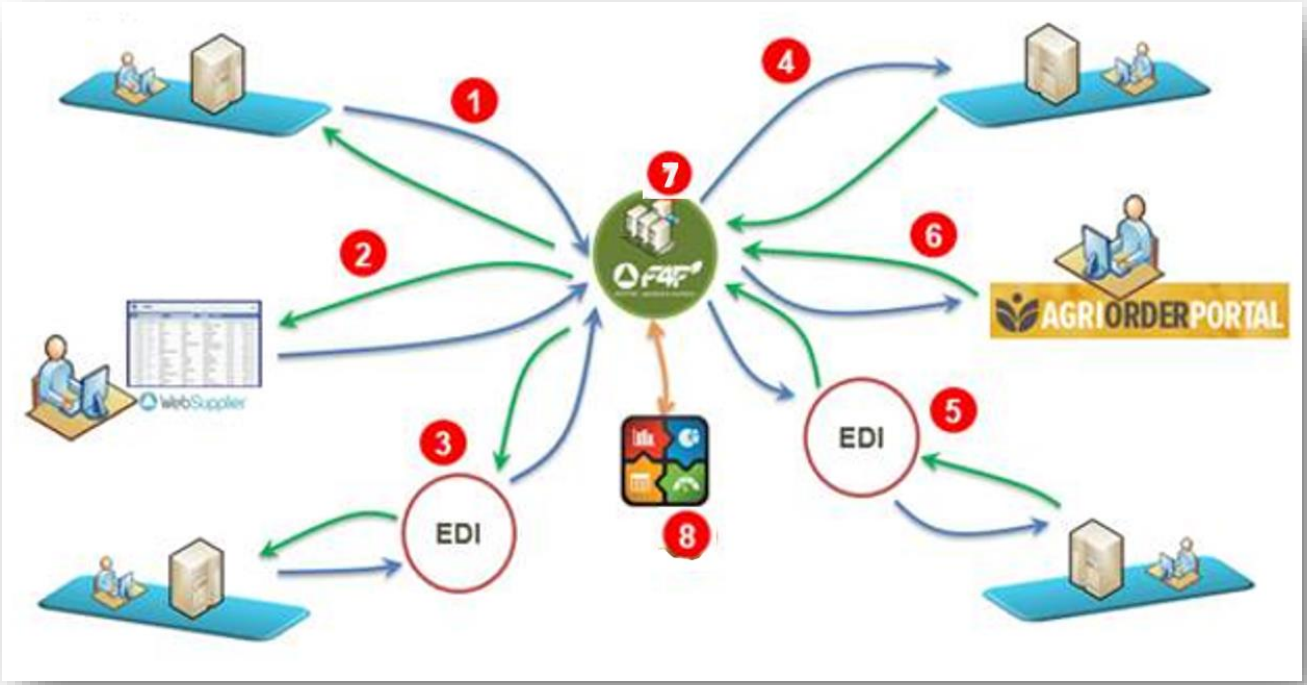
AGRO CLOSER
STICHTING AGRO CLOUD SERVICES

Proagrica



Agro CloSer

B2B Onboarding guide 2.0

Content

1 Introduction
1.1 Purpose of this document
1.2 Background of Proagrica and their relationship with Agro CloSer
1.3 How the solution will work
1.4 Price of the solution
1.5 Contacts in case of questions

2. Onboarding steps
2.1 Onboarding form
2.1.1 Details
2.1.2 Project range
2.1.3 Message format
2.1.4 Communication protocol
2.1.5 Schedule
2.2 Project initiation
2.2.1 Start of the project
2.3 The project
2.4 Test and migrate to production environment

3. Connection setting (technical)
3.1 Proagrica "Interlok" software (adapter)
3.2 AS / 2
3.3 HTTP (s) including REST
3.4 sFTP
3.5 X400
3.6 different

4. Message formats (functional)
4.1 Order
4.1.1 General principles
4.1.2 Envelope level
4.2 Order confirmation
4.2.1 General principles
4.3 Delivery note
4.3.1 General principles
4.4 Invoice
4.4.1 General principles

5. Message formats (technical)
5.1 Agro CloSer XML

6. Useful websites and contact details
6.1 General
6.2 Technical
6.3 Support

1. INTRODUCTION

1.1 PURPOSE OF THIS DOCUMENT

This document is intended for Agro CloSer partners. It means that all members of Agrodis and Nefyto are invited to use this document. Its purpose is to provide a step-by-step guide to the work required by partners to enable them to exchange B2B EDI.

