



# Test Handbook for Network Partners

eBill

Version 1.7 valid from 01.06.2023

## Document history

All the changes carried out in this document are listed below with the version designation, the change date, a brief description of the change and the specification of the chapters affected.

Version	Date	Change description	Chapter(s)
1.7	01.06.2023	Update for release 1.21: Another test case added Other minor corrections	4.4
1.6	30.09.2022	Description of access to eBill Bank Portal revised Document classification changed to C2 References to ISR and external registration forms removed Test case numbering adjusted following chapter deletion	
1.5	18.10.2021	Test Handbook revised and additions relating to NWP API V3 included	
1.4	02.06.2021	Amendments to NWP API V2.5 test cases added	
1.3	10.02.2021	Amendments to NWP API V2.3 test cases added	
1.2	04.09.2020	Search invoice issuer test case adjusted. Certificate info for access to the Bank Portal added	
1.1	03.06.2020	New test case added (Chapter 4.17)	
1.0	10.01.2020	Final version – Bank Portal examples added	

Table 1: Document history

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## General information

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The document has been prepared with the utmost care, but errors and inaccuracies cannot be completely ruled out. SIX BBS Ltd cannot assume any legal responsibility or any liability for errors in this document or their consequences.

For the purpose of simplification, non-gender-specific language is used wherever possible. All references to persons are to be regarded as gender neutral.

Should you encounter any errors in this document or have any suggestions for improvements, we would be grateful if you e-mailed your feedback to [support.billing-payments@six-group.com](mailto:support.billing-payments@six-group.com).

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# 1 Introduction

The eBill service enables electronic invoicing, invoice receipt and invoice payment. More than a million users are already receiving their invoices digitally via online banking, thus paying them conveniently, reliably and on time. The eBill service encompasses all forms of electronic invoices, reminders, credit notes and notifications – known collectively as business cases – delivered to the eBill infrastructure by network partners and received online by invoice recipients. In eBill, network partners choose the most efficient type of invoicing and can thereby build up their ranges of digital services for their customers.

## The benefits include the following:

- eBill is the secure alternative to invoicing via e-mail
- Participating in eBill is easy
- Searching for and finding customers wishing to switch to eBill is easy
- Integrating eBill in ERP and e-commerce solutions is simple thanks to standardized interfaces and processes

Network partners are part of the eBill network and thus can enable their invoice issuers to send electronic invoices to online banking users. Network partners communicate with the eBill infrastructure via a simple interface. This interface enables communication with the eBill infrastructure on the network partner's side. This makes it a central point of entry for delivering digital invoices to the banking channel.

## 1.1 Purpose of this Document

The "Test Handbook for Network Partners" is a supplement to the Handbook for Network Partners and the Technical Instructions for Onboarding. It describes the test aspects for a connection as network partner.

## 1.2 Target Audience

The Handbook for Network Partners is aimed at providers of services relating to electronic invoicing that wish to make the eBill service available to their customers (invoice issuers) via the central eBill infrastructure.

## 1.3 Change History

All changes made to this document are listed in the change history (Table 1) with the version designation, the change date, a brief description of the change and the specification of the chapters affected.

## 2 Test Infrastructure

This section describes the test and acceptance infrastructure available, as well as the procedures, processes and rules for use and reporting.

### 2.1 Overview of eBill Infrastructure

Participants in the eBill service can access the eBill infrastructure via a range of interfaces. The most important are explained in brief below.

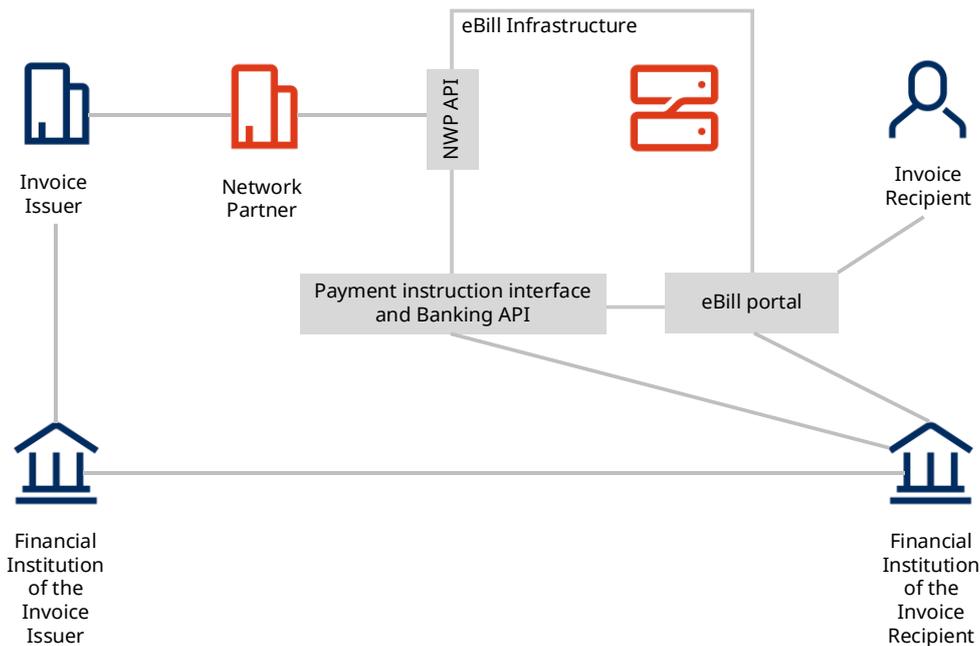


Figure 1: Overview of the eBill infrastructure

#### 2.1.1 Network Partner API

Network partners are connected to their customers via the network partner API (NWP API). This interface is used to exchange all messages with the participants (e.g., business cases, status reports, registrations).

#### 2.1.2 Bank API

The bank API is a web service interface for the financial institutions of the invoice recipients enabling them to link their online banking systems to the eBill infrastructure.

#### 2.1.3 Payment Transaction Interface

The financial institution of the invoice recipient receives payment information from the eBill infrastructure via the payment transaction interface based on the approved business cases.

#### 2.1.4 eBill Portal

The eBill Portal is a central web application for invoice recipients that can be used by all participating financial institutions. It enables invoice recipients to use eBill functions via the Internet. For end-to-end tests, the eBill Portal can also be accessed via the Bank Portal.

## 2.2 Test Environment

Implementation by the network partner is not monitored or supervised by SIX and is entirely the responsibility of the network partner in question.

The network partner is granted access to a comprehensive test infrastructure (test system) for support.

The following levels of the eBill infrastructure are generally available to the network partner. These can be reached through various login endpoints:

### **XE level:**

External acceptance/development stage. It contains the current development release stage of the eBill infrastructure. New features are provided every three weeks and can be used for integration work immediately.

### **XP level:**

External acceptance/production stage. It contains the same release stage as the current production environment.

## 2.3 Use Restrictions

### **No confidential data**

The X levels are available to all network partners in parallel, and the user authorizations and access rights do not correspond to production operational requirements. Therefore, no confidential data (production data) may be used as test data when testing the X levels.

### **No performance, stress or mass tests**

The X levels are not designed for performance, stress or any other mass tests. Appropriate test requirements must be explicitly agreed on and scheduled with eBill Support.

The following general conditions must be complied with:

- The NWP must inform SIX of any performance tests with sufficient advance notice (approximately 14 days).
- SIX must be notified of the objective of the test.
- No production data may be used for performance tests.
- SIX must be notified of the start and end of the performance test.
- There is no guarantee as to the availability of the test levels. It is possible that the test level may not be available at short notice.

## 2.4 Setting Up Connections to Test Systems

Various preparatory work and configurations are necessary on the part of both the network partner and SIX in order to enable access to the eBill infrastructure via the Network Partner API.

Please refer to the document "Network Partner Onboarding – Technical Instructions" for information on the setting up of connections.

## 2.5 Software and Release Status

The software status at the XP level corresponds to the current production software status.

New or further developments of the eBill platform are first approved internally by SIX and then made available at the XE level for external testing. Changeover from the XE to XP level takes place only shortly before the production approval.

