

**Anny Network**  
Early Warning System

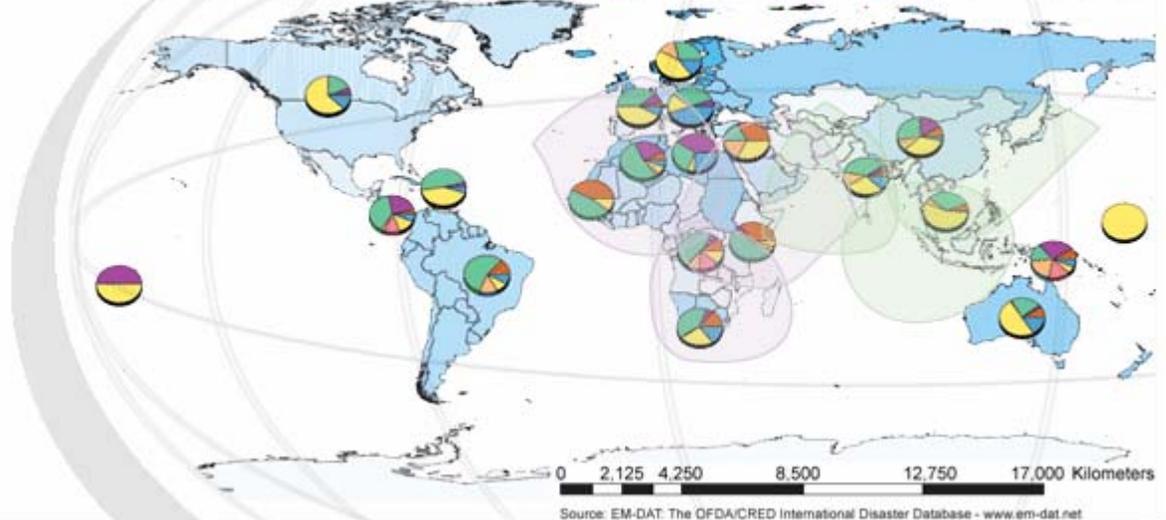
Satellite Coverage zone:

-  AfriStar Coverage area
-  AsiaStar Coverage area

 Disasters:

-  Drought / Famine
-  Earthquake
-  Flood
-  Avalanche / Landslide
-  Volcano
-  Wind Storm
-  Other

**Distribution of natural disasters, by country and type of phenomenon 1975-2001**



***Satellite based Technologies  
for Regional/National/Local dissemination of Alerts***

*WorldSpace uses its Digital Technology for the delivery of Multimedia content - text, data, imaging and streaming video - directly to transportable receivers in a service area that includes 5 billion people.*

*An efficient tool for Administrations to reach Citizens – Almost Anywhere - Independant from terrestrial infra-structures.*

**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Early Warning System

*THE NEED is for an alerting system which can cover all hazards and can be delivered by authorized agencies directly and instantaneously to those who respond to the emergency.*

### Within Nation

Issuance of warnings  
Delivering emergency and preparedness data down to village level.

- » **Authority to Authority:**  
From National to Local Authority.
- » **Authority to Citizen:**  
Local Authorities disseminate Warnings to communities.

*Multi-hazard approach,*

*Redundancy*

*Robustness*

*Sustainability*

**Addy Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Multi hazards approach

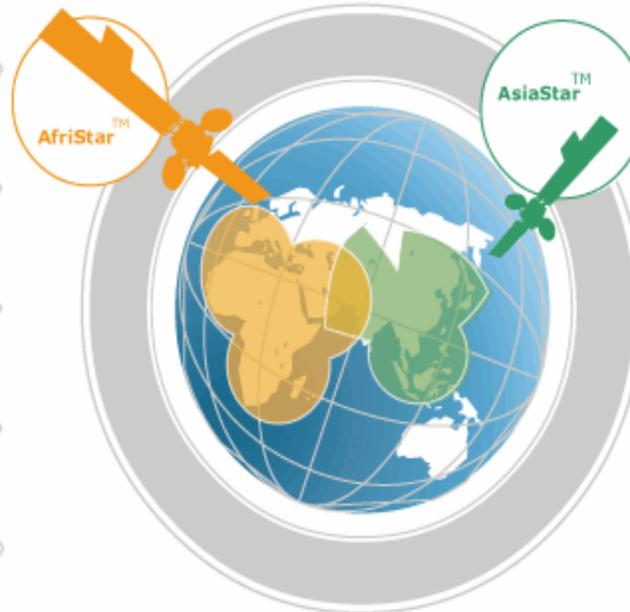
**Meteorological Risks**  
(storms, hurricanes, tornadoes, torrential rains, flash floods...)