1.2 BACKGROUND TO PROAGRICA AND THEIR RELATIONSHIP WITH AGRO CLOSER

Agro CloSer has spent considerable time and effort in its preparation of the launch of this new initiative and was keen to work with a partner with a proven track record and ability to quickly and efficiently deliver the project and connections services needed. Part of the attraction of working with Proagrica was to take advantage of their very flexible infrastructure which will enable customers to send and receive electronic messages in a wide range of formats and communication protocols. The specifics of each connection are to be agreed between the customer and Proagrica.

1.3 HOW THE SOLUTION WILL WORK

Each partner will connect to the Proagrica network and exchanges electronic messages with their customers or suppliers. The goal is to connect you to the Proagrica hub, allowing you to exchange documents with all parties within the Agro CloSer group.

The Proagrica Hub is primarily a routing engine, receiving files of information from a variety of sources, applying the appropriate processing and forwarding them on to the correct destination, all of which is achieved in a matter of seconds.

By connecting to the Proagrica Hub, companies are able to receive files from the IT system of another company directly into their own IT system, without the need for re-keying of data. Documents can also be sent back in the opposite direction. This allows you to send/receive purchase orders, and to send/receive back order responses, delivery notes and invoices, which arrive electronically in your system and so remove redundant tasks from the process.

Proagrica has experience of connecting a vast range of back office systems, including:

- SAP
- Oracle
- Navision
- Great Plains
- Open Accounts
- Microsoft Dynamics
- and many others, including ones developed in-house.

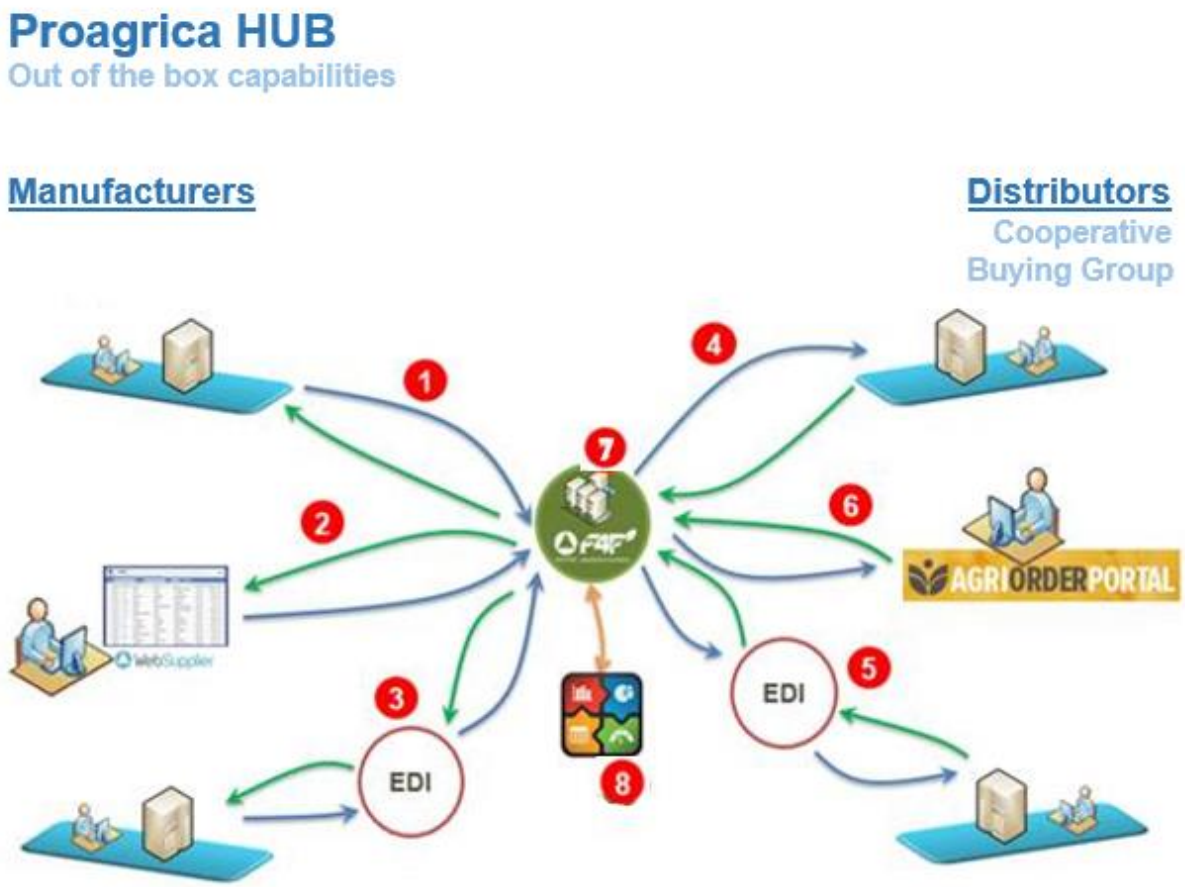
All files received at Proagrica are either in the Agro CloSer XML standard or are converted into the Agro CloSer XML standard by Proagrica, which means that no organisation needs to worry about the format required by the intended recipient, since the partner or Proagrica takes care of that. As part of the process, all parties will use GS1 codes; for organisation identification (GLN), location identification (GLN), product codes (GTIN), and pallet identification (SSCC).