## 2.6 eBill Bank Portal

### 2.6.1 Access to eBill Bank Portal

In addition to setting up the connections, the network partner can also apply for access to the eBill Bank Portal at the XE and XP levels.

With access to the eBill Bank Portal, a network partner can independently test the NWP functionality end-to-end. For this purpose, SIX sets up a dedicated financial institution for each network partner.

In line with Chapter 2.6.2, each user needs a means of authentication.

A maximum of five users of a network partner can be authorized per test level (XE/XP).

In order for SIX to be able to set up access to the eBill Bank Portal, the NWP main contact person must send the following information to SIX via e-mail:

- First name, surname, birth date, and e-mail address of the users to be authorized to access the eBill Bank Portal.
- Desired test level (XE/XP). It is best to authorize the user for both systems at the same time.
- Information on the type of means of authentication (for certificates, enclose the CER file).
- This information can be sent by the main contact person to Support ([support.billing-payments@six-group.com](mailto:support.billing-payments@six-group.com)) or directly to the technical contact person.

The eBill Bank Portal can be accessed via the following links:

XP: <https://billing-xp.np.six-group.com/ebill-bank-portal/ui/>

XE: <https://billing-xe.np.six-group.com/ebill-bank-portal/ui/>

### 2.6.2 Means of Authentication for Access to eBill Portal

The information on the currently valid means of authentication for accessing the eBill Bank Portal are available in the Member Section at <https://billing.six-group.com/private/de/home/certificates.html>.

### 2.6.3 Functions in eBill Bank Portal and eBill Portal

The eBill Bank Portal is a web application for carrying out selected administrative tasks in connection with the administration of invoice issuer and invoice recipient data in the eBill service. Moreover, the eBill Portal can be accessed directly from the eBill Bank Portal (XE and XP level) for testing purposes of a specific user.

The most important functions that are available to a network partner in the eBill Bank Portal are listed below:

- Setting up new e-banking users (test customers)
- Overview of own e-banking users and their details
- Overview of business cases of own e-banking users along with the relevant details
- Overview of payment orders
- Rejection/approval of payment orders on behalf of the test bank for status changes
- Overview of all invoice issuers along with the relevant details
- Subscription, including direct subscription to an invoice issuer
- Access to the eBill Portal for a specific e-banking user

All functions that are available to an actual invoice recipient are also available in the eBill Portal.

- Invoice overview
- Subscription and cancelling subscription to an invoice issuer
- Invoice approval
- Invoice rejection
- Invoice viewing
- Supplementary document viewing
- Entering a standing approval arrangement
- Adjusting settings, such as notifications, sharing, look-up, etc.

Individual test functions are listed in detail below.

### Setting up new e-banking users

The test user can use this function to set up new e-banking users:

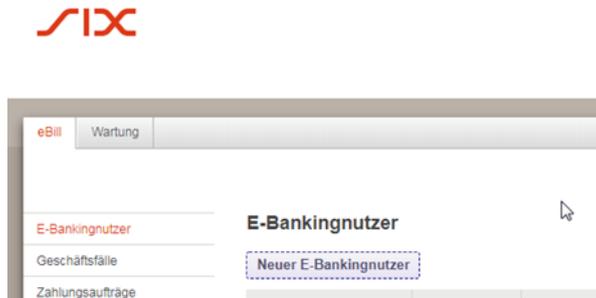


Figure 2: Setting up e-banking users

After selecting the function, the test user can choose between two options:

#### Private:

- Registered e-banking user with eBill user: The e-banking user is fully registered as eBill user for the use of the eBill service (eBill Portal).
- Registrable e-banking user: The e-banking user must complete the registration process in order to use the eBill Portal.

#### Business:

- E-banking user with eBill user: A new eBill business user (this user corresponds to a company) is registered with an e-banking user who has access to eBill for this company.
- E-banking user for existing eBill user: Another e-banking user is registered for the existing eBill business user (company).

E-Banking-Nutzer	<b>Neuer E-Banking-Nutzer</b>
Geschäftsfälle	
Zahlungsaufträge	
Rechnungssteller	
Rechnungssteller-Beziehungen	
eBill Direct Debit-Ermächtigungen und Vorschläge	
Finanzinstitut Reports	
Audit	

**Privat**

Registrierter E-Banking-Nutzer mit eBill-Nutzer

Registrierbarer E-Banking-Nutzer

**Business**

E-Banking-Nutzer mit eBill-Nutzer

E-Banking-Nutzer für bestehenden eBill-Nutzer

Vorname

Nachname

Geburtsdatum

Finanzinstitut  ▼

Figure 3: Creating new e-banking users

The NWP Test Bank should be selected as financial institution. It will be opened by SIX for the NWP. Following the setting-up, the e-banking user is displayed in the eBill Bank Portal, and it is possible to switch to the eBill Portal:

<ul style="list-style-type: none"> <li>E-Banking-Nutzer</li> <li>Geschäftsfälle</li> <li>Zahlungsaufträge</li> <li>Rechnungssteller</li> <li>Rechnungssteller-Beziehungen</li> <li>eBill Direct Debit-Ermächtigungen und Vorschläge</li> <li>Finanzinstitut Reports</li> <li>Audit</li> </ul>	<p><b>E-Banking-Nutzer EBID3B6CFC0E4D8E4DA8A1A7B9B5581866C4</b></p> <p> <a href="#">← Zurück</a> <a href="#">eBill-Nutzer</a> <a href="#">Audit</a> <a href="#">Netzwerkpartner-Events</a> <a href="#">Deregistrieren</a> <a href="#">eBill Portal</a> <a href="#">eBill Session</a> <a href="#">Auf</a> </p> <p><b>E-Banking-Nutzer</b></p> <table border="1"> <tr> <td>Vorname</td> <td>Franz</td> </tr> <tr> <td>Nachname</td> <td>Kayser</td> </tr> <tr> <td>Geburtsdatum</td> <td>24.07.2003</td> </tr> <tr> <td>Korrespondenzsprache</td> <td>GER</td> </tr> <tr> <td>FIID</td> <td>FIID0FB909852BBC4D06AD8336AAE87D7FC9</td> </tr> <tr> <td>FI Name</td> <td>PNS Bank</td> </tr> <tr> <td>Erstelldatum</td> <td>24.07.2023 19:02:22</td> </tr> <tr> <td>Status</td> <td>Aktiv</td> </tr> <tr> <td>eBill-Nutzer (E-Mail-Adresse)</td> <td>franzkayser.20230724-190222170@ebill.ch</td> </tr> <tr> <td>E-Mail-Notifikation</td> <td>Keine</td> </tr> <tr> <td>Registrierungsstatus</td> <td>Registrierung abgeschlossen</td> </tr> </table>	Vorname	Franz	Nachname	Kayser	Geburtsdatum	24.07.2003	Korrespondenzsprache	GER	FIID	FIID0FB909852BBC4D06AD8336AAE87D7FC9	FI Name	PNS Bank	Erstelldatum	24.07.2023 19:02:22	Status	Aktiv	eBill-Nutzer (E-Mail-Adresse)	franzkayser.20230724-190222170@ebill.ch	E-Mail-Notifikation	Keine	Registrierungsstatus	Registrierung abgeschlossen
Vorname	Franz																						
Nachname	Kayser																						
Geburtsdatum	24.07.2003																						
Korrespondenzsprache	GER																						
FIID	FIID0FB909852BBC4D06AD8336AAE87D7FC9																						
FI Name	PNS Bank																						
Erstelldatum	24.07.2023 19:02:22																						
Status	Aktiv																						
eBill-Nutzer (E-Mail-Adresse)	franzkayser.20230724-190222170@ebill.ch																						
E-Mail-Notifikation	Keine																						
Registrierungsstatus	Registrierung abgeschlossen																						

Figure 4: E-banking user information

### Subscription to an invoice issuer

By means of this function, the test user can subscribe invoice recipients to invoice issuers. Alternatively, the invoice recipient can be subscribed using the eBill Portal. To simulate a direct subscription from e-banking, the function must be used in the eBill Bank Portal. After selecting a previously created e-banking user, the function can be accessed under "Details":

