

**VSAT** stands for "**V**ery **S**mall **A**perture **T**erminal", this term refers to any small fixed satellite terminal that is used to provide



interactive or receive-only communications.

The VSAT comprises of two modules: an outdoor unit and an indoor unit.

The outdoor unit consists of an Antenna and Radio Frequency Transceiver (RFT). The antenna dish size is typically from 75 cm to 2.4 m in diameter.

The indoor unit functions as a modem and also interfaces with the end user equipment like PCs, LANs, Telephones or PABX.

They are used for a wide variety of telecommunications applications, including corporate networks, rural telecoms, distance learning, telemedicine, disaster recovery, ship-board communications, transportable "fly-away" systems, and much more.

VSATs are becoming increasingly popular, because they are a single, flexible communications platform that can be installed quickly and cost effectively to provide telecoms solutions for consumers, governments and corporations.

**VoicEvolution® complements its offer by delivering VSAT based solutions in the following applications:**

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- **Broadband IP networks for LAN interconnections (VPN) with MPLS capability**
- **Videoconferencing, VoIP telephony and Fax over IP (Bandwidth on demand)**
- **Maritime communications**
- **Offshore oil platforms communications (in presence of potentially explosive atmospheres)**
- **Interactive Distance Learning (IDL)**
- **SCADA control and monitoring in the Oil and Gas industry (in presence of potentially explosive atmospheres)**

All the proposed solutions follow the internationally adopted DVB-RCS open standard architecture for 2-way VSAT networking.

The DVB-RCS VSAT system underwent final standardization by the European Telecommunications Standards Institute (ETSI) in 2000.

The standard calls for a forward link based on a DVB/MPEG-2 data format and a return link using Multi-Frequency / Time Division Multiple Access (MF-TDMA) scheme, allowing a two-way exchange of data.

A revision of the DVB-RCS standard added support for the new DVB-S2 transmission standard, including adaptive coding and modulation features.

All these advanced features are supported by the **VoicEvolution® solutions**.

The network consists of a central earth station Hub station, the communication satellite, and VSAT terminals at the remote sites.

**BAGGI VoicEvolution® is a Solution Provider and a System Integrator in the Telecommunications field.**

**Turnkey global network services are provided by highly qualified personnel and advanced technology, at competitive prices.**

**It is a single source for satellite and VSAT hardware, installation material and system integration.**

**The design of the network (star or meshed topology, satellite operator, security, redundancy, bandwidth) is carried out in close contact with the Customer.**

The site survey, civil works, power supply, signal and electrical cabling, terrestrial interconnections, local regulations, commissioning are all taken care by BAGGI.

The Network Management software is provided on a centralized workstation or PC (SNMP protocol) with analysis of traffic measurements and statistics for system optimization.

Remote technical support and expedited spares shipment are available worldwide.

Due to the long time experience **in data acquisition for the Oil & Gas industry, BAGGI® offers**  
**so**  
**VSAT terminal equipments and sensors able to operate in the potentially explosive atmospheres of Oil rigs and offshore platforms, for**  
**either**  
**SCADA or VoIP applications.**