Documents passing through the Proagrica Hub are encrypted for additional security, and are fully tracked to ensure successful delivery in every case. You will have access to an online tracking

application where you will be able to follow all your messages, together with the actual status. Only information sent to you or sent by you are visible to you (visibility -1 and +1). No other people in the chain will have visbility to your data. The Agro CloSer board monitors the performance of the Proagrica network (without insight into your data).

The onboarding process is completely flexible: if your company has already invested in this sort of capability, Proagrica will work with your existing software and methods. It means that existing Elemica messages (with in addition the required Agro CloSer fields) can be kept as point-to point or be re-routed via the Proagrica network. See **(3)** and **(5)** in below picture.

If this activity is new to you, Proagrica can guide you step-by-step through what needs to be in place to make it happen quickly and efficiently. We suggest in that case to start your first project with **Order Message** and **Delivery message** between you and your customer or supplier



1] EDI: Crop protection business exchanges data with Proagrica Hub.

2] PORTAL: Manufacturers / suppliers without own ERP can rent the WebSupplier portal

3] EDI: Some crop protection businesses already have an EDI provider. Proagrica connects to other platforms and competitors.

4] EDI: Coops, buying groups, distributors exchange data with Proagrica Hub.

5] EDI: Coops, buying groups, distributors can keep using their own EDI provider.

6] PORTAL.: Distributors / customers without own ERP can rent the WebBuyer portal

7] Tracking tool for your messages.

8] Data visualization & query tools.

1.4 PRICE OF THE SOLUTION

The services and software to connect you to Agro CloSer are negotiated with Agro CloSer and are mentioned in the SOW document.

1.5 CONTACTS IN CASE OF QUESTIONS

Regarding this onboarding process:

Joachim Crombez +32 496 16 73 08, joachim.crombez@proagrica.com

Secreatriat Agro CloSer: AgroCloser@agrocloser.nl

Regarding operational issues:

Proagrica Support Desk

support@adaptris.com

Belgium support number +32 (0)2 401 9 206

France support number +33 (0)1 707 0 7967

UK support number +44 (0)203 178 2783

Germany support number +49 (0)692 2224 6118

Australia support number +61 (0)2 9839 3900

South Africa support number +27 (11) 267 8686

Poland support number +48 68 382 29 92

2 ONBOARDING STEPS

There are 4 steps in the onboarding process:

1) Decide on your preference by completing the onboarding form. This step will also register you on the Proagrica platform. This step includes how many of the 6 ways to connect to the Proagrica network apply to you.
2) Project initiation with Proagrica
3) Configuration, data mapping (if applicable) and communication setup
4) Test & migration to production environment

2.1 ONBOARDING FORM

The onboarding form will ask you for your details (Proagrica Hub registration) and will ask a couple of questions regarding your preferences:

- What messages can you send/receive?
- Do you need to send and receive?
- Do you have the possibility to link your ERP / WMS to the Proagrica network or do you need the WebBuyer / WebSupplier portals?
- What message format do you wish to exchange? There are 2 standard formats and the option to use your own format.
- How you wish to exchange messages with the Proagrica Hub? You have the choice between standard communication protocols and the option to suggest your own protocol. (which will be validated by Agro CloSer & Proagrica).
- What timelines are acceptable for you?

