



## SWIFTSolutions for Securities

# CCI over SWIFTNet

## Frequently Asked Questions

This document details responses to "Frequently Asked Questions" or FAQs from customers that want to implement a Single Platform solution where SWIFTNet communicates with Euroclear's Common Communication Interface (CCI). The information covers the products and services on offer, technical issues, security, pricing, registration, and support information. This document is for CCI project managers and technical teams responsible for the preparation and setup of messaging channels for an organisation.

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# 1 Products & Services for CCI

## Q1: What is CCI?

### Overview

The Common Communication Interface (CCI) provides customers with a single means of access to all Euroclear group services. CCI enables customers to send instructions and to use a choice of networks to receive reports in industry-standard formats.

Prior to the Euroclear group's CCI offering, Euroclear provided a similar suite of communications solutions that included file transfers, event-driven messaging, and screen access. However, the provision of CCI aims to overcome the problems associated with the many differences within the following areas:

- technology platforms
- networks and network technologies
- supported data formats
- deployment
- support strategy
- pricing structure

### Scope

Euroclear has developed the CCI for use by all organisations that must communicate with Euroclear. CCI has the following benefits:

CCI provides customers with a single access point to all of Euroclear's business services

CCI facilitates the transmission of instructions and the receipt of reports in industry-standard formats, using a choice of networks

CCI caters for the technical harmonisation of electronic communication between Euroclear and its customers at each of the following levels:

- at the **network layer**
- at the **information delivery layer**
- at the **data formats layer**

### Implementation and migration planning

To reduce the impact of business, format and technical changes, Euroclear will implement the CCI in phases.

The staged implementation of CCI is to ensure that the migration of customers from existing systems to the consolidated system generates as little risk as possible. Euroclear anticipates that the CCI and proprietary systems will co-exist for a period of time.

For additional information, please, refer to [www.euroclear.com](http://www.euroclear.com).

## Q2: Who is eligible to use CCI services?

Euroclear has developed the CCI for use by all organisations that need to communicate with Euroclear. Therefore, both financial and non-financial institutions,

including all intermediaries and issuers, can apply to use CCI services through SWIFT or SWIFTNet.

Initially, however, Euroclear intends CCI for use only by Euroclear customers and issuing agents. In the future, other types of organisations (for example, clearing houses and data vendors) will also be able to migrate communications to Euroclear through the CCI.

**Q3: What does *Single Gateway* mean?**

The *Single Gateway* concept as it relates to the CCI solution enables Euroclear customers that use multiple services to have a single connection point for all the legacy and Single Platform services that customers want to use. The Single Gateway enables greater use of the CCI solution for proprietary traffic.

The concept of SWIFT's Single Window through Alliance Gateway matches Euroclear's Single Gateway concept: the Alliance Gateway is the Single Gateway to both Single Platform business services as well as all existing legacy services.

Euroclear is reviewing the possibility to have Single Gateway available prior to Single Platform Custody launch.

**Q4: Can you describe the new Euroclear business channels?**

The following channel options for access to the Single Platform services are available to CCI customers:

The **ScreenFlow** application: an application developed and provided by Euroclear that provides an interactive user interface based on synchronous request and response interactions. This application also offers a file upload and downloads mechanism.

For configuration purposes this **mandatory channel** offers interactive access to the Euroclear CCI infrastructure, and enables Euroclear customers to manage the relationship with Euroclear (operators' management).

All business functions are accessible through the screen channel. Customers use ScreenFlow for the following purposes:

- to send instructions
- to receive reports
- to perform administrative tasks (for example, user configuration for the straight-through processing message-by-message channel)

Customers implement the ScreenFlow application which Euroclear develops and installs within the client's premises.

**AutoFlow Messaging:** a Straight-Through Processing (STP) message-by-message channel for ISO 15022 (MT) and ISO 20022 (MX) message exchanges.

**AutoFlow File Transfer:** a STP file transfer channel that enables customers to perform the following tasks:

- to batch message files
- to exchange message files

Depending on its Euroclear CCI business activities, each organisation must assess the available channel options for CCI use.

Euroclear mandates the use of ScreenFlow in conjunction with the ScreenFlow application. However, the use of other channels is for the individual organisation to decide according to its needs.

**Q5: What is the impact of CCI on today’s Euroclear business?**

Today, Euroclear provides a suite of communications solutions that includes file transfers, event-driven messaging, and screen access.

In the context of CCI, Euroclear introduces consolidated communication channels (ScreenFlow and AutoFlow) that will gradually replace the existing channels.

Chosen as Euroclear’s network provider, SWIFT supports all new CCI channels using SWIFT’s standard existing SWIFTNet services, which include:

- FileAct Store and Forward for AutoFlow File Transfer
- Manual Query/Response mechanism over SWIFTNet for ScreenFlow
- InterAct Store and Forward (ISO2022) and FIN (ISO15022) for AutoFlow Messaging

To reduce the impact of business, format and technical changes, Euroclear is implementing the CCI in stages which means that customer are using the SWIFT infrastructure for today’s Euroclear’s legacy business and tomorrow’s CCI channels.

For additional information, please, refer to [www.euroclear.com](http://www.euroclear.com).

**Q6: Which SWIFT messaging services operate with CCI?**

The SWIFT Single Window solution involves the deployment of ScreenFlow and adopted AutoFlow services, as shown in the following table.

Message channel	Deployment details
ScreenFlow	The Web Services Host Adapter transparently maps SOAP traffic that the ScreenFlow application generates into SWIFTNet traffic.
AutoFlow Messaging	This channel uses the following SWIFTNet services: <ul style="list-style-type: none"> <li>• FIN for ISO 15022 (MT) messages</li> <li>• InterAct Store-and-Forward for ISO 20022 (MX) messages</li> </ul>
AutoFlow FileTransfer	This channel uses FileAct Store-and-Forward. FileAct supports the exchange of large volumes of batched data.

For more information on the description of the SWIFTNet messaging services, see the *SWIFTNet Service Description* and the *FIN Service Description*.

Each SWIFTNet service has a service profile and a service name, and has an associated closed user group. Examples of CCI SWIFTNet services are shown in the following table.

CCI communication channel	CCI SWIFTNet service (live)	CCI SWIFTNet service (test)
ScreenFlow	euroclear.screenflow	euroclear.screenflow!pu

AutoFlow Messaging	FIN <sup>1</sup> and euroclear.autoflowmsg	FIN and euroclear.autoflowmsg!pu
AutoFlow FileTransfer	euroclear.autoflowfile	euroclear.autoflowfile!pu

**Q7: What are the SWIFT infrastructure requirements for CCI?**

Customers gain from re-using existing and proven components (for example, connections, interfaces, security, back-office applications, and procedures). This facility substantially reduces development and operational costs, risk, and implementation time.

SWIFTNet and the Single Window concept enable customers to re-use the same interface and communication channel that are already in use for other business areas (that is, for SWIFTNet services). The Alliance Gateway is the Single Window to both the Single Platform business services and to existing legacy services.

**The SWIFT Single Window solution**

Figure 1 summarises the SWIFT Single Window solution, which enables existing SWIFT customers to connect to the Single Platform to leverage existing SWIFT infrastructure.