1. Select eBill banking user to access the details of the eBill user:

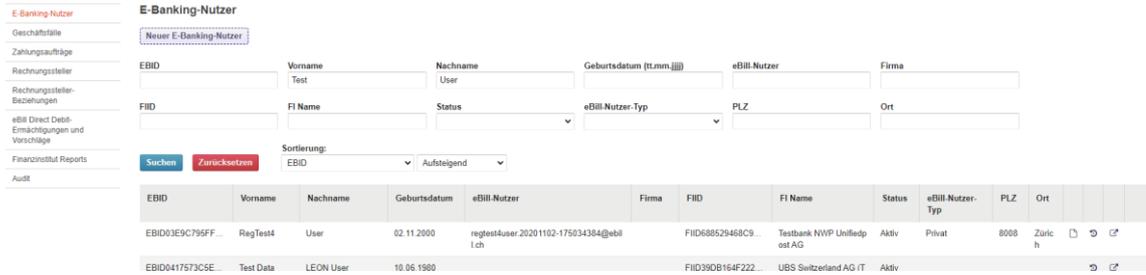


Figure 5: E-banking user subscriptions

2. In the eBill user details, the "Invoice issuer subscription form" function can be accessed by clicking on "Subscribe":

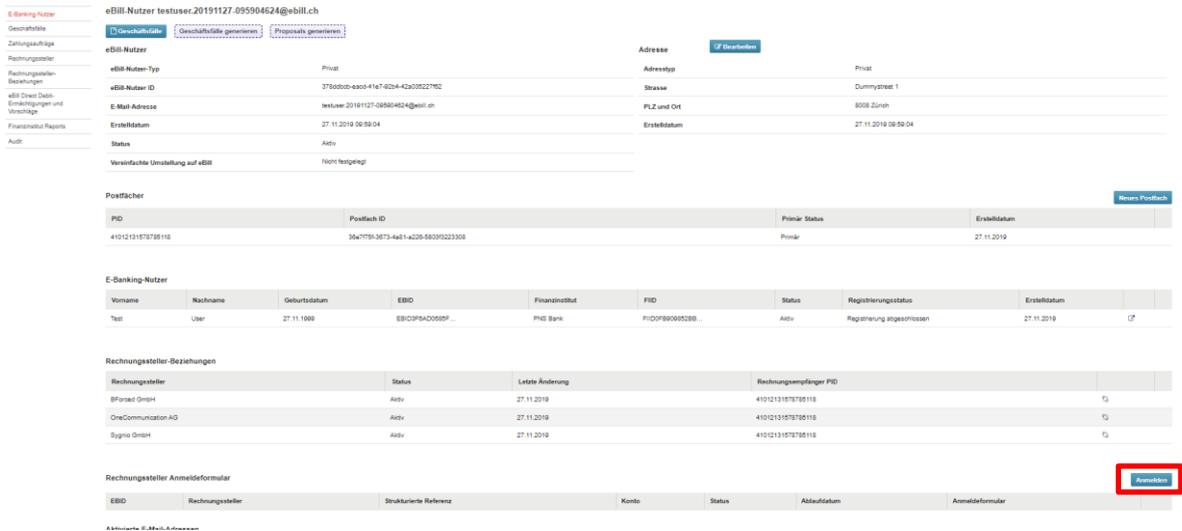


Figure 6: E-banking user invoice issuer subscription form

3. The overview of available invoice issuers is displayed. The invoice recipient can subscribe to an invoice issuer by selecting it from the list.

If the direct subscription from e-banking is to be simulated, a structured reference and an account must be specified under "Options".

Figure 7: Structured reference and account

4. After successful subscription, the relationship is displayed with the "Applied" status under the eBill user details:

E-Bankingnutzer									
Vorname	Nachname	Geburtsdatum	EBID	Finanzinstitut	FIID	Status	Registrierungsstatus	Erstelldatum	
Test	User	04.11.1999	EBIDCFEC5ED70...	PNS Bank	FIID0FB909852BB...	Aktiv	Registrierung abgeschlossen	04.11.2019	

Rechnungssteller Beziehungen			
Name	Status	Letzte Änderung	Rechnungsempfänger PID
Bellophon Comm. (Schweiz) SA	Beantragt	04.11.2019	41012140767552341

Figure 8: eBill user details

If the invoice issuer uses a subscription form, this is displayed under "Invoice issuer subscription form" and can be opened there. Opening the subscription form is limited in time, i.e. once the time limit has expired, a new subscription form can be created.

Rechnungssteller Beziehungen						
Name	Status	Letzte Änderung	Rechnungsempfänger PID			
Bellophon Comm. (Schweiz) SA	Beantragt	04.11.2019	41012140767552341			

Rechnungssteller Anmeldeformular						
EBID	Rechnungssteller	ESR-Referenz	Konto	Status	Ablaufdatum	Anmeldeformular
EBIDCFEC5ED706AD4E64ACB5612E610B0AD1	AGIS			Neu	04.11.2019 17:22:46	öffnen

Figure 9: Invoice issuer subscription form

### Payment instructions

In order for a test user to be able to change the status of the business case from the Bank view, it is possible to simulate pain.002 messages in the Bank Portal. After a business case has been approved in the eBill Portal, the test user can access the business case details in the eBill Bank Portal via the business case of the corresponding eBill user:

eBill-Nutzer	Rechnungsempf. PID	Rechnungssteller	GF-Typ	GF-Datum	Betrag	Währung	Fälligkeitsdatum	Status
shortmail@ebill.ch	41012131300292280	Donation NPO	Spendenanfrage	05.04.2023	100.00	CHF	05.07.2023	Offen
shortmail@ebill.ch	41012131300292280	BForced GmbH	Rechnung	05.04.2023	8290.05	CHF		
shortmail@ebill.ch	41012131300292280	OneCommunication AG	Ankündigung	05.04.2023	0.00	CHF		Offen
shortmail@ebill.ch	41012131300292280	OneCommunication AG	Rechnung	05.04.2023	451.10	CHF	07.04.2023	
shortmail@ebill.ch	41012131300292280	Donation NPO	Spendenanfrage	05.04.2023	50.00	CHF	05.07.2023	Offen
shortmail@ebill.ch	41012131300292280	Sygnio GmbH	Mahnung	05.04.2023	351.10	CHF	05.03.2023	Freigegeben

Figure 10: E-banking business cases

Geschäftsfall Details	
eBill-Nutzer	Privat
eBill-Nutzer-Typ	Privat
eBill-Nutzer (E-Mail-Adresse)	shortmail@ebill.ch
Geschäftsfall ID	BCIDD7968C8D5130434AAD5FF451E5129882
Geschäftsfall Typ	Mahnung
GF-Datum	2023-04-06
Gesamtbetrag	351.10
Währung	CHF
Rechnungsnummer	495bea29-edca-43f8-aa2c-67be88209d7a
Erstelldatum	05.04.2023 09:52:29
Einzelzahlung	
ID	3bed9b31-faa7-40f3-bb59-007933e3710e
Status	Freigegeben

Figure 11: Business case details

The overview of payment orders for the corresponding business case can be accessed with the "Payment instructions" button:

Geschäftsfall ID	Zahlungsauftrag ID	Group-Messagelid	Debitor FID	Debitor FI Name	Typ	Status	Kreditur Name	Debitor Name	Erstelldatum	Gewünschtes Ausführungsdatum
BCIDD7968C8D5130434AAD5FF451E5129882	000564e-2064-4f...	PIA2b3a4f8b0b7E4...	FICDF89085298...	PIB3 Bank	Manuell	Zugeschikt	Sygnio GmbH	1.20.5.2-Rederban...	05.04.2023 12:09:22	11.04.2023

Figure 12: Payment instructions

After selecting a payment order, the details are displayed. The pain.001 message that was sent to the bank after the business case was approved is listed under "Messages". To confirm the pain.001 message, the "Create PAIN.002 message" function can be used.

