

Amateur Radio as a First Aid and a Tool of the Emergency Communications

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My subjects:

- 1) Tampere Convention
- 2) IARU EmCom activities
- 3) WRC-07

My background:

- Journalist , director in press, radio and tv, entrepreneur, writer, Fulbright Scholar at Stanford University, lecturer etc.
- One of the fathers of the Tampere Convention
- EmCom Coordinator of the IARU Region 1 2005 –
- Ph.D. 1977, OH1VR since 1960

Tampere Convention

- Tampere Declaration 1991
- ICET 1998 (The Birth of Tampere Convention)
- Finally: Tampere Convention in Force
January 8th, 2005 when 30th
country ratified it !
- ICEC-2006, GAREC-2005, 2006, 2007..

United Nations Press release Information Service
United Nations Office at Geneva

7 January 2005

TAMPERE CONVENTION:

SAVING LIVES THROUGH
EMERGENCY TELECOMMUNICATIONS

Why Tampere Convention?

Former UN Secretary-General Mr. Kofi Annan:

'From the mobilization of assistance to the logistics chain, which will carry assistance to the intended beneficiaries, reliable telecommunication links are indispensable'

More:

'Until now, various regulatory barriers have made it extremely difficult for aid workers to rapidly deploy telecommunications equipment without the prior consent of local authorities'

' These formalities have caused delay and loss of lives '

More:

The Convention describes the procedures for telecommunication assistance, recognizing the right of a state to direct, control and coordinate assistance provided under the Convention within its territory. It also requires States to make an inventory of resources – both human and material – available for disaster mitigation and relief.

More

The Convention is the first treaty of its kind that provides privileges and immunities to the staff of NGOs

e.g. Amateur Radio operators

IARU and EmCom 1

- **The Amateur Radio Service is a valuable asset in Emergency and Disaster Response**
 - its networks are independent of vulnerable infrastructures
 - its skilled operators – many of them with special training in EmCom – support disaster response world wide
 - EmCom party twice a year since 2006

IARU and EmCom 2

- **Amateur Radio Service is**
 - a global telecommunication service recognized by the ITU
 - operated by more than 2 Million volunteers world wide
 - the most flexible telecommunication service, operating in all available modes: Voice, Data, Images (+ Center of Activity Frequencies)

IARU and EmCom 3

- **The Amateur Radio Service has**
 - a long tradition in EmCom
 - most recently provided services during major disasters such as
 - o The Indian Ocean Tsunami in 2004
 - o Hurricanes Katrina and Rita in 2005
 - o Tornadoes, Floods, Train accidents, Earthquakes

IARU and EmCom 4

- **The Amateur Radio Service provides operators, who**
 - have proven their qualification in exams
 - know how to establish communication network with minimal resources, make things work under adverse conditions, overcome difficulties such as damages to equipment and infrastructures

IARU and EmCom 5

- **GAREC –process**

(GAREC= Global Amateur Radio EmCom Conferences)

- In Tampere Finland 2005 and 2006, third August 2007 in Region 2, fourth in Croatia 2008 etc.
- Creating processes among Radio Amateurs for EmCom Services cross the borders (like frequency management, tools for education, exercises etc.)

Safety 2003 exercise in Finland

Objectives:

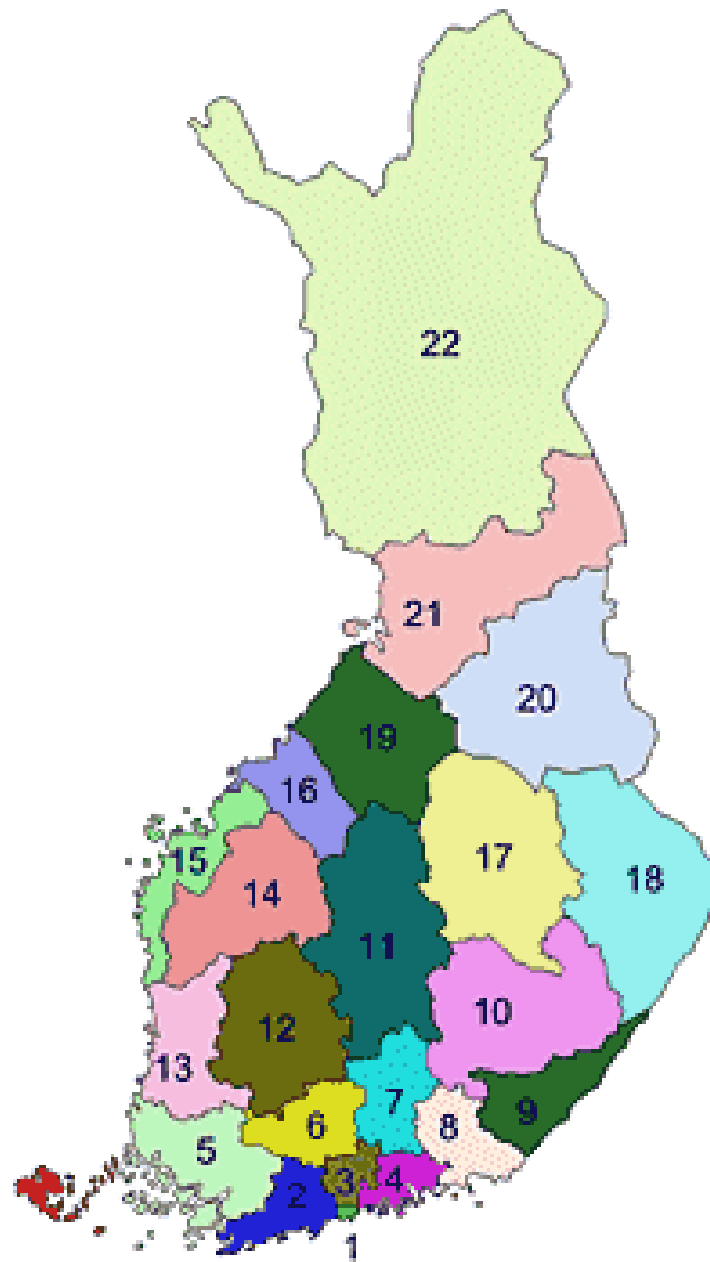
- 1) to build a nationwide (covering all 446 municipalities) two-way communications network, separate from the national grid
- 2) to enhance the preparedness of radio amateurs for assisting society in emergencies by improving, among other things, the message handling skills of amateurs, and
- 3) to create a basis for more regular cooperation with the authorities with the aim of establishing radio amateurs as a distinct cooperating partner among partners listed by the authorities in their preparedness plans

Safety 2003 in practise

- About 1000 radio amateurs participated
= every fifth finnish radio amateur
- Three preliminary exercises before June 7th, 2003
- The aim of the exercise, the building and operation of a nationwide communications network, was deliberately exaggerated

Pelastustoimen
alueet:

1. Helsinki
2. Länsi-Uusimaa
3. Keski-Uusimaa
4. Itä-Uusimaa
5. Varsinais-Suomi
6. Kanta-Häme
7. Päijät-Häme
8. Kymenlaakso
9. Etelä-Karjala
10. Etelä-Savo
11. Keski-Suomi
12. Pirkanmaa
13. Satakunta
14. Etelä-Pohjanmaa
15. Pohjanmaa
16. Keski-Pohjanmaa
17. Pohjois-Savo
18. Pohjois-Karjala
19. Jokilaaksot
20. Kainuu
21. Oulu-Koillismaa
22. Lappi



Minister of Interior and *Safety 2003*



Vests for the participants of *Safety 2003*



Training courses before the exercise



Cell HQ at Helsinki Energy ARC (under one cell HQ operated 5-8 stations)



Conclusions 1

- 1) The exercise demonstrated that radio amateurs can build a nationwide communications network which is capable of operating independently, separate from the country's national grid and telecommunications networks
- 2) The message handling skills of radio amateurs are sufficient, in spite of some shortcomings, for running traffic on such a network

Conclusions 2

3) The equipment of radio amateurs is suitable, thanks to equipment diversity, for use on an emergency communications network. Fixed antennas and equipment located at the Command Centers of the authorities would speed up construction of the network in the event that the authorities decide to seek recourse to radio amateurs for their assistance

Conclusions 3

4) Given its extent and scope, *Safety 2003*, was a unique exercise. Feedback received from the participants has been enthusiastic, so much that there is every reason to consider organizing a similar exercise in a few years' time. Regional exercises are another interesting possibility.

Conclusions 4

- 5) *Safety 2003* gave proof of the way in which the know-how and equipment of radio amateurs can be used for public service.
- 6) *Safety 2003* demonstrated the readiness of the authorities to discuss the idea of deepening cooperation with radio amateurs

WRC-07

- **IARU's two frequency proposals have a major effects on EmCom Services provided by Amateur Radio Service:**
 - New band 5260 -5410 kHz
 - World wide allocation of 7000-7300 kHz for Amateur Radio Service (now only in Region 2)

Summary

- Amateur Radio is a useful tool for the Emergency Communications
- WRC-07 has a key role to strengthen the opportunities of Amateur Radio Service
- World wide cooperation among Amateur Radio operators in the field of EmCom is in the process (GAREC's, exercises, education etc.)
- Ratification of the Tampere Convention and acceptance of CEPT -licensing are steps forward

Thank you!

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