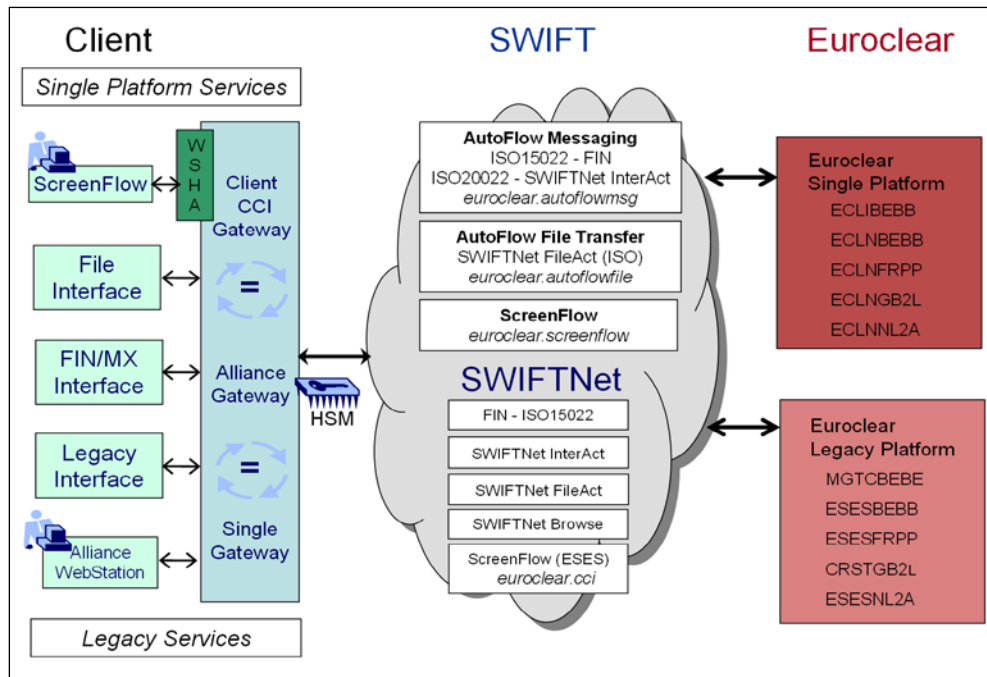


Figure 1: The SWIFT Single Window solution

**SWIFTNet-based services and adapters**

Alliance Gateway uses FIN, FileAct, Browse, and InterAct messaging services to concentrate all business flows towards the new SWIFTNet-based services.

<sup>1</sup> Most existing SWIFT members are entitled to exchange FIN messages, and SWIFT will invite customers that have yet to become SWIFT users to join SWIFT. Any organisation that wants to join SWIFT must first register with SWIFT to become an authorised SWIFT user.

Alliance Gateway offers a set of adapters that enable the exchange of SWIFTNet messages with external applications. The Web Services Host Adapter (WSHA) enables a Web services application to exchange SOAP messages with another application over SWIFTNet (used for ScreenFlow).

For CCI, customers must integrate all messaging applications with Alliance Gateway to enable access to Euroclear services.

The Hardware Security Module (HSM) calculates hardware-based Public Key Infrastructure signatures on all SWIFTNet traffic. The other Euroclear legacy channels remain unchanged.

### **ScreenFlow application**

The ScreenFlow application connects to SWIFTNet by means of the Web Services Host Adapter that is part of the Alliance Gateway application interface. This connection enables the ScreenFlow application to exchange SOAP (HTTPS) messages manually with the Single Platform over a SWIFTNet infrastructure.

Existing SWIFT customers can re-use Alliance Gateway with the new licensed WSHA component<sup>2</sup>. The WSHA is an add-on (that is, it requires a dedicated licence) that is available on all Alliance Gateway and Alliance Starter Set licenses since release 6.0. Customers can order the WSHA as part of the SWIFTNet Service Subscription for CCI. For more information, see Appendix 1: CCI Registration and Ordering in the *CCI over SWIFTNet Implementation Guide*.

To protect the link between the ScreenFlow application and Alliance Gateway, Euroclear mandates that customers implement the Secure Socket Layer (SSL) and Local Authentication (LAU) security options as part of the WSHA configuration.

### **AutoFlow Messaging**

AutoFlow Messaging is based on the FIN (MT) and InterAct (MX) messaging services.

Customers can access AutoFlow Messaging through any of the following interfaces:

Alliance Access

Alliance Entry

Alliance Messenger

any FIN and, or MX interface, that provides access to the following services:

FIN (for ISO 15022 or MT)

InterAct (for ISO 20022 or MX)

### **AutoFlow File Transfer**

#### **File transfers and interface**

AutoFlow File Transfer is based on the FileAct messaging service. AutoFlow File Transfer supports the exchange of large volumes of data.

AutoFlow File Transfer enables customers to transfer files through any of the following interfaces:

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<sup>2</sup> Alliance Gateway **6.1.60** functional update is the recommended version for CCI. See section 2 for further details

Alliance Gateway (for automated transfers) with any of the following additions:

- File Transfer Adapter module
- File Transfer Integrated module
- any (vendor or self-developed) application that supports the FileAct protocol

For more information about file transfer components, see the relevant Alliance Gateway documentation.

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Alliance Gateway acts as a concentrator for SWIFTNet message flows. This interface extends the SWIFTNet connection to multiple applications and multiple SWIFTAlliance interfaces (for example, Alliance WebStation and Alliance Access). Alliance Gateway concentrates the traffic from multiple applications and screen application software onto a single window. Alliance Gateway is available on Windows, AIX, and Solaris platforms.

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### **Security**

The SWIFT Secure IP Network is the underlying technical communication network that provides SWIFTNet connectivity for information exchange, and for the operation of control measures. The SWIFT Secure IP Network uses multiple SWIFT Network Partners to connect users to the SWIFT Secure IP Network backbone access points. SWIFTNet services offer high service availability, with worldwide support services.

### **Standards**

Standards are another essential element of SWIFT's global offering that enable simple, unambiguous communication across national and linguistic barriers. The SWIFT Single Window solution enables re-use of the broad range of ISO-compliant FIN and XML-based standards that facilitate the link between front-office and back-office operations.

### **Configuration of the Euroclear Group entities**

CCI channels are available through SWIFTNet, and use a standard SWIFTNet configuration. This configuration<sup>3</sup> includes SWIFTNet VPN boxes and lines, SWIFTNet Link, and Alliance Gateway. Network security, including the provision of encryption and digital signature facilities (that is Public Key Infrastructure and HSM) is automatically part of the configuration.

To communicate with the Single Platform business services, customers can target the following new BIC and DN destinations that identify Euroclear Group entities for CCI:

- ECLIBEBB for Euroclear Bank
- ECLNBEBB for Euroclear Belgium
- ECLNFRPP for Euroclear France
- ECLNGB2L for UK and Ireland
- ECLNNL2A for Euroclear Nederland

### **SWIFTNet environments and customer testing**

In the context of CCI testing, SWIFT customers will perform testing on the Production environment. Customers will use the pilot (test-and-training) mode on a specific set of

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<sup>3</sup> The Client CCI Gateway concept represented in Figure 1 on Page 11 integrates all components of a SWIFTNet single window configuration.

SWIFTNet services administered by Euroclear. Pilot services on the Production environment provide the same characteristics and level of services and Support than the ones available for live operations.

For more information on the choice of the Requestor DN, Responder DN, Service Name and Request Type, see Appendix 2: SWIFTNet Addressing in the *CCI over SWIFTNet Implementation Guide*.

For more information on the SWIFTNet technical environments, see the *SWIFTNet Service Description* that is available in the SWIFT User Handbook online at [www.swift.com/cci](http://www.swift.com/cci).

