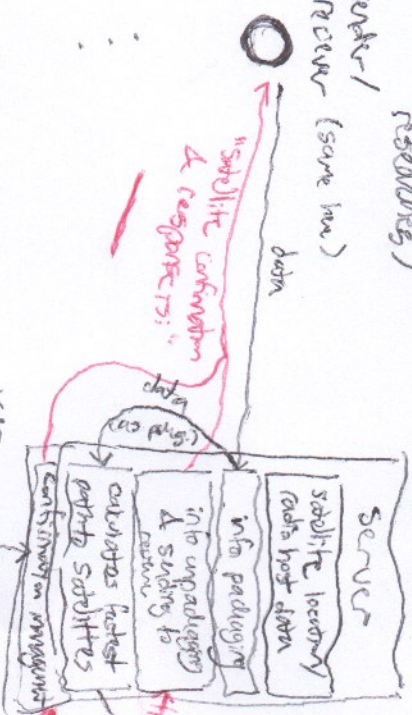
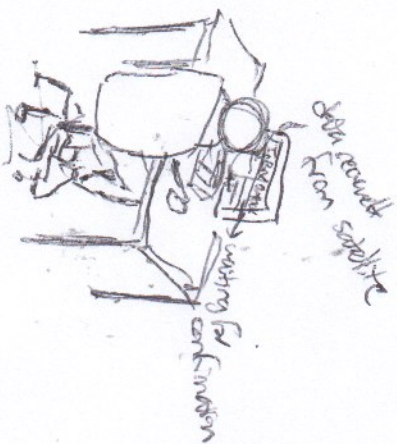


# 1. Satellite Receiving Data

## 2. Satellite Sending Back Confirmation

End User (typically researchers)

Server/Receiver (same loc.)



user

ASIA server

functionally but addressably

US server

user

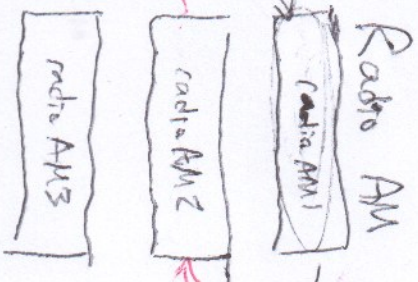
highband server

Europe server

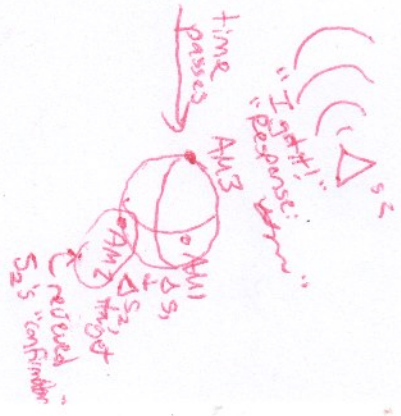
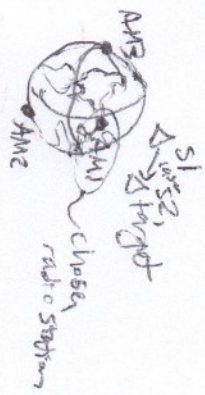
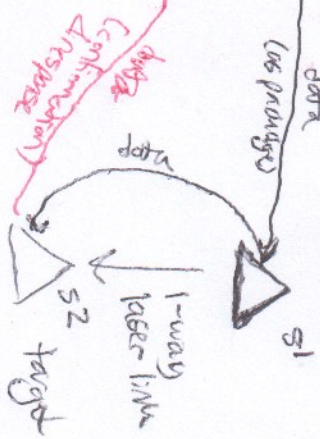
etc. server

user

keep doing this until confirmation received



Satellites



data user → satellite  
data satellite → user  
(confirmation & response)



## Components

1. Server <sup>is divided by further networks</sup> & their allowed frequencies  
• handles satellite locations & trading etc. (for otherwise inputted from user)  
• packages info appropriately, listing time & frequency  
• manages list of radio hosts/AM's and their available frequencies, <sup>location on earth, open hours (if radio host)</sup> <sup>✓ figures out shortest path to satellite, including pass times</sup>  
• specifies it, etc.
  - from this, when a package is being sent, selects one radio AM for the request (if device goes to next one) (sees if the AM is positioned correctly for the sat satellite)
  - accept packages from radio AM & be able to send them to appropriate receiver <sup>Does this one have confirmation satellite confirmed position?</sup>
2. Radio AM ( $\rightarrow$  satellite,  $\rightarrow$  server)
  - be able to accept packages from server; be able to send them back (package includes satellite position)
  - Retract radio antenna to satellite's position & actually send the package
  - ~~not for~~ <sup>or wait for</sup> this AM or another AM will receive the confirmation and send it back to sender <sup>confirm the confirmation back to the satellite</sup>
  - ~~AM remains~~ <sup>on the lookout for incoming</sup> satellite packages, if receives (satellite position included), sends package to server & replies to satellite w/ confirmation of receipt
3. Satellite ( $\rightarrow$  radio AM)
  - accepts packages from radio AM along certain frequency, <sup>package-specified frequency (but is able to accept any frequency)</sup> sends back confirmation
  - globally (wide-spread range), ~~can wait to get confirmation or confirmation or else pings again every time a package is received~~ <sup>to be received multiple times, does it to the 1st</sup>
  - sends out packages wide-spread for a radio AM to pick up, pinging them in or local, <sup>just sends back signal, 'received!'</sup> <sup>unless update?</sup> <sup>✓</sup>

Satellite confirmation inbuilt is quality of life (sender could ~~disable this~~)