Zahlungsaufträge	
Typ	Manuell
Status	Zugelassen
Gewünschte Ausführungsdatum	2023-04-11
Referenznummer	
Betrag	351.10
Währung	CHF
Kreditort Name	Sygnis GmbH
Kreditort Konto	IBAN
Kreditort IBAN	CH434804880071001481
Kreditort FIID	12052-Niderrdan TestUser
Kreditort FI Name	
Debitor Name	
Debitor Kontotyp	IBAN
Debitor Konto	CH980000000000000000
Debitor IBAN	EBSD483872CF28438E6CF8C8C789F8424
Debitor FIID	FIDOF80988288C4D9A428136A817D7FC8
Debitor FI Name	PHS Bank

Meldungen				
Erstelldatum	Typ	Ggf. für MessageId	UID	Status
06.04.2023 12:00:22	PAIN.001	PA23a4705b78459e9b3185e9fa023	00a79e4e-2004-4f6b-90d2-000000000000	

Figure 13: Payment instruction messages



## 2.7 Test Data

Master data that cannot be created independently by application functions are provided by SIX in the test environment. In particular, SIX provides the following master data:

- Master data of network partners
- Dedicated financial institution for network partners to access the eBill Bank Portal.

### **Invoice recipient**

New invoice recipients can be set up by the network partner via the eBill Bank Portal.

### **Invoices**

Business cases (invoices, notifications, reminders, etc.) can be delivered by the network partner as a PDF/A-3 via the NWP API.

## 2.8 Availability of Test Levels

The XE and XP integration levels are in principle permanently available, with the exception of Thursdays. Thursdays are reserved for the system maintenance of the eBill platform, release updates, etc.

SIX also reserves the right to use the XE level exclusively for internal test and acceptance processes as part of further developments and to temporarily restrict access for network partners. These time windows are kept as short as possible.

### 3 Integration and Acceptance

A network partner develops and tests the interface for the eBill infrastructure independently, using the documents received from SIX. Once its independent tests have been completed successfully, the network partner conducts an acceptance test and activates the productive operation. The corresponding test definitions are provided by SIX. Successful performance of the tests is a prerequisite for the acceptance and approval for productive use.

In the first phase, the network partner independently validates and tests implementation using the test infrastructure provided by SIX.

In the second phase, an acceptance test is performed to ensure that the interface can be approved for productive operations.

#### **Acceptance test procedure**

1. The network partner develops the interface with the eBill infrastructure based on the documents provided.
2. The network partner conducts a technical integration test on the interface.
3. The network partner uses the test system (XP) to test the interface that it has developed and records the test results in the acceptance test report.
4. Once all test cases have been run through and tested successfully, the network partner contacts SIX for the acceptance test. The acceptance test completed by the NWP is sent to SIX.
5. SIX coordinates the acceptance test with the network partner.
6. SIX verifies the test results and completes the acceptance test report.
7. SIX transfers the test environment configuration to the production environment.
8. The network partner specifies the time for the approval for the production environment and notifies SIX accordingly.
9. SIX activates the network partner for the production environment at the appointed time.
10. Once this process is complete, the network partner can offer the eBill service (electronic invoices, reminders, credit notes, notifications and donation requests) to its customers.

### 3.1 Acceptance Test

After the network partner has successfully completed independent integration tests, an acceptance test can be conducted. The network partner informs the SIX project manager that they are ready for an acceptance test.

The acceptance test checks the functional use cases, or the interfaces, with end-to-end tests between the network partner and SIX. Further information and requirements concerning onboarding can be found in the Technical Onboarding Specifications.

Once the acceptance process is successfully completed, the network partner is configured for productive operations and then activated at the time agreed upon.

### 3.2 Retesting Network-Relevant Functions

Retesting is performed whenever a new network-relevant function is introduced or an existing one changed. The network partner tests the new functions or changes to network-relevant functions itself.

### 3.3 Performance of the Tests and Test Evidence

The network partner is responsible for conducting the acceptance and approval tests.

The test evidence can be provided in different ways and is different depending on the test cases to be conducted:

#### **Self-declaration**

The simplest form is self-declaration by the network partner. Test cases in this category do not require any additional control by SIX and fall entirely under the responsibility and expertise of the network partner. They are marked with "**SD**" in the test cases.

#### **Self-declaration with evidence**

This category is intended for network-relevant functions that must be implemented. The network partner carries out the corresponding tests independently but provides test evidence as a result (e.g. screenshot, log extract, etc.). They are marked with "**SDE**" in the test cases.

## 3.4 Prerequisites and Entry Criteria for Acceptance

In order to enter the acceptance process, various prerequisites and entry criteria must be fulfilled:

- Complete technical connection at the XP test level
- Complete application configuration at the XP test level
- The network partner has completed implementation according to the specifications and has independently and successfully worked through the acceptance test cases provided by SIX.

### 3.4.1 Termination Criteria

Various situations can lead to the termination of the ongoing acceptance process and to a mandatory rescheduling of the acceptance:

- Critical implementation errors on the part of the network planner
- The eBill and/or necessary platform accesses are not available or cannot be made available within two hours.

### 3.4.2 Reporting and Test Completion

The results of the acceptance test are recorded by SIX in the acceptance test report and are made available to the network partner.

The network partner may comment on the report if they do not agree with the results or if they want to make additions.

The acceptance test report forms the basis for the activation of the network partner for production, or for determining the next steps to be taken.

## 4 Network Partner Function Test Cases

This section describes the eBill functions of the NWP API. All details such as resources, technical operations, payload definitions, validation information etc. can be found in the detailed technical OpenAPI specifications and the documentation of the content of the structured information from the eBill format.

Network-relevant functions of the NWP API are marked with an asterisk \* and must be implemented and documented with evidence by the network partner.

Test evidence is provided as self-declaration (SD) or as self-declaration with evidence, "SDE" (see section: 3.3 Performance of the Tests and Test Evidence). To be able to execute the test cases, access to the eBill infrastructure via the network partner's API must be established.

### 4.1 Querying System Status

Requests information about the system status (can be used as a health check for the eBill infrastructure).

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
1.1	Query system status.	SD	Access via the NWP API is established.	Query system status. Health check.	Request is processed successfully. Authentication and authorization were successful.	
1.2	Query system status and display maintenance window.	SD	Access via the NWP API is established.  A published maintenance window is set up by SIX for the future.	Query system status. Health check.	Request is processed successfully. Authentication and authorization were successful.  Published maintenance windows are transmitted and displayed by the NWP.	

## 4.2 Querying Sectors

Sectors are valid across the system and are managed in the eBill infrastructure. The network partner assigns one or more sectors to an invoice issuer during data entry.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
2.1	Query sectors.	SD	Access via the NWP API is established.	Query supported sectors.	Sectors are transmitted and displayed in ger, fre, ita and eng languages.	

### 4.3 Searching/Querying Invoice Issuers

The network partner can query the invoice issuers connected to the eBill infrastructure. The network partner receives a list with the returned invoice issuer list and can search in it for the desired information.

With the exception of the subscription URL, every network partner can see all the information of an invoice issuer. Only the primary network partner sees the subscription URL.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
3.1	Query public data of all invoice issuers. With search by name.	SD	Access via the NWP API is established.	Query public data of all invoice issuers with various search criteria. Search by: - Name of invoice issuer	Invoice issuers that are found based on the search criteria are returned and displayed.	
3.2	Query public data of all invoice issuers. With search by UID.	SD	Access via the NWP API is established.	Query public data of all invoice issuers with various search criteria. Search by: - UID	Invoice issuers that are found based on the search criteria are returned and displayed.	
3.3	Query public data of all invoice issuers. With search by IBAN/QR-IBAN.	SD	Access via the NWP API is established.	Query public data of all invoice issuers with various search criteria. Search by: - IBAN/QR-IBAN	Invoice issuers that are found based on the search criteria are returned and displayed.	
3.4	Query public data of all invoice issuers. Search is performed using multiple search criteria.	SD	Access via the NWP API is established.	Query public data of all invoice issuers with various search criteria. Combine different search criteria. - Name of invoice issuer - UID - IBAN/QR-IBAN	Invoice issuers that are found based on the search criteria are returned and displayed.	



