right business and operational requirements and delivers our customer's specific needs.

For more information, please contact your SWIFT account manager or visit www.swift.com.

Notes:

- (1) within a maximum of 2.5 hours
- (2) 24 principles published in April 2012 by the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO), urge RTGS system operators to increase their resiliency.