## Support

SWIFT provides the same level of Support for customer testing as for live operations. This service, provided in a variety of languages is available 24 hours per day, 7 days a week. It uses the "follow the sun" principle to provide 24\*7 service in normal circumstances. Customers must register individually to use the Support service. Registration is free of charge.

Customers can report questions or problems using the Support online services available on [www.swift.com/support](http://www.swift.com/support) or they can contact SWIFT Customer Support Centre (CSC) by telephone.

Support also gives customers access to a number of self-service channels available on [www.swift.com/support](http://www.swift.com/support). As a practical alternative to obtaining support over the telephone, customers can access these services at their convenience through the Internet or through SWIFTNet.

For more information on Support and its related services, see section 8.1 Support in the *CCI over SWIFTNet Implementation Guide*.

## CCI Migration support

In addition to Support, SWIFT CCI customers are granted dedicated support from a SWIFT migration team to ensure a smooth migration from legacy communication channels with Euroclear to the CCI communication channels in line with the overall Euroclear deployment plan. For more information, see section 2.1 in the *CCI over SWIFTNet Implementation Guide*.

In a nutshell, SWIFT provides:

**Guidance during the project execution**, more specifically for the preparation and testing phases (e.g. Assistance with the ordering process, software installation support, connectivity & ISO test monitoring against certain deadlines);

**Regular project status updates** and tracking of customer's migration status, based on agreed project milestones;

Upon request, **on-site implementation service for ScreenFlow**. Refer to section 7.3 in the *CCI over SWIFTNet Implementation Guide* for more details on this topic.) .

## Q8: What are the SWIFTNet Features for CCI?

For more information about this topic, see section 2.4 SWIFTNet Features in the *CCI over SWIFTNet Implementation Guide*.

**Q9: Does Euroclear mandate FileAct?**

**No.** Each organisation must assess each of the possible messaging channels required for its Euroclear CCI business activities.

However, Euroclear mandates that customers use ScreenFlow with the Euroclear ScreenFlow application. Use of the other channels depends on the business decisions of individual organisations.

**Q10: Does Euroclear use FileAct Store-and-Forward or FileAct Real-Time?**

AutoFlow File Transfer uses FileAct Store-and-Forward.

**Q11: Can AutoFlow File (over FileAct) also deliver instructions?**

**Yes.** The Euroclear OAM application, which is available through the ScreenFlow application, enables users to configure AutoFlow File for instructions and/or reporting. Please contact Euroclear for further details.

**Q12: When Euroclear pushes files to a customer, how does Euroclear see that the customer is online to receive a file through FileAct?**

Euroclear does not check whether a customer is online, because Euroclear automatically delivers the file to SWIFTNet through FileAct Store-and-Forward service. SWIFT stores the file safely and enables the customer to retrieve the file the moment that the customer goes online. AutoFlow File Transfer enables customers to transfer files through any of the following interfaces:

Alliance Gateway (for automated transfers) with any of the following:

- File Transfer Adapter module
- File Transfer Integrated module

any (vendor or self-developed) application that supports the FileAct protocol

For more information about file transfer components, see the relevant Alliance Gateway documentation.

**Q13: How does FileAct handle bulk messaging, and how does this bulk messaging compare with bulked SEPA payments in FileAct?**

Euroclear uses bulk messaging according to the recommendations in the *Giovannini File Transfer* rulebook. Euroclear produced a Data Exchange Manual for Single Platform Custody detailing how messages must be bulked into a File.

Please also refer to Q20 and Q21 for additional details

**Q14: Does Euroclear support FileAct compression for CCI?**

**No.** Euroclear does not support end-to-end compression on AutoFlow File Transfer.

**Q15: What changes can customers expect with regards to MT messages?**

Future changes to the MT message format will fully align the format with SWIFT's yearly Standards release. CCI over SWIFTNet will use MT FIN messages in their current format. The SWIFT FIN message validation ensures release compliance both at test time and in production.

**Q16: Why is the ScreenFlow application mandatory?**

The ScreenFlow application enables Euroclear customers to manage the relationship with Euroclear (operator management), to send instructions and to receive reports. ScreenFlow is mandatory for its administrative functions. For more information, see specific documentation at [www.euroclear.com](http://www.euroclear.com).

**Q17: Is the ScreenFlow application web based?**

**No.** The ScreenFlow application is Java-based, not Web-based. For more information, see the Euroclear document, *CCI Pre-Requisites Application Guide - Screen Interface*.

**Q18: Is Fundsettle in scope for CCI?**

**No.** Fundsettle, Biweb, and Triweb are *not* accessible by means of the CCI Single Gateway. For more information, see the Euroclear document *Project Implementation Kit - 6.0 Single Gateway*.

**Q19: We use Tri-Web tri party services through the Internet and MS Access Database that Euroclear supplies. Is this approach in scope for CCI?**

The Euroclear document *Project Implementation Kit - 6.0 Single Gateway* states that "Fundsettle, Biweb, and Tri-web are *not* accessible through the CCI Single Gateway".

**Q20: What is the Giovannini Protocol?**

*The Giovannini Protocol* defines an agreed set of EU-wide data standards and technology recommendations aimed at creating an environment where all industry participants can interoperate. The protocol hopes to eliminate some of the complexity and cost of cross-border clearing and settlement.

Dr Alberto Giovannini chairs the 72-strong Giovannini Group of financial market participants and experts that advise the European Commission on specific financial market issues. In 2003, the Group identified 15 specific barriers to efficiency in EU securities cross-border clearing and settlement arrangements, and set out a process to overcome them. These barriers have become apparent as 25 separate countries, each with its own domestically focused legal regime, fiscal policy and national infrastructure supporting the local securities market, work towards the creation of a single integrated European capital market.

To complement the Giovannini Protocol Recommendation published in March 2006, SWIFT has been working with senior industry representatives to develop the *File Transfer Rulebook*, which specifies generic rules for file construction and best practices for file transfer operations for any and all file transfers, on any network.

The objective of the *File Transfer Rulebook* is as follows:

to eliminate the requirement for business partners, who need to send file transmissions to each other

to eliminate expensive and time-consuming design processes before setting up business systems.

The *File Transfer Rulebook* does this by specifying header and content structures which can be replicated easily on any technology platform, and which complement *The Giovannini Protocol* by re-using components from the ISO standards domain.

You can find more information about Giovannini at [www.swift.com](http://www.swift.com) ▶ [Home](#) ▶ [Solutions](#) ▶ [Industry initiatives](#) ▶ [Giovannini](#)

**Q21: What is the link between Giovannini and CCI?**

The messages or files have to be formatted according to Euroclear rules.

**For FIN**, customers must send FIN messages in blocks 1 -> 5 as they currently do. Conversion to a Giovannini-compliant format then occurs centrally at SWIFT in the hosted CCI infrastructure.

**For InterAct**, customers must send MX messages as they currently do. Conversion to a Giovannini-compliant format then occurs centrally at SWIFT in the hosted CCI infrastructure.

**For FileAct**, customers must send a File where the Payload is already in a Euroclear Giovannini-compliant format (following Euroclear’s Data Exchange Dictionary, DEX). It is the customer’s responsibility to ensure that files are properly formatted. SWIFT does not interfere in the payload of the files.