<b>3.5</b>	Query detailed data of an invoice issuer. With search by invoice issuer ID.	SD	Access via the NWP API is established.  Invoice issuer is registered.  Network partner is assigned as primary NWP for this invoice issuer.	Query detailed data of an invoice issuer with various search criteria. Search by:  - Invoice issuer ID	Only the detailed data on the desired invoice issuer is returned and displayed.	
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## 4.4 Registering Invoice Issuers\*

This use case is a central element of the services provided by SIX and enables invoice issuers to be onboarded for the eBill service.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
4.1	Set up/register a new invoice issuer without a subscription form.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer has not yet been connected to another NWP.</p>	<p>Register a new invoice issuer on the eBill infrastructure.</p> <ul style="list-style-type: none"> <li>- Name of invoice issuer</li> <li>- UID from the Commercial Register</li> <li>- Contact data for all languages (ger, fre, ita, eng): display name, address data, logo, e-mail address, phone number</li> <li>- Sector(s)</li> <li>- Account information</li> <li>- Anomaly detection limit (set value 250,000)</li> </ul>	<p>Invoice issuer is set up with the desired data elements.</p> <p>Invoice issuer ID is reported back and stored for the invoice issuer.</p>	

<p><b>4.2</b></p>	<p>Set up/register a new invoice issuer for donation requests without a subscription form.</p> <p>(Optional if the invoice issuer does not submit donation requests.)</p>	<p>SDE</p>	<p>Access via the NWP API is established.</p> <p>Invoice issuer has not yet been connected to another NWP.</p>	<p>New registration of an invoice issuer for donation requests on the eBill infrastructure.</p> <ul style="list-style-type: none"> <li>- Name of invoice issuer</li> <li>- UID from the Commercial Register</li> <li>- Contact data for all languages (ger, fre, ita, eng): display name, address data, logo, e-mail address, phone number</li> <li>- Sector(s)</li> <li>- Account information</li> <li>- Anomaly detection limit (set value 250,000)</li> </ul>	<p>Invoice issuer for donation requests is set up with the desired data elements.</p> <p>Invoice issuer ID is reported back and stored for the invoice issuer.</p>	
<p><b>4.3</b></p>	<p>Repeated setting up/registration of an invoice issuer.</p>	<p>SDE</p>	<p>Access via the NWP API is established.</p> <p>An invoice issuer has been already activated once.</p>	<p>Register an invoice issuer that shares any of the following characteristics with the previously registered issuer:</p> <ul style="list-style-type: none"> <li>- Credit account (+ account addition where available)</li> <li>- Display name, street and place</li> <li>- If a UID exists according to the Commercial Register: display name and Commercial Register UID</li> </ul>	<p>Invoice issuer has not been set up.</p> <p>User is notified of the error.</p>	

## 4.5 Editing Invoice Issuer Data\*

This use case is a central element of the services provided by SIX and makes it possible to keep invoice issuer data up to date. Invoice issuer data can be managed only by the primary network partner.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
5.1	Change invoice issuer name.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered, and the acting NWP is the primary NWP.</p>	Change legal name.	Name is correctly changed.	<p>Previous:</p> <p>Updated:</p>
5.2	Change invoice issuer UID number.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p>	Change UID number.	UID number is correctly changed.	
5.3	Change invoice issuer contact information in German.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p>	<p>Change German contact data:</p> <ul style="list-style-type: none"> <li>- Display name</li> <li>- Address</li> <li>- E-mail address</li> <li>- Phone number</li> </ul>	German contact data is correctly changed.	
5.4	Change invoice issuer contact information in French.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p>	<p>Change French contact data:</p> <ul style="list-style-type: none"> <li>- Display name</li> <li>- Address</li> <li>- E-mail address</li> <li>- Phone number</li> </ul>	French contact data is correctly changed.	

5.5	Change invoice issuer contact information in Italian.	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.	Change Italian contact data:  - Display name - Address - E-mail address - Phone number	Italian contact data is correctly changed.	
5.6	Change invoice issuer contact information in English.	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.	Change English contact data:  - Display name - Address - E-mail address - Phone number	English contact data is correctly changed.	
5.7	Change/add invoice issuer sector.	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.	Change sector and/or add an additional sector.	Sector is correctly changed/added.	
5.8	Change/add invoice issuer account data.	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.	Change account data and/or add an additional account.	Account is correctly changed/added.	

<p><b>5.9</b></p>	<p>Change the limit for anomaly detection.</p>	<p>SDE</p>	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Limit for anomaly detection is set to 1,000.</p>	<p>Set limit for anomaly detection to new value 125,000.</p>	<p>Limit has been set to the new value.</p>	
<p><b>5.10</b></p>	<p>Declare invoice issuer as a donation organization.</p> <p>(Optional if the invoice issuer does not submit donation requests.)</p>	<p>SDE</p>	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Invoice issuer is not declared as a donation organization.</p>	<p>Change the donation ID for the invoice issuer.</p> <p>Declare invoice issuer as a donation organization.</p>	<p>Donation ID has been activated.</p> <p>Invoice issuer is allowed to submit donation requests.</p>	
<p><b>5.11</b></p>	<p>Invoice issuer is no longer declared as a donation organization.</p> <p>(Optional if the invoice issuer does not submit donation requests.)</p>	<p>SDE</p>	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Invoice issuer is declared as a donation organization.</p>	<p>Change the donation ID for the invoice issuer.</p> <p>Invoice issuer is no longer declared as a donation organization.</p>	<p>Donation ID has been deactivated.</p> <p>Invoice issuer is not allowed to submit donation requests.</p>	

### 4.5.1 Changing Invoice Issuer Data Logo\*

This use case is a central element of the services provided by SIX and makes it possible to keep invoice issuer data up to date.

Invoice issuer data can be managed in full only by the primary network partner.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
6.1	Change invoice issuer logo.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>A logo is saved with the invoice issuer.</p>	Replace invoice issuer's logo.	<p>Logo is correctly replaced.</p> <p>New logo is displayed.</p>	
6.2	Delete invoice issuer logo.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>A logo is saved for the invoice issuer.</p>	Delete invoice issuer's logo.	<p>Logo is deleted.</p> <p>Logo is no longer displayed.</p>	



<b>6.3</b>	Add invoice issuer logo.	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.  No logos are saved for the invoice issuer.	Add invoice issuer's logo.	Logo has been added and is displayed.	
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### 4.5.2 Deregistering Invoice Issuers\*

This use case is a central element of the services provided by SIX and makes it possible to deregister an invoice issuer from the eBill service. Invoice issuer deregistration can be performed only by the primary network partner. When an invoice issuer is deregistered, it is not deleted but set to "inactive" in the system. As a result, it can no longer submit business cases or be found on the list of invoice issuers in the eBill Portal.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
7.1	Deactivate eBill for invoice issuer.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer was set up in the eBill infrastructure.</p> <p>The status is ACTIVE and subscriptions to the invoice issuer are allowed.</p> <p>The invoice issuer is no longer visible in the eBill Portal for subscriptions.</p>	Deactivate eBill for invoice issuer.	<p>Invoice issuer status is inactive. Subscriptions to the invoice issuer are no longer possible.</p> <p>The invoice issuer is no longer visible in the eBill Portal for subscriptions.</p>	

## 4.6 Submitting Supplementary Invoice Issuer Document

This use case is a supporting element of the services provided by SIX and enables the primary network partner to create invoice issuer supplementary documents that must be attached to all invoice issuer business cases (e.g. price lists) with just one submission.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
8.1	Submit supplementary documents for a specific invoice issuer.	SD	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>eBill customer subscribes to this particular invoice issuer and an invoice has been delivered.</p>	Upload supplementary documents for each language (ger, fre, ita, eng) for a specific invoice issuer.	<p>Supplementary documents can now be retrieved via the Bank Portal for the specified invoice issuer.</p> <p>The supplementary document can be retrieved and displayed in the eBill Portal.</p>	
8.2	Submit a second supplementary document for a specific invoice issuer.	SD	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Supplementary documents are already saved for the invoice issuer.</p>	Upload additional supplementary documents for each language (ger, fre, ita, eng) for a specific invoice issuer.	<p>Supplementary documents can now be retrieved via the Bank Portal for the specified invoice issuer.</p> <p>The second supplementary document as well as the first supplementary document can be retrieved and displayed in the eBill Portal.</p>	

## 4.7 Querying Supplementary Document

This use case is a supporting element of the services provided by SIX and enables the network partner to see which supplementary documents its invoice issuers have, e.g. to determine the validity period of a supplementary document.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
9.1	Query information on supplementary documents of a specific invoice issuer.	SD	Access via the NWP API is established.  Invoice issuer is fully registered.  Supplementary documents are saved for this invoice issuer.	Query supplementary documents for a specific invoice issuer.	All information on the supplementary documents for the desired invoice issuer is reported back and displayed.	