**Environmental Risks**  
(tsunamis, pollutions, industrial risks, locusts ...)

**Health Risks**  
(hunger, diseases (epidemics)...) )

**Safety/Security**  
(fires, accidents(road/rails/planes) ...)

**Civil Protection**



### THE NEED

*is for an Alerting System which can cover all hazards and can provide to Authorities who respond to the emergency Tools to reach populations down to the Village level*

*Independent from any terrestrial infrastructure.*

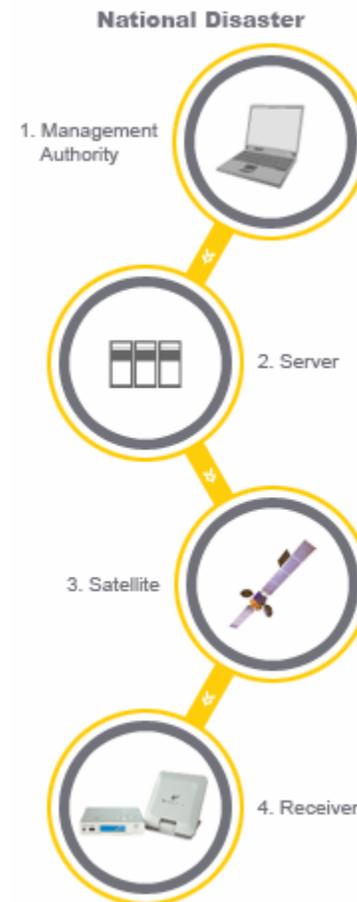
**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Key Features

- ▶ **Authorities are able to record and deliver Audio/Data Warnings to Anny receivers**
- ▶ **Web based Alert Platform allowing generation and broadcasting of Alerts**
- ▶ **A Public Key Infrastructure (PKI) for Users authentication Encryption of messages.**
- ▶ **XML-based Alerts allowing interoperability And Multi-lingual communication.**



**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Web Access

**Anny Network** Web based platform to issue warnings and manage the Network

- To generate and geo-reference Alerts.
- To visualize on maps the terminals status.
- To give access to specific partners applications.

### Recipient Management

The user can define and activate recipients and/or groups Of recipients through standard forms.

### Alert Management

The user can create alerts following the CAP standard.

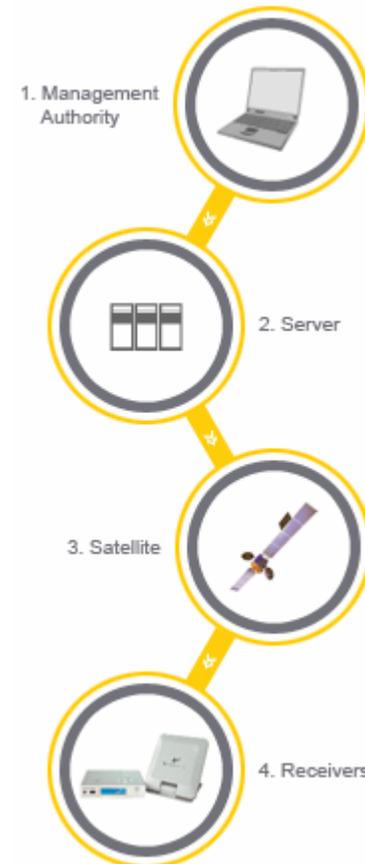
The addressing of terminals can be done several ways:

- by listing the groups of recipients
- by defining a geographical area
- by defining a country code
- by a combination of the above criteria

The system supports also exercise or test alerts.

*Operates as a single point of entry for National Authorities.*

### National Disaster



**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Receivers

### *The Radio Receiver Capabilities:*

Specifically adressable to an individual or to a group

- » To receive geo-referenced alerts,
- » To control relays for switching on external devices (sirens, flash lights,..)
- » To display summarized textual information about the alert
- » To automatically tune itself to an alert audio channel that would give instructions.



### *The Multimedia Receiver:*

Linux-based terminal hosting dedicated applications for alerts and preparedness.