2.1.1 Details

The form will ask you for the following company details:

- Company name
- Company address
- General contact details (business owner of this process/project)
- Technical contact details

2.1.2 Project scope

Agro CloSer is looking to exchange orders and delivery notes as a **minimum** between customers and their suppliers. Order responses, invoices and the connection to the logistics partners are extra.

2.1.3 Message format

There are two standard format defined: Agro CloSer Xml and Proagrica Xml. The latter is meant for existing customers.

If you already exchange electronic messages in another format, please indicate which format this is. Proagrica will need detailed specifications of the format and samples for each document type.

2.1.4 Communication protocol

Proagrica offers the possibility to exchange messages using the following communication protocols:

- Proagrica Adapter: Lightweight Proagrica software installed at your side. It will pick up files from a file or network drive, encrypt the data and send to Proagrica. In the other direction it will receive data, decrypt the messages and put the file on a file or network drive.
    - This option is advised if you don't have any EDI infrastructure yet.
- AS/2: communication standard based on HTTP and S/MIME.
- sFTP: secure version of FTP (File Transfer Protocol)
- REST protocol
- X400 protocol

For non-paying customers only, the underlined options are available. Paying customers are the suppliers. In the majority of the cases this is the manufacturer when they receive the orders from their distributors. In case a distributor wants to send messages to its members or farmers they become a supplier and have to pay for the messages.

If you already have another communication protocol in place, please specify which one. If you are already connected to another hub or community, there is a big chance Proagrica has an "interconnection" with that other network. Please specify the name.

2.1.5 Schedule

This is the schedule for an average Proagrica project:

- Week 1: first contact, requirement's analysis
- Week 2-4: mappings analysis, implementation, communication protocol setup and internal (unit) testing
- Week 5-7: deployment on test environment, end-to-end testing
- Week 8: go live and sign off

Based on this schedule, please let us know when you would like to start the project.

2.2 PROJECT INITITATION

2.2.1 Start of project

Proagrica will analyse the work required and will arrange a call between your commercial and technical representatives, Agro CloSer and Proagrica to formally initiate the project. This call will aim to achieve the following:

- Confirmation of the project scope and your preferences.
- Common understanding of the tasks required and the dependencies between them
- Agreement on when the project will take place.

At the end of this step the project will be formally launched if the following conditions are met:

- You have read the onboarding guide and completed the onboarding form.
- Agro CloSer & you have completed product, location or any other code lookups in an excel sheet and communicated this to the Proagrica Project Manager.
- Both Agro CloSer and you have confirmed having the necessary business & technical capacity to assist delivering the project. Holidays of key people have been communicated in both directions.
- You have provided test files and message specifications (if applicable).

2.3 THE PROJECT

If you already send and receive documents electronically, you will know exactly what is required here. If not, Proagrica will advise you on the simplest and most effective solution, based on your IT system, for making customer orders available to Proagrica for onward delivery to Agro CloSer.

Should you also wish to receive return messages, Proagrica will assist you and provide the necessary documentation.

During this step, Proagrica will work with you (if you have chosen a customized format) to convert your message format to/from the standard Proagrica XML format.

You and Proagrica will implement the technical solution to exchange the messages between your system and the Proagrica hub.

Proagrica will also complete the setup on the Proagrica Hub to enable communication between you and Agro CloSer.

Proagrica will execute a number of unit tests. Results of these tests are usually exchanged by email or using the communication protocol (if already completed at that point).

2.4 TESTING & MIGRATION TO PRODUCTION ENVIRONMENT

The projectfase contains several tests scenarios. Proagrica and you will run through these scenarios.

Once all the scenarios are completed successfully, you will accept the test solution, signalling Proagrica to move the solution to the production environment.

Proagrica usually doesn't repeat any tests on the production environment. The first order is usually the test of the production solution.

From this moment onwards, please always include the Proagrica Support Team regarding any issues or questions. (See previous chapter for contact details)

The first couple of weeks after the go live, the Proagrica Support Team can escalate issues to the project team. This period is called the "warranty period" or "hypercare" and enables Proagrica to offer a better service. Once a substantial number of messages have been exchanged without any problems, the project team will be dissolved. The Agro CloSer board will monitor the performance too as is agreed in the contract between Agro CloSer and Proagrica.