**Q22: Does the migration to the Single Platform have any impact on the existing Euroclear services?**

**No.** SWIFT intends to keep existing Euroclear-based services operational as legacy services. For all of these solutions, all current pricing, service management, and procedures remain applicable, and will not change until the migration of each service to the full-fledged CCI service is complete.

**Q23: What is the list of supported messages for Single Platform Custody?**

Referring to Single Platform Custody data exchange manual

Part 1 - ISO 15022 (version 4)

[Last update](#): December 2009

ISO 15022 Message	Link to PDF
Introduction v4	<a href="#">Introduction</a>
Giovannini Envelope	<a href="#">Header Information</a>
MT 564 Corporate Action Notification v4	<a href="#">MT 564</a>
MT 565 Corporate Action Instruction v4	<a href="#">MT 565</a>
MT 566 Corporate Action Confirmation v4	<a href="#">MT 566</a>
MT 567 Corporate Action Status and Advice v4	<a href="#">MT 567</a>
MT 568 Corporate Action Narrative v4	<a href="#">MT 568</a>
MT 508 Intra Position Advice v4	<a href="#">MT 508</a>

MT 595 Feedback Message v4	<a href="#">MT 595</a>
Overall v4	<a href="#">Overall</a>

Single Platform Custody Euroclear Messaging Working Group - [Worked examples](#)  
 Sample ISO-15022 compliant messages (full service)

Part 2 - ISO 20022

[Part 2a - Issuers and issuer agents \(ISO 20022\)](#)

[Part 2b - Message definition guide - Issuers and issuer agents \(ISO 20022\)](#)

**Q24:** Is there any guideline on whether a BIC should use granular RMA or open up for all MTs?

Euroclear does only support RMA at BIC8 level and no further granularity as detailed in the CCI forms for [Single Platform connectivity testing](#)

## 2 Technical Access to CCI

**Q25: For CCI, what is the minimum connectivity pack that SWIFT supports?**

The minimum connectivity pack for CCI is Alliance Connect Bronze. Please also refer to Q45 for additional details.

**Q26: What are the minimum infrastructure requirements for CCI?**

**For ScreenFlow**

The minimum configuration requirements for ScreenFlow are as follows:

Managed Customer-Premises Equipment VPN boxes or Alliance Connect VPN boxes that a Network Partner has connected to the Secure IP Network

Alliance Gateway (Single Window, Automation, Alliance WebStation Concentration, or Starter Set license) 6.0.10 or 6.0.15 or 6.1 or 6.1.15 with Alliance Gateway 6.1.50 or 6.1.51 functional update installed (for Web Services Host Adapter) for the CCI Connectivity testing phase. Alliance Gateway 6.1.60 functional update is the minimum required patch level for the start of the CCI Participant Acceptance Testing phase or utilisation of the Live CCI Services.

The Euroclear ScreenFlow application

**For ScreenFlow and AutoFlow**

The minimum configuration requirements for ScreenFlow and AutoFlow (Messaging or File Transfer, or both) are as follows:

Managed Customer-Premises Equipment VPN boxes or Alliance Connect VPN boxes that a Network Partner connects to the Secure IP Network (Net)

Alliance Gateway (Single Window, Automation, Alliance WebStation Concentration, or Starter Set license) 6.0.10 or 6.0.15 or 6.1 or 6.1.15 with Alliance Gateway 6.1.50 or 6.1.51 functional update installed (for Web Services Host Adapter) for the CCI Connectivity testing phase. Alliance Gateway 6.1.60 functional update is the minimum required patch level for the start of the CCI Participant Acceptance Testing phase or utilisation of the Live CCI Services.

The Euroclear ScreenFlow application

A FIN/MX interface for AutoFlow Messaging

A File Transfer Interface for AutoFlow File Transfer

**Q27: How much CPU and RAM will each ScreenFlow session demand?**

For more information on system requirements, please refer to latest Euroclear documentation, the *Alliance Gateway 6.1.60 Functional Update Release Letter* and the *SWIFTNet Connectivity Packs*.

**Q28: Has SWIFT qualified Alliance Starter Set for CCI?**

Yes, SWIFT has qualified Alliance Starter Set for the usage of CCI. The Web Services Host Adapter is available on Alliance Starter Set licenses as of the Alliance Gateway 6.1.50 Functional Update and allows the usage of ScreenFlow.

**Q29: Can I re-use my SWIFT infrastructure or my Alliance Gateway for EUCLID and CCI traffic during the 2009-2011 CCI migration period?**

**Yes.** Alliance Gateway licences allow this, taking into account that:

**for ScreenFlow** you require the WSHA component (the host adapter available with all Alliance Gateway licences)

**for EUCLID** you require Remote API Host Adapter component and the dedicated Euclid Connector Client application

**Q30: What operating systems does ScreenFlow support?**

For more information, see the latest Euroclear documentation.

The Euroclear ScreenFlow application runs on different language versions of the following operating systems:

**Stand-alone machines**

Euroclear has tested the ScreenFlow application on stand-alone machines that run Windows XP Professional with Service Pack 2. The ScreenFlow application is currently *not* supported on Windows Vista. If the customer installs a different operating system, then this may affect application performance. In such cases, Euroclear can only offer limited support for technical issues.

**Terminal Server**

Euroclear has tested the application on terminal servers that run Windows Server 2003 Service Pack 1. If the customer installs a different operating system, then this may affect application performance. In such cases, Euroclear can only offer limited support for technical issues.

**Q31: How do I configure my SWIFT components to communicate with CCI ScreenFlow?**

For more information, see section 4.3.1 Configuring ScreenFlow in the *CCI over SWIFTNet Implementation Guide* ([www.swift.com/cci](http://www.swift.com/cci)).

**Q32: How do I configure my SWIFT components to communicate with CCI AutoFlow?**

For more information, see sections 4.3.2 Configuring AutoFlow Messaging and 5.3.3 Configuring AutoFlow FileTransfer in the *CCI over SWIFTNet Implementation Guide*.

**Q33: What is SOAP?**

SOAP was originally an acronym for Simple Object Access Protocol. SOAP is a protocol for the exchange of XML based messages over a computer network that normally uses HTTP. SOAP provides a basic messaging framework on which customers can build more abstract layers.

There are several types of messaging patterns in SOAP. The most common pattern is the remote procedure call. This pattern allows one network node (that is, the client) to send a request message to another node (that is, the server). The server immediately sends a response message to the client.

A SOAP message is an XML based protocol that consists of 3 parts:

The **SOAP envelope**

The SOAP envelope defines an overall framework for the information in a

message, who deals with it, and whether the information is optional or mandatory. In the envelope there are two additional sections: the header and the body of the message.

**The SOAP encoding rules**

These rules define a serialisation mechanism that the user can use to exchange instances of application-defined data types.

**The SOAP convention for RPC**

This convention represents remote procedure calls and responses.

Customers can potentially use SOAP in combination with a variety of other protocols. Currently, the Web Services Host Adapter uses SOAP over HTTPS only.

SOAP uses XML to provide a simple and light mechanism for the exchange of structured and typed information between peers in a decentralised and distributed environment. SOAP does not define any application semantics (for example, programming model semantics or implementation-specific semantics). SOAP provides a modular packaging model to define a simple mechanism to express application semantics. SOAP also defines encoding mechanisms that encode data within modules. These mechanisms enable customers to use SOAP in a large variety of systems that range from messaging systems to RPC.