Small (170x124x38mm)  
Silencer (without fan)  
Hard disk 40Gb

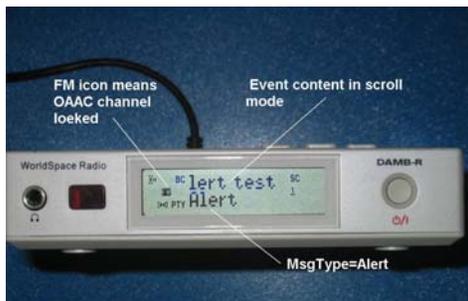


- » Includes a built-in GPS and an GPRS/GSM (optional) system for

- Validation
- Acknowledgement
- Alert generation.

## Receivers

- **The base configuration:**
- The alert system includes in this base configuration:
- a DAMB-R2 receiver with an L-band antenna
- a power supply (2 AA batteries or 6V AC/D adapter or car power adapter)



- **Operation** (fig3)
- The essential operation is identical to the DAMB-R WorldSpace Radio receiver. A new function was added: Press **Antenna** and **AC/DC** buttons simultaneous for 2 second to show the coordinate information.
- When the receiver is locked to the service channel sending alert messages, **FM** icon will appear on the left of DAMB-R2 display.
- When a new alert message received applicable to the terminal itself or to the area where the terminal is currently located, the buzzer in DAMB-R2 will beep for 5 seconds .
- In case the alert includes a control message to switch to a specific alert audio channel , the speaker in DAMB-R2 will begin to play audio program defined in the alert message.

### Display

- When DAMB-R2 is in Alert state, all buttons are redefined. Press **Antenna** or **AC/DC** button could show the alert Base information one by one.

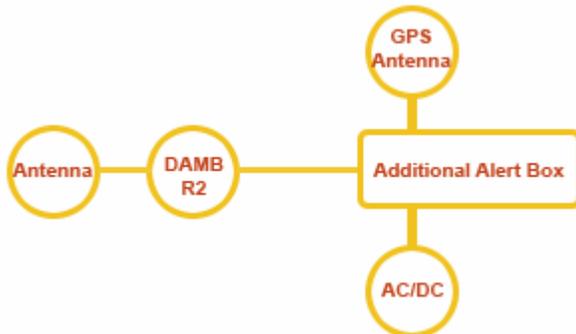
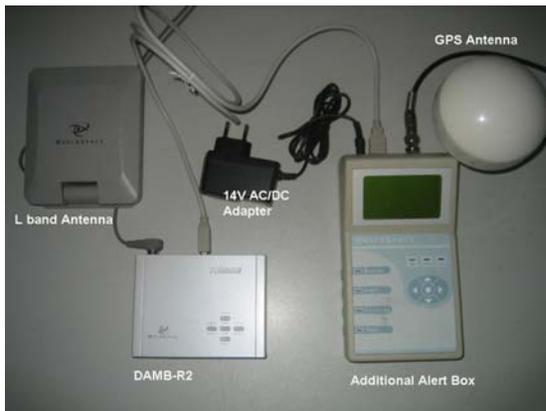


## Receivers

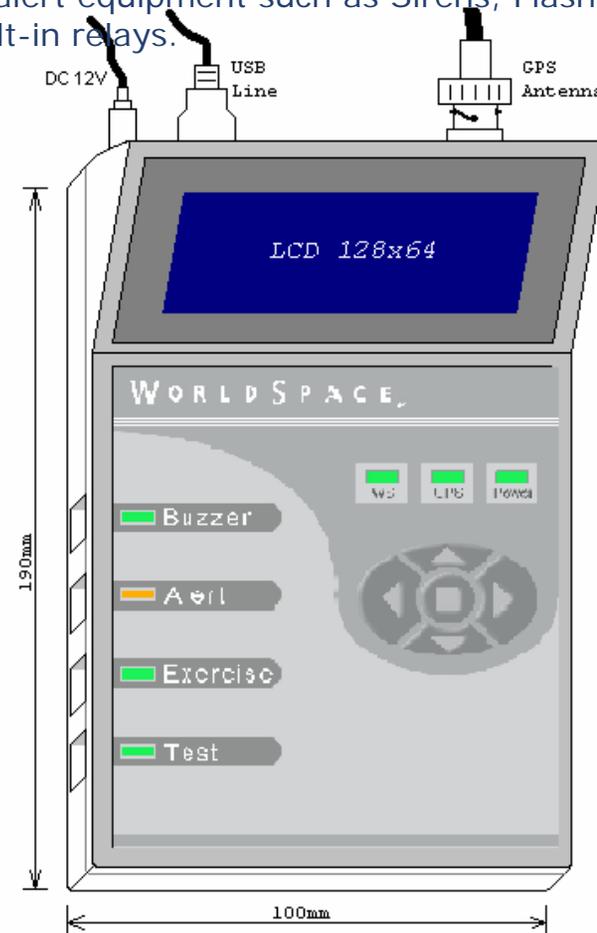
### Add-on Box:

In this extended configuration, the Alert System includes:

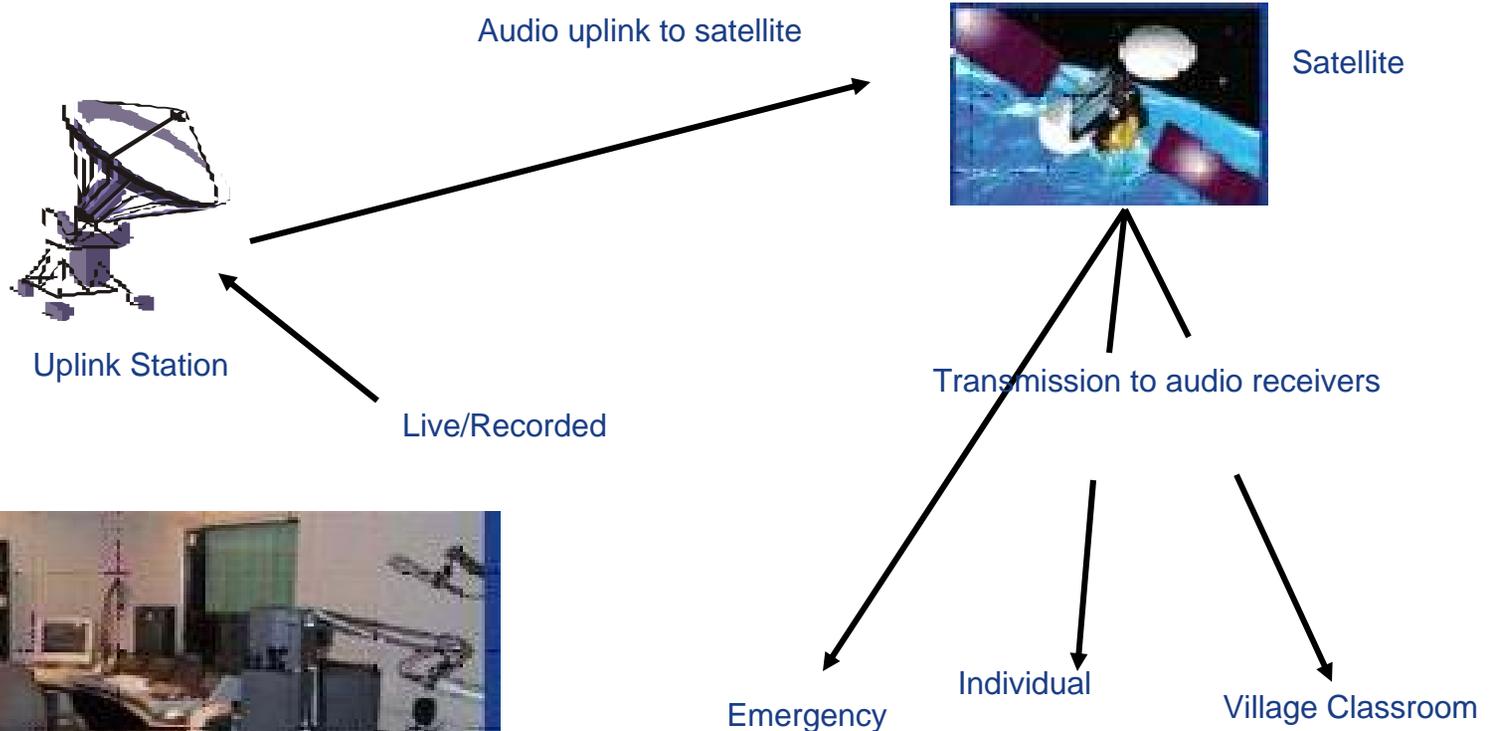
- a DAMB-R2 receiver with L-band antenna.
- an Additional alert box
- a GPS antenna
- a 12-24V AC/DC adapter.



The additional alert box is an add-on equipment of the WorldSpace Alert System. It communicates with DAMB-R2 receiver via USB cable. It can provide coordinate information via a built-in GPS and control other alert equipment such as Sirens, Flashing lights by built-in relays.



