



# Using Scoopy IP over BGAN

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This document provides recommendations on the use of the Scoopy IP codec from AETA Audio Systems over the BGAN network. It explains its features and benefits, how to set up Scoopy IP for use over BGAN, the equipment needed and customisation required for use with BGAN.

## **1 Overview**

- Plug and play solution for high quality, live audio transmission via BGAN
- Demonstrates best fit with BGAN service offering

### **1.1 Product range**

The Scoopy model for use with BGAN is IP SCOOPY ref: 80 00 130 65.

### **1.2 Typical users**

- Radio broadcasters
- Outside broadcasting from remote areas.

## **2 Key features**

Scoopy IP offers the following main features over the BGAN network:

- High quality, live audio transmission
- Fully automated configuration and call set-up of the BGAN user terminal.

## **3 Benefits to BGAN users**

Scoopy IP offers you the following main benefits:

- Highly efficient use of BGAN streaming IP connections for live audio transmission.
- Automated selection and configuration of the different streaming IP connection types according to the selected codec algorithms.
- Cost-efficient live audio transmission (7kHz bandwidth @ 32kbps streaming).
- 15/20kHz live audio are available with higher bandwidth BGAN streaming IP connection types.

## 4 Set-up

This section describes how to set up the BGAN terminal for use with Scoopy IP, and provides an example of a Scoopy IP configuration.

Things to remember:

- Use the Ethernet interface on your BGAN terminal to connect Scoopy IP.
- Scoopy IP can operate using static, dynamic, private or public IP addresses.
- No additional hardware is required.
- The solution uses UDP (User Datagram Protocol) and SIP (Session Initiation Protocol).
- The packet size is 200 to 1768 Bytes including the header (size depends on the selected algorithm).
- Your BGAN SIM card must be enabled for streaming IP; standard IP isn't suitable for Scoopy IP.

### 4.1 Step-by-step guide

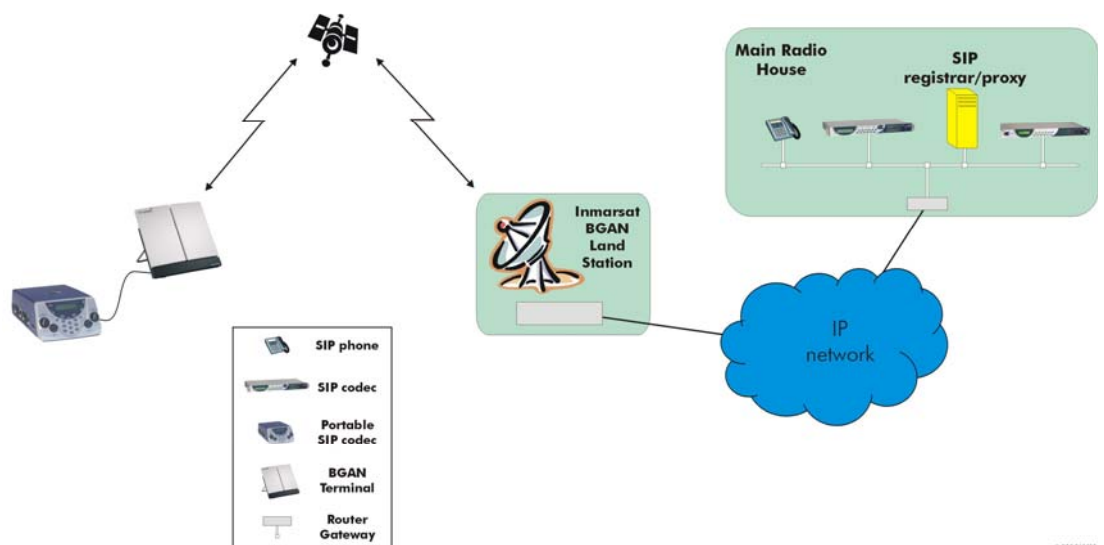
To set up your Scoopy IP and the BGAN terminal for live broadcasting:

- a. Connect the devices using an Ethernet cable.
- b. Power on the BGAN terminal and point it towards the Inmarsat satellite.
- c. Power on the Scoopy IP codec and wait until the BGAN terminal is detected.
- d. Enter the destination address and press the green button (phone symbol).
- e. Start speaking.
- f. Terminate the link by pressing the red button (phone symbol).

### 4.2 Scoopy IP with BGAN configuration



#### Inmarsat BGAN Audio Broadcast Application: Transmission using SIP Codecs



### 4.3 Equipment needed

Typical example:

- Thrane & Thrane EXPLORER 500, EXPLORER 700 or Hughes HNS 9201 BGAN terminal.
- Nera WorldPro 1010 (planned).
- Scoopy IP with BGAN support software.
- Professional microphone.
- Headset.
- On the studio side an Internet access and a SIP compatible audio codec such as the Scoop Studio IP are required.

## 5 BGAN customization

The Scoopy IP configures your BGAN terminal automatically. You do not require a computer with the BGAN LaunchPad software

## 6 Hints and tips

- Select the CELP algorithm for 7 kHz voice bandwidth. It requires only a 32kbps streaming IP connection.

## 7 Technical summary

The Scoopy IP technical feature sets are summarized below:

Feature	Scoopy IP for BGAN
Integral BGAN support	Yes, automated configuration and call setup
Interface for BGAN	Ethernet
Audio codec algorithms	G.711, G.722, CELP, MPEG Layer II
Other data interfaces	POTS, GSM, ISDN
Power supply	Internal battery, external AC power supply
Audio interfaces	XLR
Hardware solution	Yes
Software solution	Software upgrade through serial port and Ethernet interface
BGAN ISDN/standard IP and streaming IP support	Streaming classes
BGAN IP addressing requirement	Supports dynamic and static. All IP addresses using SIP option

## **8 Further details and support:**

### **Inmarsat contact:**

Customer\_Care@inmarsat.com

### **Transtel & AETA contact details:**

Valerie Racinet: vracinet@aeta-audio.com

TransTel : Gerald List: Gerald\_List@tranxtel.com