## 4.8 Changing Invoice Issuer Supplementary Data

This use case is a supporting element of the services provided by SIX and enables the primary network partner to edit its submitted supplementary documents for its invoice issuers.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
10.1	Change supplementary document for a specific invoice issuer.	SD	Access via the NWP API is established.  Invoice issuer is fully registered.  A supplementary document is saved for this invoice issuer.	Change a supplementary document for a specific invoice issuer.  Presentation date Label Last name	Supplementary documents for the specific invoice issuer are changed.  Presentation date Label (visible in the invoice issuer's Bank Portal). Name (visible in the eBill Portal on an invoice).	

## 4.9 Deleting Supplementary Invoice Issuer Documents

This use case is a supporting element of the services provided by SIX and enables the primary network partner to delete invoice issuer supplementary documents.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
11.1	Delete supplementary document for a specific invoice issuer.	SD	Access via the NWP API is established.  Invoice issuer is fully registered.  A supplementary document is saved for this invoice issuer.	Delete a supplementary document for a specific invoice issuer.	Supplementary documents for the specific invoice issuer are deleted.  Supplementary document is no longer visible in the invoice issuer's Bank Portal nor in the customer's eBill Portal.	

## 4.10 Querying Invoice Recipients\*

This service is a central element of the services provided by SIX and supports a simplified (invoice-issuer initiated) process for subscribing an invoice recipient to the invoice issuer for obtaining electronic invoices. This operation is also referred to as "Invoice Recipient Look-up".

Only invoice recipients that have consented to the look-up process or have an active relationship with the invoice issuer can be found.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
12.1	Search for a possible invoice recipient by e-mail address.  Invoice recipient is found.	SDE	Access via the NWP API is established.  Invoice issuer has the invoice recipient's e-mail address.  The invoice recipient must allow being found by invoice issuers.	Search for an invoice recipient via the e-mail address that the customer stores for eBill.	The desired recipient is found. E-mail address and the participant's identification number (PID) is reported back.  Search result is displayed accordingly.	
12.2	Search for a possible invoice recipient customer ID (Participant Identification Number – PID).	SDE	Access via the NWP API is established.  The invoice issuer has a customer ID (participant identification number – PID) of the invoice recipient.  The invoice recipient must allow being found by invoice issuers.	Search for an invoice recipient via invoice recipient ID such as participant identification number (PID).  Search with: 41020165119257508	The desired recipient is found. Participant identification number (PID) is reported back.  Search result is displayed accordingly.	

<p><b>12.3</b></p>	<p>Search for a possible invoice recipient by e-mail address.  Invoice recipient is <b>not</b> found.</p>	<p>SDE</p>	<p>Access via the NWP API is established.  Invoice issuer has the invoice recipient's e-mail address.  The invoice recipient must be set up in such a way that it cannot be found by invoice issuers.</p>	<p>Search for an invoice recipient via the e-mail address that the customer stores for eBill.</p>	<p>The desired participant is not found. E-mail address is not reported back.  Search result is displayed accordingly.</p>	
<p><b>12.4</b></p>	<p>Search for a possible invoice recipient by UID.</p>	<p>SDE</p>	<p>Access via the NWP API is established.  Invoice issuer has the invoice recipient's UID address.  The invoice recipient is registered as a company and must allow being found by invoice issuers.</p>	<p>Search for an invoice recipient via eBill user (UID) that the business customer stores for eBill.</p>	<p>The desired participant is found. eBill user (UID) and participant identification number (PID) are reported back.  Search result is displayed accordingly.</p>	
<p><b>12.5</b></p>	<p>Search for several possible invoice recipients by e-mail address.</p>	<p>SDE</p>	<p>Access via the NWP API is established.  Invoice issuer has several e-mail addresses of possible invoice recipients.</p>	<p>Search for multiple invoice recipients via multiple e-mail addresses.  Search for multiple invoice recipients via multiple e-mail addresses that have been stored for eBill.</p>	<p>The found participants are reported back.  Search result is displayed accordingly.</p>	



			The invoice recipients must allow being found by invoice issuers.			
<b>12.6</b>	Search for multiple possible invoice recipients by customer ID (Participant Identification Number – PID).	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer has several PIDs of possible invoice recipients.</p> <p>The invoice recipients must allow being found by invoice issuers.</p>	Search for multiple invoice recipients via invoice recipient ID, such as Participant Identification Number (PID).	<p>The found participants are reported back.</p> <p>Search result is displayed accordingly.</p>	



<b>12.7</b>	Search for multiple possible invoice recipients by UID.	SDE	Access via the NWP API is established.  Invoice issuer has several UIDs of possible invoice recipients.  The invoice recipients must allow being found by invoice issuers.	Search for multiple invoice recipients via eBill user (UID).	The found participants are reported back.  Search result is displayed accordingly.	
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## 4.11 Submitting Business Cases\*

This use case is a core element of the services provided by SIX. It ensures that business cases are sent from the network partner to the eBill infrastructure.

Business cases can be submitted via any network partner. Submission results in a business case being placed in the data room of the network partner and invoice issuer involved.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
13.1	Submit an invoice.	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Invoice recipient has subscribed to the desired invoice issuer.</p>	Submit invoice as PDF/A-3.	Invoice is processed and can be seen in the Bank Portal and in the eBill Portal as "Invoice" with "Open" status.	
13.2	<p>Submit a reminder.</p> <p>(Optional if the invoice issuer does not submit reminders.)</p>	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Invoice recipient has subscribed to the desired invoice issuer.</p>	Submit reminder as PDF/A-3 with reference to an invoice that has been previously submitted.	<p>Reminder is processed and can be seen in the Bank Portal and in the eBill Portal as "Reminder" with "Open" status.</p> <p>The business case (details) contains a reference to the original invoice and vice versa.</p>	

			An invoice has been submitted.		In the customer's eBill Portal, the original invoice can be retrieved via the reminder, and the reminder via the original invoice.	
<b>13.3</b>	Submit an installment invoice.  (Optional if the invoice issuer does not submit installment invoices.)	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.  Invoice recipient has subscribed to the desired invoice issuer.	Submit installment invoice as PDF/A-3	Installment invoice is processed and can be seen in the Bank Portal and in the eBill Portal as "Invoice" with "Open" status.	
<b>13.4</b>	Submit a credit note.  (Optional if the invoice issuer does not submit credit notes.)	SDE	Access via the NWP API is established.  Invoice issuer is fully registered.  Invoice recipient has subscribed to the desired invoice issuer.	Submit credit note as PDF/A-3.	Credit note is processed and can be seen in the Bank Portal and in the eBill Portal as "Credit note".	
<b>13.5</b>	Submit a notification.  (Optional if the invoice issuer does not submit notifications.)	SDE	Access via the NWP API is established.	Submit notification as PDF/A-3.	Notification is processed and can be seen in the Bank Portal and the eBill Portal as "Notification".	

