

# NETWORKING OF ALTERNATIVE COMMUNICATION TOOLS WITH PUBLIC INFRASTRUCTURES IN EMERGENCIES BY VOLUNTEERS



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# Facts



- Daily used communications infrastructures get unusable in disasters. Therefore alternative means of communications have to be organized. The alternative known to be most reliable is 2-Way Radio Communications.
- As disasters can overwhelm all existent government resources, volunteers with a expertise on a special field have to be organized and integrated to the response mechanism as a part of preparation to disasters and big-scale emergencies.
- The volunteers with the expertise on Radio Communications are Radio Amateurs. In Turkey they are integrated to the «Communication Service Group» together with all Communication Service Providers.

# Facts



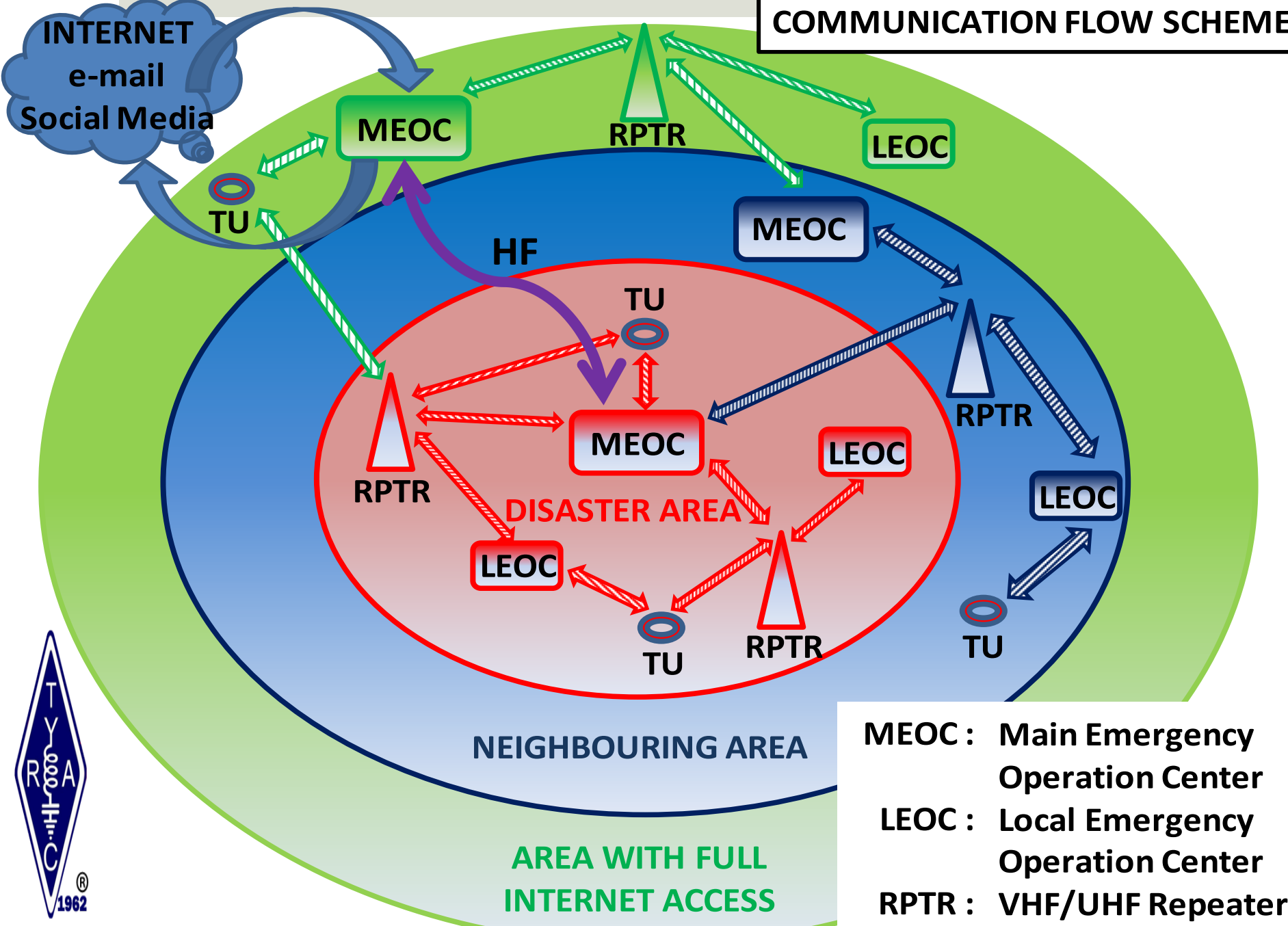
- On the other hand, Social Media can be a very powerful tool for informing and guiding the general population in the aftermath of disasters or emergencies.
- However, due to the failure of internet, GSM and fixed communication services in the area being affected from the disaster or emergency, the utilisation of Social Media will be impossible.
- The biggest demand in such situations is providing informations to other areas about the situation and distributing other relevant informations such as a call for mobilisation of volunteers needed for assistance in the affected area.

# General Overview

- My article should be regarded as a proposal for utilizing social media in times of disasters and emergencies by volunteers with expertise on Radio Communications (Radio Amateurs).
- It bases on the assumption that the usual telecommunication infrastructures become unusable only in the affected area, are partly existent in the next vicinity and fully available in the following area. The other assumption is the existence of radio communications between these areas.



# COMMUNICATION FLOW SCHEME



- MEOC:** Main Emergency Operation Center
- LEOC:** Local Emergency Operation Center
- RPTR:** VHF/UHF Repeater
- TU:** Tactical Unit



# Communication Path

- As seen in the scheme, radio communications is existent between all three areas.
- In the affected area, all field units report to the Local Emergency Operation Centers via 2-Way Radio. The Local Emergency Centers report to the Main Emergency Operation Center which has the command on all operations and is the main decision authority.



# Message Path

- The Main Emergency Operation Center in the affected area will be in contact with the Main Operation Centers in other areas by 2-Way Radio and/or other suitable means of communications, conveying situation reports to them and requesting aid (if necessary).
- Relevant informations for the general public will be sent to the first area which has full access to internet. Media resources (TV&Broadcast) can be utilised as well.



# Message Path

- From there, informations being considered to be important for the general public will be transferred to social media.
- Any possible feedbacks coming in via social media will be conveyed to the affected area in the same path, but in reverse direction.
- During this procedure proper message management and monitoring social media is extremely important.





# Message Management

- This is required to avoid possible duplications and misinterpretations which can cause confusion and panic.
- This management should strictly in the hands of the Main Emergency Operation Centers and message authentication should be provided. The top priority has to be on the messages originating from the affected area.



# FINAL COMMENTS



- If all suitable alternative communication resources are identified and planned prior to an emergency, communication will be easily possible. Radio Amateurs should be considered as a primary voluntary resource.
- The Case Study in my article should be considered as a “first-hand observation” in terms of Social Media in times of an emergency.



□ THANK YOU,

□ 73!