**Q34: What is the Web Services Host Adapter?**

Alliance Gateway 6.0 introduces a new host adapter, called the Web Services Host Adapter. This adapter is part of the application interface for Alliance Gateway. A Web services application that connects to Alliance Gateway through the Web Services Host Adapter can exchange SOAP messages with another application over SWIFTNet.

**Q35: How does a PC with ScreenFlow *know* how to connect to the Web Services Host Adapter?**

A configuration file uploads at the ScreenFlow application startup. For more information, see the Euroclear document, *CCI Pre-Requisites Application Guide - Screen Interface*.

**Q36: With Resilience, can the ScreenFlow application switch from one Alliance Gateway to another? How does that work?**

**Yes.** Customers will be able to create multiple Configuration Profiles, each one identifying an Alliance Gateway and associated with a shortcut. The shortcuts and Configuration Profiles can be shared by multiple users. Within a Configuration Profile they identify the parameters required to communicate through a specific Alliance Gateway. Customers can append their own descriptive text to the name of the Configuration Profile & Shortcut to allow them to distinguish between the different configurations.

**Q37: How is the WSHA maintained? What release cycles does it have?**

As with other Alliance Gateway adapters, Web Services Host Adapter maintenance aligns with Alliance Gateway release management.

**Q38: Can multiple BICs share a SWIFT infrastructure? If not, how does the WSHA support multiple BICs?**

Alliance Gateway and the Web Services Host Adapter support multiple Bank Identifier Codes (BICs) through the use of multiple Alliance Gateway Message Partners, endpoints and multiple SWIFTNet PKI certificates.

**Q39: How do old and new infrastructures run in parallel, and for how long can these infrastructures run?**

The way in which an organisation structures its processes to handle custody and settlement matters dictates how the organisation must structure a whole CCI-Single Platform migration process. For more information, see Euroclear's detailed timeline planning.

**Q40: Must I log in to my Logical Terminal to perform ScreenFlow traffic?**

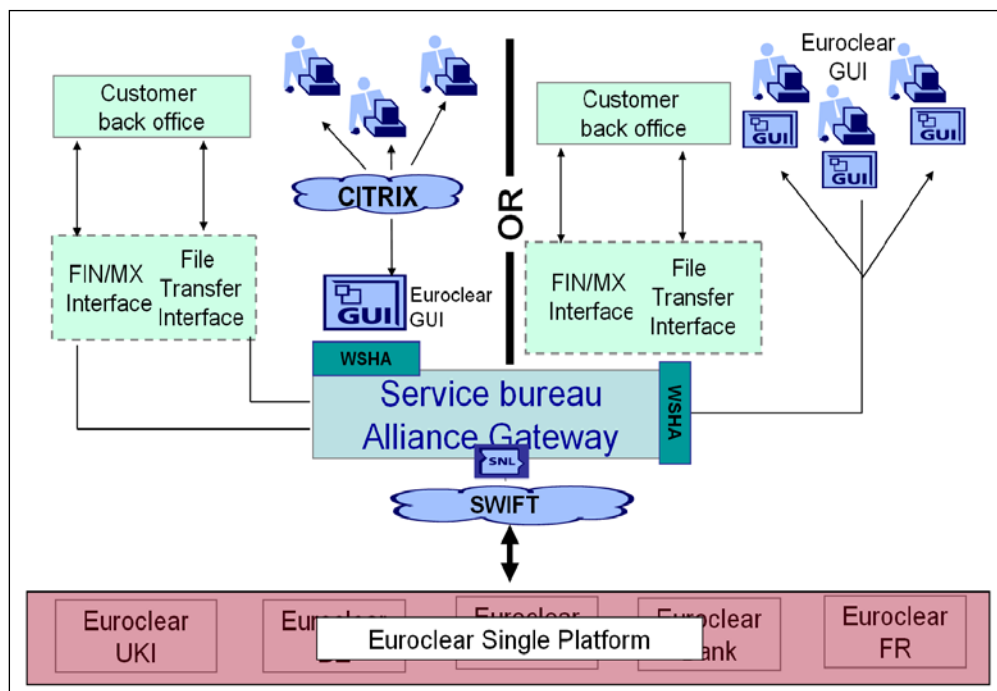
**No.** There is no dependency between your FIN traffic and related logical terminals on your Alliance Access (or Alliance Entry) interface and ScreenFlow messages. The traffic goes from the ScreenFlow GUI through the WSHA and Alliance Gateway, to the SWIFT network through the VPN boxes and related connectivity. ScreenFlow can be used independently from the other CCI services.

**Q41: To access CCI, must a user log on once for Alliance Gateway and WSHA, and then separately log on for Euroclear?**

**No.** A customer must only log on once to the ScreenFlow GUI to access Euroclear. Access to SWIFTNet is transparently taken care of by the SWIFT infrastructure (that is, Alliance Gateway).

**Q42: Is any third-party Gateway compatible with CCI?**

**No.** Only Alliance Gateway offered by SWIFT is compatible with WSHA that provides CCI ScreenFlow connectivity.

**Q43: Can I access the CCI service using shared infrastructure?**


**Yes.** You can access CCI through either of the following services:

**A Service Bureau:** a third-party organisation which hosts the technical connectivity to SWIFTNet and manages daily operations such as logons, managing sessions and security. A Service Bureau can also provide additional value-added services to customers, including support.

**A Member/Concentrator:** who provides, in addition to the technical connectivity, business services such as SWIFT administration and invoicing on a customer's behalf. The Member/Concentrator programme is reserved for SWIFT Member institutions.

In addition, many SWIFT Regional Partners operate as Service Bureaux. Regional Partners resell SWIFT products, services and solutions and, therefore, provide a convenient one-stop-shop for many SWIFT Solutions, including the CCI over SWIFTNet solution.

SWIFT maintains a list of indirect connectivity providers that can provide access to CCI over SWIFTNet. Currently, there are over 130 Service Bureaux and 28 Member/Concentrators in operation. You can find more information on the list and details of indirect connectivity providers by country, at [www.swift.com](http://www.swift.com) >

**Solutions>Connectivity.**

To provide access to CCI over SWIFTNet, indirect connectivity providers must follow the same procedure as other SWIFT customers intending to connect to CCI. Consequently, there is no difference in the configuration requirements for indirect connectivity providers or for a directly-connected SWIFT customer.

**Q44: Business case: What is the typical configuration in case of a Service Bureau?**

The Euroclear ScreenFlow application can be installed either:

at the Service Bureau infrastructure in a multi-user environment like Windows Terminal Service or Citrix. The customer can access the ScreenFlow application remotely through a Windows Terminal Service or via a Citrix session.

at the customer infrastructure. The Screenflow application installed locally at customer premises communicates with the Web Services Host Adapter of the Alliance Gateway located in the Service Bureau infrastructure.

Message confidentiality and integrity is ensured between the ScreenFlow application and Euroclear thanks to SSL encryption and message authentication using LAU. On top of the end-to-end security mechanism, standard SWIFTNet security applies including the usage of PKI. Existing PKI certificates can be re-used in the context of CCI.

Multiple customers can connect using a unique Web Service Host Adapter on the Alliance Gateway. Customer connections are differentiated through the usage of distinct message partners. There is no limitation in the number of message partners using the Web Service Host Adapter.

**Q45: Does SWIFT offer an economical way to access CCI?**

**Yes.** You have two options as follows:

**Shared Infrastructure:**

For more information, see Q44: Can I access CCI service, using Shared Infrastructure?