			<p>Invoice issuer is fully registered.</p> <p>Invoice recipient has subscribed to the desired invoice issuer.</p>			
<b>13.6</b>	<p>Rolled-over invoice.</p> <p>Submit an invoice with reference to another business case of the same invoice issuer.</p>	SDE	<p>Access via the NWP API is established.</p> <p>Invoice issuer is fully registered.</p> <p>Invoice recipient has subscribed to the desired invoice issuer.</p> <p>An invoice has already been submitted and its status is "Open".</p>	<p>Submit invoice as PDF/A-3 with reference to a business case that has previously been submitted.</p>	<p>Invoice is processed and can be seen in the Bank Portal and in the eBill Portal as "Invoice" with "Open" status.</p> <p>The referenced rolled-over invoice is displayed with "Completed" status.</p>	

<p><b>13.7</b></p>	<p>Submit a donation request. Without a specific donation purpose and donation amount.  (Optional if the invoice issuer does not submit donation requests.)</p>	<p>SDE</p>	<p>Access via the NWP API is established.  An invoice issuer is fully registered as a donation invoice issuer.  Invoice recipient has subscribed to the desired invoice issuer.</p>	<p>Submit invoice as PDF/A-3.  One-time donation purpose and donation amount.</p>	<p>Invoice is processed and can be seen in the Bank Portal and the eBill Portal as "Donation request" with "Open" status.</p>	
<p><b>13.8</b></p>	<p>Submit a donation request (earmarked). With specific donation purposes and donation amounts.  (Optional if the invoice issuer does not submit donation requests.)</p>	<p>SDE</p>	<p>Access via the NWP API is established.  An invoice issuer is fully registered as a donation invoice issuer.  Invoice recipient has subscribed to the desired invoice issuer.</p>	<p>Submit invoice as PDF/A-3.  List of donation purposes and list of donation amounts is provided.</p>	<p>Invoice is processed and can be seen in the Bank Portal and the eBill Portal as "Donation request" with "Open" status.</p>	

<p><b>13.9</b></p>	<p>Submit incorrect invoice.  Invoice recipient has not subscribed to the invoice issuer.</p>	<p>SDE</p>	<p>Access via the NWP API is established.  Invoice issuer is fully registered.  Invoice recipient has <b>not</b> subscribed to the desired invoice issuer and the eBill user cannot be added automatically (look-up).</p>	<p>Submit invoice as PDF/A-3.</p>	<p>Invoice is rejected and not processed.  Internal process in the event of an error is triggered at the NWP.  The invoice issuer must be informed about the incorrect submission.  The invoice issuer adjusts their processing.</p>	
<p><b>13.10</b></p>	<p>Submit incorrect invoice.  With incorrect identification.</p>	<p>SDE</p>	<p>Access via the NWP API is established.  Invoice issuer is fully registered.</p>	<p>Submit invoice as PDF/A-3 with wrong participation identification number (PID) or unknown e-mail address.</p>	<p>Invoice is rejected and not processed.  Internal process in the event of an error is triggered at the NWP.  The invoice issuer must be informed about the incorrect submission.  The invoice issuer adjusts their processing.</p>	

## 4.12 Querying Business Case Data

This use case is a supporting element of the services provided by SIX and enables the network partner to request information concerning business cases that it has initiated.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
14.1	Query business case data for an invoice.	SD	Access via the NWP API is established.  An invoice was submitted and processed.	Query business case data for the submitted invoice.	Information about the requested invoice is reported back and displayed.	
14.2	Query business case data for a reminder.	SD	Access via the NWP API is established.  A reminder was submitted and processed.	Query business case data for the submitted reminder.	Information about the requested reminder is reported back and displayed.	
14.3	Query business case data for an installment invoice.	SD	Access via the NWP API is established.  An installment invoice was submitted and processed.	Query business case data for the submitted installment invoice.	Information about the requested installment invoice is reported back and displayed.	
14.4	Query business case data for a donation request.	SD	Access via the NWP API is established.  A donation request invoice was submitted and processed.	Query business case data for the submitted donation request.	Information about the requested donation request is reported back and displayed.	

### 4.13 Querying Business Case Processing Events

This use case is a supporting element of the services provided by SIX and enables the network partner to query business case processing events and forward the information to its invoice issuers.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
15.1	Query status change of business cases (invoice and reminder).	SD	<p>Access via the NWP API is established.</p> <p>An invoice and a reminder were submitted and processed.</p>	<p>Business cases invoices and reminders have been approved or rejected.</p> <p>Query processing events for business case invoices and reminders.</p>	Information on the status change for the business cases invoices and reminders is reported back and processed by the NWP.	
15.2	Query status change of business cases (donation requests with a specific donation purpose).	SD	<p>Access via the NWP API is established.</p> <p>Donation requests were delivered and processed.</p>	<p>Donation request business cases with a specific donation purpose approved.</p> <p>Query processing events for business case donation requests.</p>	Status change information for the donation request business case is reported back and processed by the NWP including the donation purpose.	



<b>15.3</b>	Query status change of business cases (installment invoice).	SD	Access via the NWP API is established.  An installment invoice was submitted and processed.	Business cases for installment invoice have been submitted and approved or rejected.  Query processing events for business case installment invoices.	Information on the status change for the installment invoice is reported back and processed by the NWP.	
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## 4.14 Retrieving Subscription and Cancellation Events\*

This use case is an element of the services provided by SIX and enables the network partner to obtain events for the invoicing authorization created between the invoice recipient and invoice issuer and to forward the information to its invoice issuers. By processing of these events, validation errors during submission can be avoided.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
16.1	Query events via delivery permit (subscription).	SDE	<p>Access via the NWP API is established.</p> <p>No subscription forms are saved for the invoice issuer.</p> <p>Subscription to the invoice issuer takes place <b>without</b> a subscription form.</p>	Invoice recipient subscribes to the invoice issuer.	<p>Information on the desired subscription status is transmitted.</p> <p>The information is communicated to the invoice issuer in an appropriate form.</p> <p>Relationships are accordingly tracked in the NWP infrastructure.</p>	

<p><b>16.2</b></p>	<p>Query events via delivery permit (cancellation).</p>	<p>SDE</p>	<p>Access via the NWP API is established.</p> <p>Invoice recipient has subscribed to the invoice issuer.</p>	<p>Invoice recipient cancels subscription to the invoice issuer.</p>	<p>Information on the desired cancellation status is transmitted.</p> <p>The information is communicated to the invoice issuer in an appropriate form.</p> <p>Relationships are accordingly tracked in the NWP infrastructure.</p>	
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## 4.15 Querying Changed E-Mail Addresses

This use case is a supporting element of the services provided by SIX and enables the network partner to retrieve events for changed e-mail addresses and to forward the information to its invoice issuers. By processing of these events, validation errors during submission can be avoided.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
17.1	Collect events about e-mail addresses that have been changed.	SD	Access via the NWP API is established.  Invoice recipient is registered for eBill.	Invoice issuer changes their e-mail address in the eBill Portal.  An invoice is submitted to the old e-mail address.  Retrieve events for e-mail addresses that have been changed.	Event for the changed e-mail address is sent.  The information is communicated to the invoice issuer in an appropriate form.  Invoice issuer saves the new e-mail address for further submissions.	

## 4.16 Invoice Recipient Subscription via Invoice Issuer Website

This service supports an invoice recipient-initiated subscription to the invoice issuer via the invoice issuer's website/portal.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
18.1	Invoice recipient can register for eBill directly on the invoice issuer's website.	SD	<p>Access via the NWP API is established.</p> <p>Invoice recipient is registered for eBill.</p> <p>Invoice issuer supports an eBill subscription directly from its website.</p>	<p>1. The invoice recipient enters the e-mail address used in eBill on the invoice issuer's website. The subscription is triggered.</p> <p>2. The verification code that was sent to the specified e-mail address is entered on the invoice issuer's website.</p>	<p>1. An e-mail with verification code is sent to the specified e-mail address.</p> <p>2. After successful subscription with the verification code, a relationship between invoice issuer and invoice recipient with the status "Active" is created and can be seen in the Bank Portal under "Invoice issuer relationships" for the corresponding eBill user.</p> <p>The invoice recipient's subscription data are reported back to the NWP.</p>	

<p><b>18.2</b></p>	<p>Invoice recipient subscribes via the invoice issuer's website with an incorrect verification code.</p>	<p>SD</p>	<p>Access via the NWP API is established.</p> <p>Invoice recipient is registered for eBill.</p> <p>An invoice issuer can be created via the Bank Portal.</p> <p>Invoice issuer supports an eBill subscription directly from its website.</p>	<p>1. The invoice recipient enters the e-mail address used in eBill on the invoice issuer's website. The subscription is triggered.</p> <p>2. An incorrect verification code is entered on the invoice issuer's website.</p>	<p>1. An e-mail with verification code is sent to the specified e-mail address.</p> <p>2. Error message is reported back to the NWP and displayed to the invoice recipient.</p>	
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## 4.17 Checking if Invoice Recipient is Available in eBill Infrastructure