# Audio: How it can be used



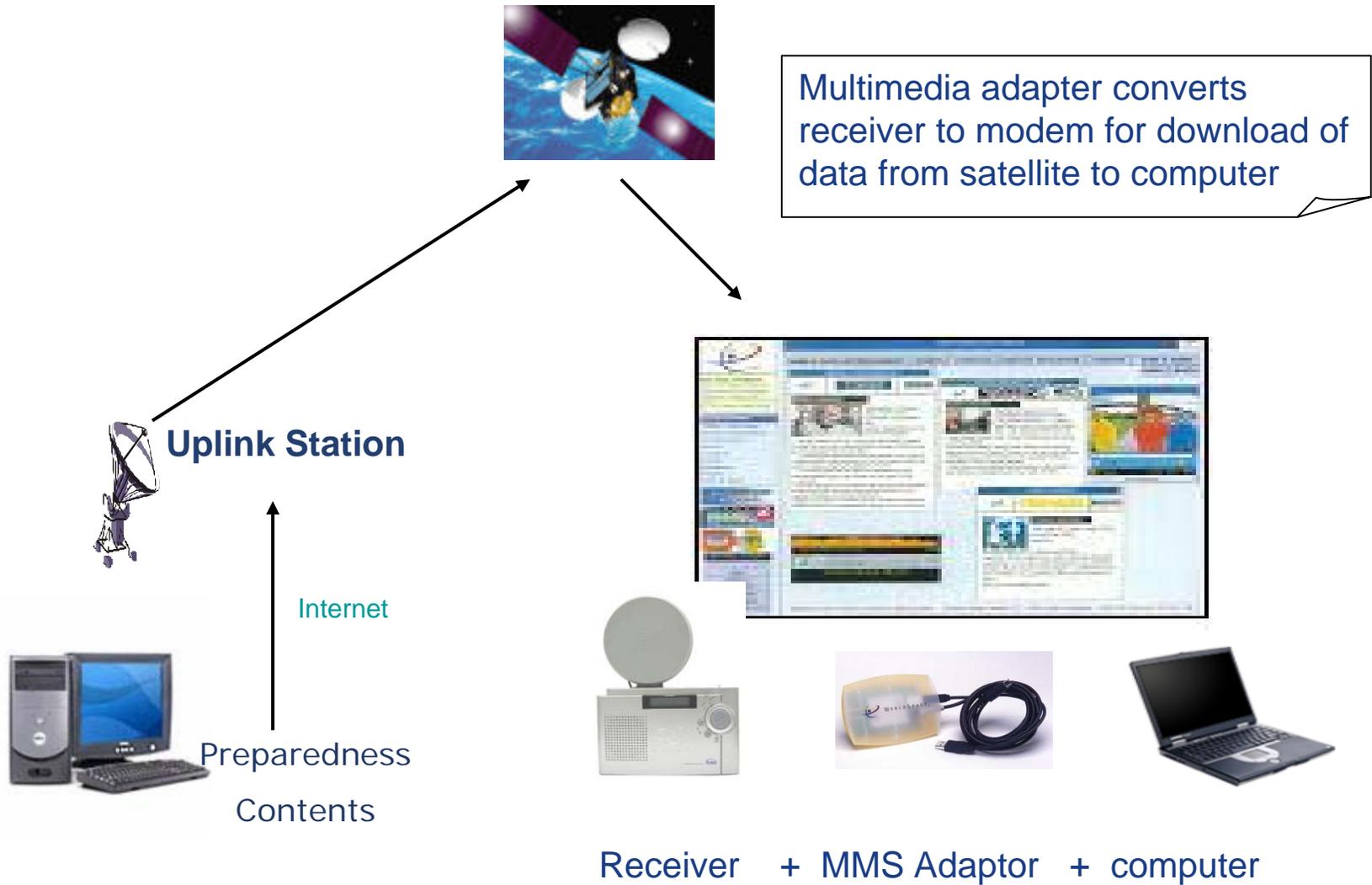
**Content:**

- Locally & regionally relevant
- Culturally appropriate
- Practical & solution oriented
- Balance and accurate/ Non-political