**Private Infrastructure:**

Alliance Connect Bronze is designed for low volume customers and looking for a low cost yet fully secure network connectivity to SWIFTNet. Alliance Connect Bronze uses the internet to access SWIFTNet. Alliance Connect Bronze is also available as a network connectivity option within the Alliance Kits.

**Q46: What port number is used for WSHA? Can this port be configured?**

If a customer places a concentrator firewall between the applications and Alliance Gateway, then the customer must configure the firewall settings. This enables traffic between the ScreenFlow application and the machine that runs Alliance Gateway. During the installation of the Alliance Gateway 6.1.50 functional update, a prompt asks you to specify a single port number that allows Web services applications to connect to WSHA. By default, this TCP port number is **48005**, and it must be left open on your firewall. (The customer can adapt the port number if necessary, however, the port number must always be higher than 1024.)

The following IP's have been provisioned for the Browse part of the Pilot ScreenFlow service (euroclear.screenflow!pu): 149.134.0.70 and 149.134.0.80. The Port used to contact those IP's like for all Browse services is 443.

The following IP's have been provisioned for the Live ScreenFlow service (euroclear.screenflow):

149.134.0.12 (TCP on port 443)  
149.134.0.13 (TCP on port 443)  
149.134.0.18 (TCP on port 443)  
149.134.0.20 (TCP on port 443)  
149.134.0.99 (TCP on port 443)  
149.134.0.195 (TCP on port 443)  
149.134.0.211 (TCP on port 443)  
149.134.0.212 (TCP on port 443)

For more information on SWIFTNet access, see the SWIFT Network Access Control Guidelines and the SWIFT Network Configuration Tables Guide, at [www.swift.com/cci](http://www.swift.com/cci).

**Q47: Does AutoFlow support Connect Direct or any other FileAct solution?**

**Yes.** Any third-party FileAct Store-and-Forward-compliant solution can do the job for the AutoFlow service with regard to CCI. This means that a customer that uses Connect Direct currently for FileAct flow can re-use Connect Direct for the AutoFlow file service.

**Q48: When migrating from ESES to Single Platform (SP) Custody, what is the impact on my Alliance Gateway? What about the WSHA version?**

On your Alliance Gateway, you must define two Message Partners as follows:

1. **One for ESES** where you must define the WSHA message partner that uses the End-to-End SOAP configuration over SWIFTNet.
2. **One for SP Custody** where you must define the WSHA message partner that uses the End-to-End SOAP configuration over HTTPS. You must also provide the following default routing details for this message partner: Requestor DN, Responder DN, Service Name, Request Type, Authorisation DN, Sign DN.

The **Alliance Gateway 6.1.50 or 6.1.51 or 6.1.60 functional update is required.** This patch supports connectivity to the Euroclear ScreenFlow application version of WSHA for use with CCI. The patch is backward compatible for use with ESES.<sup>4</sup>

**Q49: Which WSHA release is for Alliance Gateway 6.3?**

There is no Alliance Gateway 6.3.x functional update containing WSHA functionalities. Alliance Gateway 6.3 does not have the WSHA functionality built-in.

The upgrade path depends if Alliance Gateway functional update 6.1.50 or 6.1.60 (WSHA) is already installed prior to migrating to release 6.3:

- If YES, not additional steps
- If NO, indeed Alliance Gateway 6.1.60 needs to be installed on top of release 6.3.

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<sup>4</sup> The WSHA version used for ESES (6.0.7) should be **upgraded** (de-installation is not supported) to the WSHA version for CCI (6.1.50 or 6.1.60).

**Q50: What is the latest minimum WSHA patch level to have installed?**

Patch Alliance Gateway 6.1.60 will be required for Full Functional Testing and for using the CCI screenflow in Production. Please refer to the Appendix 5: Compatibility Matrix between Euroclear Screenflow application and Alliance Gateway WSHA of the CCI over SWIFTNet Implementation Guide for more information. Alliance Gateway 6.1.60 does not mandate the preliminary installation of Alliance Gateway 6.1.50 run-time version. It includes fixes in patch Alliance Gateway 6.1.51. More details on the fixes can be read from its release letter, the patch can be downloaded from the download centre on [www.swift.com](http://www.swift.com)

**Q51: Is ScreenFlow supported on dial-up connectivity?**

Although dial-up connectivity has been qualified with WSHA, its limited bandwidth may not be sufficient to accommodate CCI ScreenFlow and existing FIN traffic without performance degradation. SWIFT therefore recommends CCI customers having dial-up connectivity to upgrade to one of the new Alliance Connect connectivity options. For example, your dial-up connectivity can be upgraded to Alliance Connect Bronze - an Internet based connectivity. In order to encourage the upgrade process, SWIFT has lowered its prices compared to the old equivalent connectivity and will subsidise the price and shipment of the new VPN boxes. Upgrade Orders to the new Alliance Connect connectivity options are already available on [www.swift.com](http://www.swift.com) > Ordering > Order products and services > [Alliance Connect](#).

For any additional information, please consult the connectivity page on [swift.com](http://swift.com) or contact your regional sales office.

## 3 CCI Security

### Q52: What types of security does Euroclear use for CCI over SWIFTNet?

#### Standard security for ESES

For ESES, the SWIFTNet messaging service provides a secure connection from Alliance Gateway to Euroclear.

Network security, which includes the provision of encryption and digital signature facilities is part of the SWIFT infrastructure that SWIFT automatically provides for each customer. Furthermore, SWIFT ensures message confidentiality, integrity, and authenticity across its network.

Virtual Private Network (VPN) tunnels also reinforce these confidentiality, integrity, and authentication controls at a lower-level layer.

The mandatory Hardware Security Module (HSM) is a tamper-resistant hardware device that SWIFT provides to SWIFTNet users. The HSM enables a user to store its SWIFTNet Public Key Infrastructure private keys and to protect digital signature generation.

#### Client-side local area network security

On the client side, customers can configure the Web Services Host Adapter (WSHA) to provide either an encrypted secure socket layer connection for the ScreenFlow application, or an unencrypted connection. The WSHA configuration setting determines data security over a customer's internal network as the data travels between the ScreenFlow application and Alliance Gateway.

#### Recommendation 1: for *basic* local area network security

The ScreenFlow application always encrypts certain sensitive data fields. However, unless the secure socket layer is configured on the WSHA, most data within messages passes over the client's internal Local Area Network (LAN) in unencrypted form. Euroclear, therefore, recommends that the customer maintains the default WSHA setting for secure socket layer connections.

#### Recommendation 2: for *additional* LAN security

To ensure the integrity of traffic as it travels across the LAN, SWIFT recommends that customers put additional security measures in place. The second recommendation, therefore, is to enable the local authentication that Alliance Gateway provides.

Local authentication requires that the exchanging entities (in this case, the ScreenFlow application and the Alliance Gateway) use the same symmetric key to compute a local message authentication code.

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It is the customer's responsibility to enable local authentication.

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For more information on local authentication and SSL, see the *WSHA Release Letter* and the *WSHA Configuration Guide*.

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**Q53: Are card readers necessary for ScreenFlow? How does ScreenFlow identify and authenticate users?**

The Euroclear document entitled *CCI Pre-Requisites Application Guide - Screen Interface* indicates that no authentication device is necessary for the Single Platform Custody phase.

**Q54: How do I manage ScreenFlow user permissions and functions? Is there a way to set up the 4-eyes principle for specific operations?**

Management of user permissions and functions is at the Euroclear ScreenFlow application level, and not at the SWIFT level. Customers use the CCI **Operator Access Management** (OAM) application to perform these tasks. OAM enables multiple operators to enter instructions.