This service enables a network partner to check whether an invoice recipient is available in the eBill infrastructure based on the "PID" participant number.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
19.1	Check if an invoice recipient exists. Customer is found.	SDE	<p>Access via the NWP API is established.</p> <p>The invoice issuer has a customer ID such as the participant identification number (PID) of the invoice recipient.</p>	<p>Check if an invoice recipient exists via the invoice recipient ID participant identification number (PID) in the eBill infrastructure.</p> <p>Search e.g. with: 41020165119257508</p>	<p>The desired recipient is found. Participant identification number (PID) is reported back.</p>	
19.2	Check if an invoice recipient exists. Customer is not found.	SDE	<p>Access via the NWP API is established.</p> <p>The invoice issuer has a customer ID, such as the participant identification number (PID) of the invoice recipient.</p>	<p>Check whether an invoice recipient exists in the eBill infrastructure via the invoice recipient ID, such as participant identification number (PID).</p> <p>The search is made with a PID which does not exist.</p> <p>Search e.g. with: 41020165112345678</p>	<p>The desired participant is not found.</p>	

## 4.18 Creating or Changing Subscription Form Directly in eBill Infrastructure

This use case is a supporting element of the services provided by SIX and makes it possible for an NWP to save a subscription form for an invoice issuer directly in the eBill infrastructure. For the additional fields, only fields that are mandatory should be created. Such a subscription form will be accessed whenever an invoice recipient wants to subscribe to an invoice issuer. Only the primary network partner of an invoice issuer can save subscription forms for this invoice issuer.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
20.1	Create a subscription form in the eBill infrastructure.	SD	<p>Access via the NWP API is established.</p> <p>The NWP has created its own invoice issuer.</p>	<ul style="list-style-type: none"> <li>- A subscription form is saved for the desired invoice issuer.</li> <li>- Info text in the respective language (ger, fre, ita, eng).</li> <li>- Form field (CUSTOM type for all to be visible) in the respective language (ger, fre, ita, eng), e.g. for customer number.</li> <li>- Validation of the form field: minimum length 3 digits/maximum 6 digits, allowed numeric input between 800 and 700,500.</li> <li>- Description text for customer number in the respective language (ger, fre, ita, eng) e.g.: "You can find the customer number on the back of your customer card".</li> <li>- Create form field of BIRTHDAY type.</li> </ul>	<p>If a user wishes to subscribe to this invoice issuer via the eBill Portal, the created subscription form will be displayed.</p> <ul style="list-style-type: none"> <li>- Saved info text is displayed.</li> <li>- Input field (e.g. for customer number) is displayed.</li> <li>- Input according to saved validation.</li> <li>- Date of birth field is displayed. No input possible.</li> <li>- Check the subscription form in ger, fre, ita, eng, depending on the language of the invoice recipient.</li> </ul>	

<p><b>20.2</b></p>	<p>Create a subscription form for a donation invoice issuer in the eBill infrastructure.</p>	<p>SD</p>	<p>Access via the NWP API is established.</p> <p>The NWP has created its own donation invoice issuer.</p>	<ul style="list-style-type: none"> <li>- A subscription form is saved for the desired invoice issuer.</li> <li>- Info text in the respective language (ger, fre, ita, eng).</li> <li>- Form field (CUSTOM type for all to be visible) in the respective language (ger, fre, ita, eng), e.g. for customer number.</li> <li>- Validation of the form field: minimum length 3 digits/maximum 6 digits, allowed numeric input between 800 and 700,500.</li> <li>- With several selection fields for donation purpose, e.g. for "oceans, jungles, Arctic".</li> </ul>	<p>If a user wishes to subscribe to this invoice issuer via the eBill Portal, the created subscription form will be displayed.</p> <ul style="list-style-type: none"> <li>- Saved info text is displayed.</li> <li>- Input field (e.g. for customer number) is displayed.</li> <li>- Input according to saved validation.</li> <li>- Check the subscription form in ger, fre, ita, eng, depending on the language of the invoice recipient.</li> <li>- A donation purpose "oceans, jungles, Arctic" can be selected.</li> </ul>	
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<p><b>20.3</b></p>	<p>Edit an existing subscription form in the eBill infrastructure.</p>	<p>SD</p>	<p>Access via the NWP API is established.</p> <p>The NWP has created its own invoice issuer. A subscription form is saved for this.</p> <p>The network partner is assigned as primary NWP for this invoice issuer.</p>	<ul style="list-style-type: none"> <li>- Change info text in the respective language (ger, fre, ita, eng).</li> <li>- Form field: Change name, description and validation rule.</li> </ul>	<p>If a user wishes to subscribe to this invoice issuer via the eBill Portal, the created subscription form will be displayed.</p> <p>The amended subscription form is displayed.</p> <ul style="list-style-type: none"> <li>- Change info text according to the change in the respective language (ger, fre, ita, eng).</li> <li>- Form field according to change:             <ul style="list-style-type: none"> <li>o Designation</li> <li>o Description</li> <li>o Validation rule</li> </ul> </li> </ul>	
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## 4.19 Querying Subscription Form

The network partner can query the subscription forms saved for an invoice issuer. The network partner receives the saved data for the requested subscription form. Only the primary network partner can receive the data on an invoice issuer.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
21.1	Query form data of an invoice issuer in the eBill infrastructure.	SD	<p>Access via the NWP API is established.</p> <p>The NWP has created its own invoice issuer. A subscription form is saved for this in the eBill infrastructure.</p> <p>The NWP is assigned as primary NWP for this invoice issuer.</p>	Query data of the saved subscription form for the invoice issuer.	The form data of the desired invoice issuer saved in the eBill infrastructure is transmitted and displayed.	

## 4.20 Deleting Subscription Form

The network partner can delete the subscription forms saved for an invoice issuer.

ID	Brief description of test	Declaration	Prerequisites	Action	Expected result	Test result/outcome (OK/NOK/Skip)
22.1	Delete the subscription form of an invoice issuer in the eBill infrastructure.	SD	<p>Access via the NWP API is established.</p> <p>The NWP has created its own invoice issuer. A subscription form is saved for this.</p> <p>The NWP is assigned as primary NWP for this invoice issuer.</p>	Delete data of the saved subscription form for the invoice issuer.	<p>The saved subscription form of the desired invoice issuer has been deleted in the eBill infrastructure.</p> <p>When trying to subscribe to this invoice issuer via the eBill Portal, subscription form is no longer displayed.</p>	

## 4.21 Error Cases and Error Handling

Each HTTP request from the client is answered with an HTTP status code. The status code indicates to the client whether the request was successful or not. In the event of an error, the response body contains additional information about what the cause of the error may be.

If an NWP requires help from SIX for problems, the requests to SIX should not be formulated in general terms. SIX always requires the following information for research and better error analysis:

- The use case, which call was accessed and the contents of it
- Date and exact time of the problem/test
- Which level is affected: XE or XP
- Error message
- Network Partner ID
- X-Correlation-Id (an ID that identifies the request, assigned by the network partner. It is also reported back in the response).

**Example:**

<b>Request made:</b>	GET /api/pns/xe/networkpartner/v1/billers/BIID000000117 Host: api-etu.six-group.com		
<b>Date:</b>	28.08.2019 / 08:51	<b>Network Partner ID:</b>	NWID0091234567
<b>System XE, XP, P level:</b>	XE level	<b>X-Correlation-Id:</b>	bde19bdc-cb12-4599-b14c-a9d141d94785
<b>Error message</b>	<pre>{   "type": "/problems/NETWORK_PARTNER_OPERATION_NOT_ALLOWED",   "title": "Requested operation not allowed for network partner",   "status": 403,   "detail": "There are restrictions regarding access to some resources. See network partner API documentation in &lt;&lt;Primary Network Partners&gt;&gt; for details.",   "instance": "/api/pns/networkpartner/v1/billers/BIID000000117/errors/NWID0000011212/bde19bdc-cb12-4599-b14c-a9d141d94785",   "technicalReason": "failed to access the resource, the network partner with id 'NWID0000011212' is not allowed to access the resource of the biller with id 'BIID000000117'" }</pre>		