



# *Telecommunications for Refugees Relief Operations*

ITU-T Workshop on  
Telecommunications for Disaster Relief,  
Geneva, 17 Feb. 2002




# *UNHCR*


is mandated by the United Nations to lead and coordinate international action for the world-wide protection of refugees and the resolution of refugee problems.





# UNHCR


 Created in December 1950


 Now helps:


 nearly 19.8 million persons of concern, 12 millions of these are refugees

 in more than 140 countries, 33 % in Africa

 244 offices in 118 countries including HQs in Geneva

 80% of our 5 528 staff members work in the Field


 Executive Committee of 53 member countries


 In 2002, UNHCR worked with 694 NGOs implementing partners, 393 of these were national NGOs




# UNHCR


## Global financial requirements

 from 1985: \$ 445 million

 to 2003: \$ 1 billion




## All but a small fraction of UNHCR's budget comes from voluntary contributions

 UN contribution totals \$ 20 million only

 UNHCR activities depend principally on donations



# ***UNHCR Telecommunications***

-  Provides means of communications for UNHCR staff and implementing partners
  -  for staff safety, operation co-ordination and administration within the Field and between Field and HQs
  -  both for routine and during emergency operations where no telecommunications infrastructure is available

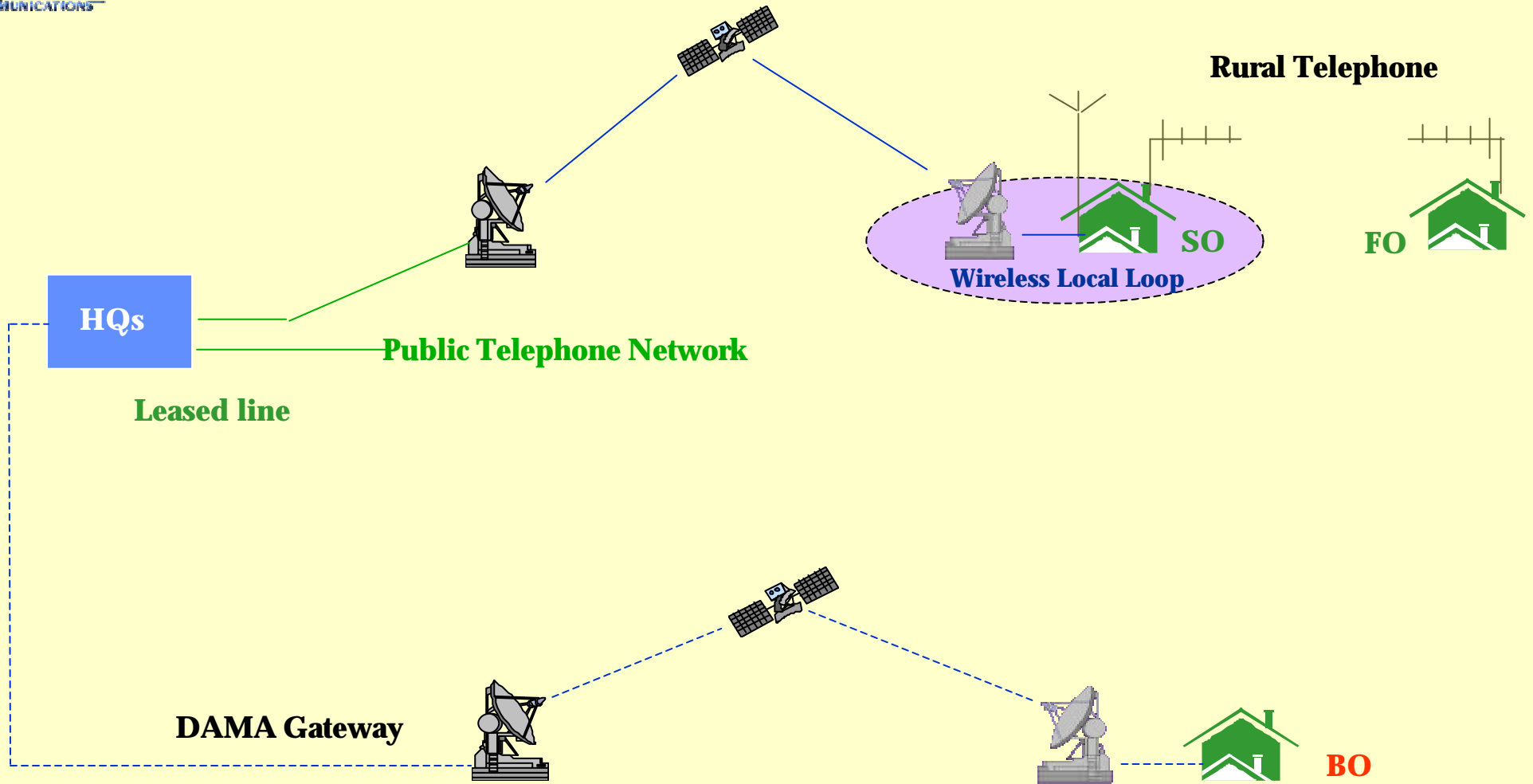


# ***UNHCR Telecommunications***

UNHCR has established networks using:

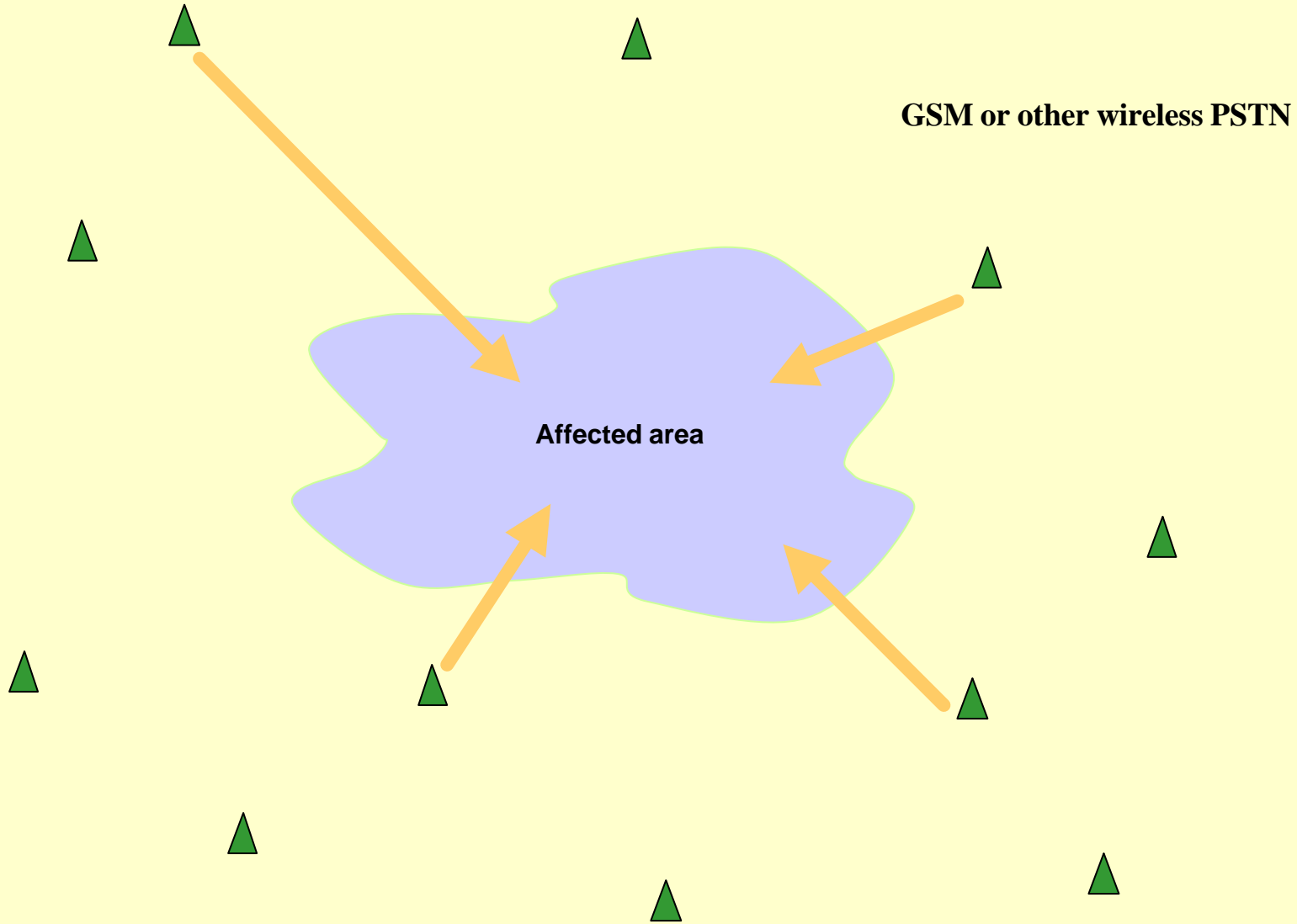
- |                       |                   |
|-----------------------|-------------------|
| ☞ HF                  | Voice & Data      |
| ☞ VHF                 | Voice & Data      |
| ☞ Satellite terminals | Voice, Fax & Data |
| ☞ VSAT                | Voice, Fax & Data |
| ☞ SITA                | Data              |

# TELEPHONE CONNECTIVITY





# NATURAL DISASTER







# MAN MADE DISASTER

Poorly served border region

Affected country with:

- Devastated telecommunications Infrastructure
- Possibly poor security

Former Yugoslavia  
Kosovo  
East Timor  
Afghanistan

Poorly served border region



## *Options*

## *Pros*

## *Cons*

1 - HF Radio

Low cost  
Stand alone

Low data rate  
Skill required

2 - Public satellite services

Inexpensive to buy  
Portable

Expensive to use  
Asset Management

3 - GSM drop in with  
satellite backhaul

Good voice service

Very expensive  
Wrong technology  
Poor data capability

4 - Wireless TCP/IP  
w/VSAT back haul

Low cost  
Consumer WiFi

VoIP ?



**Thank You**

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