The following extract from the Euroclear document *ESE/CCI User Guide V.1 - 12.2 Operator Access Management* explains OAM functionality more fully, as follows:

"The right of a business operator to perform various functions on behalf of specific Parties on specific sub accounts is determined by the CCI Operator Access Management (OAM). The administrator when creating new business operators within the Access Management module configures this.

OAM allows you to create an operator profile, which will later be assigned to specific operator(s). These operator profiles enable the operator(s) to which they are assigned to perform various functions on behalf of specific Parties and sub-accounts. An operator will not be able to perform functions, which are outside the rights within their profile.

It is only possible for a CCI STP channel operator to successfully send instructions for a particular Party and sub account, or for a CCI screen interface operator to perform enquiries for a particular Party and sub-account, when correctly configured operator profile has been assigned to that operator.

For example, an operator profile may be created allowing a business operator to input standing instructions on behalf of Party A for sub-account B. Party A may hold several other sub-accounts with Euroclear, but the business operator would not have the option of selecting these other sub-accounts when creating the standing instruction. If an operator tries to perform an action for a sub-account which is not included in their profile, an error message are displayed when they click Save. Administrators must read the CCI Deployment Guide – STP before creating CCI STP channel operators."

**Q55: How do ScreenFlow users relate to SWIFTNet users?**

The Euroclear naming and addressing scheme defines ScreenFlow application users as *Operators belonging to an Access Provider*. This definition must match the definition of SWIFT BICs and related PKI Certificate(s) DN. When completing appropriate Euroclear forms, customer must provide per communication channel relevant PKI Certificate(s) DN used. The information is required for the initial setup of a client's OAM with the Access Provider details.

Certificate and ScreenFlow

In the Alliance Gateway Message Partner, customers define the Public Key Infrastructure certificate or certificates used for CCI traffic. A customer can decide to reuse an existing certificate or create a new one, depending on the organisation's business requirements.

The certificate must be at least a level 3 DN (where f.i. cn=operator1, o=abcdbebb,o=swift) and must match the certificate DN registered in the Euroclear CCI Single Platform Connectivity Testing forms. Multiple users of the same institution can share the same Public Key Infrastructure certificate.

All certificates used to authenticate Euroclear CCI traffic in Live **must** be stored on an HSM. If the number of slots on the HSM reaches its limit (that is, 250 certificates for release 6.0 and 6.1), then the customer must order a new HSM or use existing HSM but upgrade to use SWIFTNet 6.3 features. With release 6.3, the capacity of an HSM has been enhanced to store up to 2500 certificates per HSM box.

Instructions on how to upgrade are provided after ordering the optional large certificate capacity licence. This operation does not require replacing the HSM box hardware or reconfiguring the HSM cluster. It does preserve the certificates that the HSM box already contains. For information on the charges associated with this option, please refer to the *Price List*. For information on the order of the optional large certificate capacity licence for HSM high throughput class please refer to [www.swift.com](http://www.swift.com).

**Q56: How does SWIFTNet authenticate traffic?**

As per the SWIFTNet authentication mechanism, SWIFTNet performs the following check on messages transferred through SWIFT. The last two levels (o=bic8, o=swift) of the signing DN must correspond to the Requestor DN that the closed user group provides.

**Q57: How do I generate the two SSL certificates I need?**

A customer must use the ScreenFlow GUI to import the SSL certificate that secures the connection between the ScreenFlow GUI and the WSHA. During the installation of the Alliance Gateway WSHA patch this certificate automatically generates, but you can also generate this certificate later, if necessary.

For more information about how to secure the connection between the ScreenFlow application and the WSHA, see section 3.1 of the *SWIFT WSHA Configuration Guide*.

**Q58: When can I use Lite certificate to authenticate traffic for CCI Pilot traffic?**

Lite certificates can be used since the availability of CCI release 4.2.

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## 4 Pricing

**Q59: What kind of pricing model will CCI over SWIFTNet use?  
Who charges what?**

Euroclear has chosen a "sender pays" model.

In this model, the SWIFT customer pays SWIFT for instructions that it sends to Euroclear through SWIFT. This statement applies to single messages (FIN, InterAct), files (FileAct) and manual instructions and queries that users send through the ScreenFlow application.

Euroclear pays SWIFT for status information, reports, or confirmations that Euroclear sends to its customers. Customers must approach Euroclear for information about charges.

**Q60: How much does the ScreenFlow application cost?**

Usage of screen access is charged at 1.6 Euro cents per 1,000 characters, with a minimum charge of 2,000 characters per message.

**Q61: What does WSHA cost?**

You can find more information about WSHA pricing, at [www.swift.com/index.cfm?item\\_id=64623](http://www.swift.com/index.cfm?item_id=64623) > Useful Links: SWIFT Pricing & Invoicing > Price List (PDF) (at the very end of the page) > Part B Connections to SWIFT > SWIFT Alliance Interfaces > SWIFT Alliance Gateway > Additional Host Adapter options: WSHA.

On a Single-Window license, the cost will vary between 3,400 and 9,600 USD for the one-time fee and between 1,700 and 4,800 USD for the yearly maintenance fee. It is also available on the Automation and the Webstation Concentration licenses with the following price: 3,400 USD for the one-time fee and 1,700 for the annual maintenance fee.

Please, note that adding the WSHA option to a Single-/Multi-service Alliance Gateway licence profile will automatically trigger its migration to an Automation/Single Window Alliance Gateway licence profile. Customers in such a situation will be contacted by SWIFT End-to-End Ordering department when ordering the WSHA.

**Q62: How does Euroclear CCI contribute to SWIFT network-based invoicing?**

Because Euroclear has chosen a *sender pays* model, the SWIFT subscriber pays for the traffic sent to Euroclear. SWIFT includes this charge in its SWIFT Network Based Invoice.

**Q63: Where can customers find more information about the price of Alliance interfaces or connectivity?**

You can find more information about the complete SWIFT Price List at [www.swift.com](http://www.swift.com) > Ordering & Support > Billing Services > Useful Links: SWIFT Pricing & Invoicing.

For more information, customers can contact a SWIFT account manager.

## 5 Support

### Q64: What is the SWIFT Consulting Services?

SWIFT Consulting Services provides with direct access to SWIFT experts who can help optimising the business processes, identify best-practice enhancements for the SWIFT infrastructure, speed up the SWIFT integration projects, and reduce the total cost of ownership.

Refer to [www.swift.com](http://www.swift.com) > Solutions > SWIFT Consulting Services for more information.

### Q65: What level of online support or technical assistance is available for problems with CCI over SWIFTNet?

#### Online technical support

SWIFT offers all customers 24-hour support by means of the online support service at [www.swift.com](http://www.swift.com) > Ordering & Support > Support.

With this tool, customers can easily report, update, and monitor the status of cases. SWIFT advises customers to use online support as the main communication channel to its support centre. Customers that have urgent problems can contact SWIFT by telephone.

#### SWIFT-related queries or problems

The following table details the appropriate SWIFT contact for customers to use depending on the nature of the query or the problem.