# Multimedia: How it can be used

Internet-type downloads without an Internet connection



# Audio Broadcasting for Emergency Relief



**India  
Reconstruction  
and Relief**



**Indonesia  
Disaster Relief**



**Equal Access  
Afghanistan & Nepal  
Distance Learning and  
Radio Dramas**

**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time

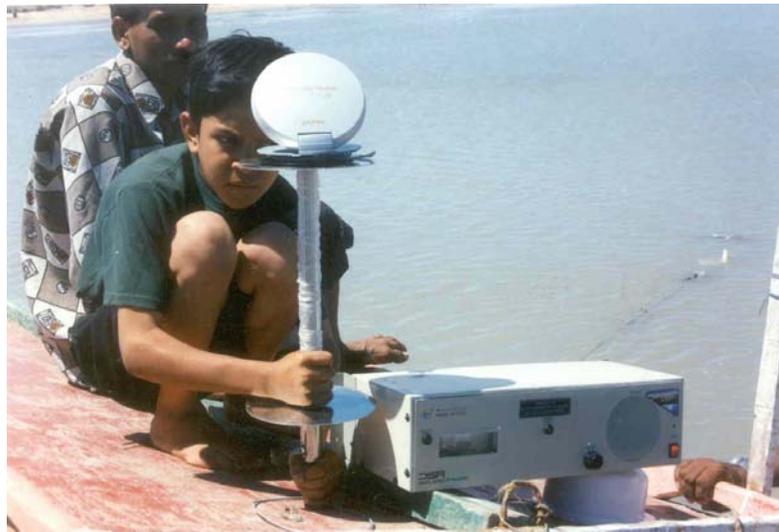


### Cyclone Warning System for Fisherman out at Sea

- Pilot Experiment in west coast of India
- 80 boats fitted with WorldSpace reception
  - Encased in water proof enclosure
  - Pretuned to the assigned channel
- Warning messages in MP3 format via Internet to the uplink site
- Boats into the sea up to 200 miles
- Valuable experience gained in designing the full system



### WorldSpace Reception on a Fishing Boat



**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



*Anny Network is not a substitute to existing solutions.*

It can be used as a **unique** Warning System or as a **redundant** Warning System linked to other solutions.



**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## The advantages

### Anny Network, the advantages

- *Existing coverage of more than 130 countries.*
- *Reach well beyond traditional communication networks.*
- *Rapid roll-out of the system over wide areas.*
- *Geo-referencing and selective addressability.*
- *Easy to use web-interface for alert generation, updates and cancellation.*
- *Built-in authentication and security features.*
- *Low power consumption and possibility of Lufo or solar powering.*
- *Display of the alert in CAP format.*
- *Interface to an external box for operating a relay for a warning signal.*
- *Ease of deployment, operation and maintenance.*
- *Expandability and Scalability.*

**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Anny Network in partnerships

- **With CENTRAL GOVERNMENT AGENCIES** (e.g., Indian Meteorological Department, PTI, ...) who can provide alerts
- **With NONGOVERNMENTAL ORGANIZATIONS** (e.g., M.S. Swaminathan Foundation) who can provide information for communities' preparedness
- **With STATE AND REGIONAL GOVERNMENT AGENCIES** (e.g., Relief Commissioner in Chennai, Kenya, Tanzania Meteo) who can coordinate activities pre/post-disaster
- **With UN AGENCIES** involved in Emergency communications, humanitarian affairs, preparedness and educational (e.g., ITU, WMO, ISDR etc..)
- **With TECHNOLOGY PROVIDERS and COMMUNICATIONS OPERATORS and CONTENTS PROVIDERS**

**Anny Network**  
Coverage Area

- AfriStar™ coverage area
- AfriStar™ & AsiaStar™
- AsiaStar™ coverage area
- No coverage available at this time



## Contact Us

**Pierre Casadebaig** General Manager

[pcasadebaig@worldspace.com](mailto:pcasadebaig@worldspace.com)

**Pierre Genillon** DataCasting Manager

[pierre.genillon@mediaport.net](mailto:pierre.genillon@mediaport.net)

**Jérome Soumagne** Chief Technology Officer

[jsoumagne@worldspace.com](mailto:jsoumagne@worldspace.com)

For more information, visit our Web Site :

[www.annynetwork.com](http://www.annynetwork.com)

[www.worldspace.fr](http://www.worldspace.fr)

### WorldSpace France

13, rue Michel Labrousse  
31100 TOULOUSE FRANCE



**Didier Lehoux** WorldSpace Marine service

Stay at your disposal for live demos in the ITU  
Montbriand ground floor.





**Anny Network**  
Coverage Area

-  AfriStar™ coverage area
-  AfriStar™ & AsiaStar™
-  AsiaStar™ coverage area
-  No coverage available at this time



**Thank you**