3 CONNECTION SETUP (TECHNICAL)

Agro CloSer & Proagrica offer the following standard connection methods:

- Proagrica "Interlok" software (Adapter) *
- AS/2 *
- HTTP(s) *
- sFTP
- REST
- X400 *
- Other *

*: can incur additional costs for non-paying customers, see also 3.14

3.1 PROAGRICA "INTERLOK" SOFTWARE (ADAPTER)

This software has to be installed at your premises, by preference on a server. The software communicates in a secure way with the Proagrica platform:

- Pick up messages from a local or network folder, encrypt the data, send over JMS.
- You load the data over JMS, decrypt the data, place the messages in a local or network folder.

The software has built in functionality that allows the Proagrica Support Team to be notified of errors or if the software is not running.

You need to provide a server (does not have to be dedicated, the software is very lightweight). Any environment, virtual or real, running Windows or Linux will work.

The software initiates all connectivity, meaning no process is "listening" to the outside world. The adapter will communicate with a number of Proagrica servers.

Note: IP adresses not provided, as these can change. Please use the FGDN's (Fully Qualified Domain Name)

In order to allow Proagrica to install & configure the software, please provide:

- The server name
- Operating system & version
- Confirmation your firewall allows communication with the servers mentioned above
- Information on your proxy server (if applicable)
- Remote access details (Windows Remote Desktop, Teamviewer or any other alternative)

The installation & configuration only takes 1 hour and doesn't require a reboot.

For more information, please follow this link: http://www.adaptris.com/pages/products-and-services/interlok

3.2 AS/2

AS2 (Applicability Statement 2) is a specification about how to transport data securely and reliably over the Internet. Security is achieved by using digital certificates and encryption. The AS2 protocol is based on HTTP and S/MIME.

- Files are encoded as "attachments" in a standardized S/MIME message (an AS2 message).
- AS2 messages are always sent using the HTTP or HTTPS protocol and usually use the "POST" method. Proagrica is using the HTTP protocol without the usage of authentication.
- Messages can be signed, but do not have to be. Proagrica always signs its messages.
- Messages can be encrypted, but do not have to be. Proagrica always encrypts its messages using 3DES.
- Messages may request a Message Disposition Notification [MDN] back if all went well, but do not have to request such a message. Proagrica requires an MDN and supports both synchronous and asynchronous MDNs. Proagrica prefers synchronous MDNs.

Before setting up the connection, Proagrica will send you a document with the test & live parameters and will send you the Proagrica public certificate you should use to encrypt the messages and to verify the Proagrica signature.

3.3 HTTP(S) INCLUDING REST

Proagrica supports several HTTP(s) implementation. Standard push-push, SOAP Webservices implementations, …

If you have an existing HTTP(s) implementation, please provide as much technical details as possible. Proagrica will analyse the information and will notify Agro CloSer and yourself of the additional costs this might incur.

3.4 sFTP

Proagrica supports sFTP, both for FTP servers hosted by Proagrica (preferred option) or hosted by yourself. Proagrica is not responsible for message delays if an externaly hosted server has limited availability.

The default way for FTP communication is:

- Separate server for test & live communication
- 1 folder to get/put your orders (filename has to be unique)
- 1 folder to get/put your order acknowledgements (filename has to be unique)
- 1 folder to get/put your delivery notes (filename has to be unique)
- 1 folder to get/put your invoices (filename has to be unique)

3.5 X400

A lot of Proagrica customers used an X400 implementation to exchange messages. For instance: X400, GXS, ATLAS400, …

Proagrica has the following X400 addresses available:

Live: C=WW / A=400NET / P=Proagrica / S=admin / G=f4f

Test: C=WW / A=400NET / P=Proagrica / S=test / G=f4f

Messages you send to Proagrica will be routed based on the content of the messages. This means your message format requires unique identifiers for yourself, Agro CloSer and the message type.

If an interconnection has to be setup between your X400 network and Proagrica's X400 network, this is your responsibility.

If you are planning to exchange a substantial volume of messages, Proagrica strongly suggests using another way of communication as X400 incurs a cost per message.