Query type	Contact reference
<b>Commercial advice</b> (for example, about how to join SWIFT, or how to order SWIFT products)	See <a href="http://www.swift.com/offices">www.swift.com/offices</a> for information about how to contact a SWIFT representative or a regional SWIFT office.
<b>Technical assistance</b>	See <a href="http://www.swift.com/support">www.swift.com/support</a> .
<b>Specific CCI queries</b>	See <a href="http://www.swift.com/ccj">www.swift.com/ccj</a> , or e-mail <a href="mailto:cci@swift.com">cci@swift.com</a> .

To access SWIFT's online support services on [www.swift.com](http://www.swift.com), customers must first register with Support.

SWIFT Support and Euroclear Communications Helpdesk have reached an agreement to contact each other in case a joint customer problem investigation is required. Therefore, when customers contact SWIFT Support for a CCI related issue, if further information/investigation is required from Euroclear, SWIFT Support will contact the Euroclear Communications Helpdesk to ensure joint problem investigation, and vice-versa. SWIFT-related queries or problems.

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**SWIFT general questions, implementation kit, administration, and provisioning**

For all SWIFT administration-related questions (for example, questions about the implementation kit, administration, and provisioning), customers can contact the local SWIFT office.

You can find a list of all SWIFT offices at [www.swift.com/offices](http://www.swift.com/offices).

**Q66: What is the SWIFT ScreenFlow Implementation Service?****Service description**

If internal expertise or resources are not available for your ScreenFlow deployment, you can rely on the expertise of SWIFT and request the **SWIFT ScreenFlow implementation service**. It offers you an installation and configuration service for your WSHA product and Euroclear ScreenFlow application. SWIFT's own technical experts or an accredited SWIFT Service Partner, under the direct responsibility of SWIFT, delivers this service. This ensures a smooth and efficient implementation.

**Service content and duration**

The one-day implementation includes:

The deployment of up to 3 ScreenFlow instances and associated WSHA within your SWIFT infrastructure

Basic operator configuration and testing

**Pricing**

The fee is EUR 1500, excluding any travel costs.

**How to request the ScreenFlow Implementation Service by SWIFT**

On completion of your order for WSHA, SWIFT sends you an e-mail describing the service, and asks you to confirm your interest. In close collaboration with you, SWIFT then manages the end-to-end delivery of the implementation.

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For generic information about the SWIFT software implementation service, see the *SWIFT Software Implementation Service* that is available through the SWIFT User Handbook online at [www.swift.com/ccj](http://www.swift.com/ccj) > Service > Standard Support.

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## 6 Registration and Ordering

**Q67: How do I subscribe to CCI services?**

See Appendix 1: CCI Registration and Ordering in the latest *CCI over SWIFTNet Implementation Guide* on [www.swift.com/cci](http://www.swift.com/cci).

**Q68: How do I order the WSHA?**

See Appendix 1: CCI Registration and Ordering in the latest *CCI over SWIFTNet Implementation Guide* on [www.swift.com/cci](http://www.swift.com/cci).

**Q69: In the CCI forms for Single Platform Connectivity Testing, what do the Gateway DN/Certificate DN refer to?**

In the CCI Form 2 – Connection to SWIFT, part of the CCI forms for Single Platform Connectivity Testing, customers need to input the Gateway DN/Certificate DN which will be used for the different channels (Screen, Messaging and File). This Gateway DN/Certificate refers to the Distinguished Name of the SWIFTNet PKI certificates which will be used to sign and authenticate the traffic.

**Q70: When will I be provisioned in the SWIFTNet CCI Services?**

When completing online the SWIFTNet Service Subscription for CCI, you will see in the subscription form you can choose a preferred implementation date. By default, provisioning always occurs on the second Saturday following the date of your form submission. A later Saturday can of course, be specified. You must ensure that your implementation date is in line with the on-boarding slot agreed with Euroclear (as part of Euroclear's client roll out campaign).

This implementation date will only to both the Test/Pilot and Live SWIFTNet CCI Services (i.e. euroclear.screenflow!pu, euroclear.autoflowmsg!pu and euroclear.autoflowfile!pu, euroclear.screenflow, euroclear.autoflowmsg and euroclear.autoflowfile).

**Q71: How do I register for a Connectivity Testing slot?**

To obtain a connectivity testing slot, customer will need to liaise with Euroclear and complete the CCI connectivity testing - Pre-registration form available on [www.euroclear.com](http://www.euroclear.com). The date of the testing slot will be confirmed by Euroclear.

**Q72: Where to find the details of the tests to be completed during the Connectivity Testing phase?**

The details of the tests to be completed during the Connectivity Testing phase are described in the Euroclear CCI testing guide (version 1). The Version 1 is intended for Euroclear Bank clients but the principals outlined apply equally to Euroclear UK and Irish clients as well as ESES clients.

**Q73: How to obtain ScreenFlow Root Operators ID and Password?**

As part of the registration process, after having completed the Euroclear Single Platform Connectivity Testing forms, Euroclear will perform the initial provisioning in the OAM application and provide the Root Operators ID and Password. As part of the

registration process, Euroclear will provide you with information about how and where download a copy of the ScreenFlow application.

**Q74: How will the support of multiple ScreenFlow versions affect the WSHA?**

The ScreenFlow version used for ESES and the version used for CCI Connectivity Testing could connect through the same version of WSHA (6.1.50, 6.1.51 or 6.1.60). WSHA being backwards compatible, it could concentrate ESES and CCI traffic over the same Alliance Gateway. The customer will only need to configure one SAG message partner per ScreenFlow mode (i.e. one for ESES and one for CCI)

**Q75: When filling-in an e-MSSF for multiple BIC's (Bulk ordering), if I specify keep the default queue for traffic routing, will messages of all the BIC's be Routed to that queue, or will messages be routed to the default queue of each BIC?**

No. The messages will be routed to the default queue of each individual BIC part of this Bulk ordering.

**Q76: Can I do Bulk ordering if I want to specify different routing rules than default queue proposed?**

No. You will need to subscribe for every BIC individually.

## Glossary

The following glossary lists acronyms and abbreviations for technologies and components that are used in this document.

Acronym	Expanded term
BIC	Bank Identifier Code
CCI	Common Communication Interface
CSD	Central Securities Depository
DEX	Data Exchange Dictionary
ESES	Euroclear Settlement of Euronext-zone Securities
FA SnF	FileAct Store-and-Forward
HMAC	Hashed Message Authentication Code
HSM	Hardware Security Module
HTTP	Hypertext Transfer Protocol
HTTPS	HTTP over SSL
IA SnF	InterAct Store-and-Forward
ISO	International Organisation for Standardisation
JRE	Java Runtime Environment
LAN	Local Area Network
LMAC	Local Message Authentication Code
LAU	Local Authentication
LT	Logical Terminal
MAC	Message Authentication Code
MP	Message partner
MQHA	WebSphere MQ Host Adapter
OAM	Operator Access Management
PC	Personal Computer
PKI	Public Key Infrastructure
RAHA	Remote API Host Adapter
RGV	Relit Grande Vitesse
RMA	Relationship Management Application
SBI	Sociétés de Bourses Intermédiaires (trade confirmation platform)
SOAP	Simple Object Access Protocol
SP	Single Platform (project)
SSL	Secure Socket Layer
SSPA	Securities System Participant, a category of SWIFT user
STP	Straight-Through Processing

<b>Acronym</b>	<b>Expanded term</b>
SWIFT	Society for Worldwide Inter-bank Financial Telecommunications
TPS	Transactions Per Second
URL	Uniform Resource Locator
VPN	Virtual Private Network
WSHA	Web Services Host Adaptor (provided by SWIFT)

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