3.6 OTHER

If your preferred way of B2B communication is not listed, please get in touch with Proagrica for a detailed discussion on your alternative.

4 MESSAGE FORMATS (FUNCTIONAL)

As mentioned before, the minimum message set is the orders & delivery note message between a customer and his supplier. The most recent documentation for the exchange of Orders (PurchaseOrders, TransportOrders) and Deliveries (DespatchAdvices) are collected in a zip-file (180807.Implementation instruction T&T CPP.zip). We would like to draw your attention to the fact that these are concept versions that can change as a result of the pilots

DropBox:
https://www.dropbox.com/s/pd0exma4szsndra/190307.Implementation%20instruction%20T%26T%20CPP.zip?dl=0

4.1 ORDER

4.1.1 General principles

- The order message is used for everyday orders.
- Every order corresponds to a specific customerand a specific supplier.
- Every order contains one or more order lines.
- Every order results in just one order acknlowledgement, x delivery notes and x invoices. An order matches one delivery note based on a specific location and a specific delivery date. For each delivery, you only have one invoice.

4.1.2 Envelope level

An (optional) envelope can contain 1 or more orders from you to one ore more suppliers. Proagrica will, by default, split the envelope in individual orders. Return messages on bundled orders will not be merged.

4.2 ORDER ACKNOWLEDGEMENT

4.2.1 General principles

- The order acknowledgement is sent from the supplier to the buyer to confirm the reception of the order.
- The client order number is a central element that link all information flows. It must be stated on all following documents.
- In the response, all order lines must be used, whether it is accepted or not. But in the header, the state must be specified: accepted, rejected, modification
- The acknowledgement references exactly one order. All order lines have to be sent back.

4.3 DELIVERY NOTE

4.3.1 General principles

- The delivery note (DespatchAdvice) is sent from the supplier to the buyer to confirm the planned delivery. In case of a delivery via a third-party warehouse the ProAgrica portal will re-route the message of the warehouse on behalf of the supplier to the buyer.
- The message can also be used for the supplier to advise the third-party warehouse which products to pick for a certain buyer. In this case, after the picking process the third-party warehouse will send the DespatchAdvise message via the portal to the supplier and the buyer. The supplier will use the message to make its batch transaction booking and push the invoice message. The buyer will use the message to prepare the batch entry into their WMS before arrival of the product(s).
- The delivery note confirms SSCC's, GTIN's, quantities, batches, unloading dates and timeslot, and delivery locations (GLN).
- The delivery note references exactly one order. It can containa number of order lines, planned to be delivered to the same delivery location/shipto on the same date.

4.4 INVOICE

4.4.1 General principles

- The invoice is sent from the supplier to the buyer to bill the delivered goods.
- This message is considered as the exchange of invoice data as well as the actual legal invoice. Consequently, archiving is required of this message.
- The invoice corresponds with exactly one delivery note (DespatchAdvice).

5 MESSAGE FORMATS (TECHNICAL)

5.1 AGRO CLOSER XML

The most recent versions of the xml schema definitions for the Agro CloSer standard messages (Order, DespatchAdvice and Invoice) are to be found at:

http://www.agroconnect.nl/Portals/10/XSDs/TandT_CPP/v2018p01/TandT_CPP_Order_v2018p01.xsd
http://www.agroconnect.nl/Portals/10/XSDs/TandT_CPP/v2018p01/TandT_CPP_DespatchAdvice_v2018p01.xsd
http://www.agroconnect.nl/Portals/10/XSDs/TandT_CPP/v2018p01/TandT_CPP_Invoice_v2018p01.xsd

The complete implementation instruction can be requested at info@agroconnect.nl .

6 USEFULL WEBSITES AND CONTACT DETAILS

6.1 GENERAL

Proagrica website: http://www.proagrica.com

Adaptris website: http://www.adaptris.com/

AgroConnect website: http://agroconnect.nl

Nefyto website: http://nefyto.nl

Agrodis website http://agrodis.nl

6.2 TECHNICAL

Proagrica tracking tool:

- Live environment: https://cirrusconnect.eu.f4f.com/cirrus-connect/home.xhtml
- Test environment: https://cirrusconnectoat.eu.f4f.com/cirrus-connect/j_security_check

6.3 SUPPORT

Proagrica Support Desk, available 9h30 – 17h CET

Dutch phone number will follow shortly

support@adaptris.com