



HITS - DMR Turnkey Service

Flexible service tailored to your individual requirements

In recent years there has been a growth for the need of **Critical Communications**, this has sadly come at the cost of lives.

Thus it is imperative that the Humanitarian sector ensure they have a communications network that still meets the ever-growing 'communications requirements of their environment'. Gone are the days where one solution fits every country.

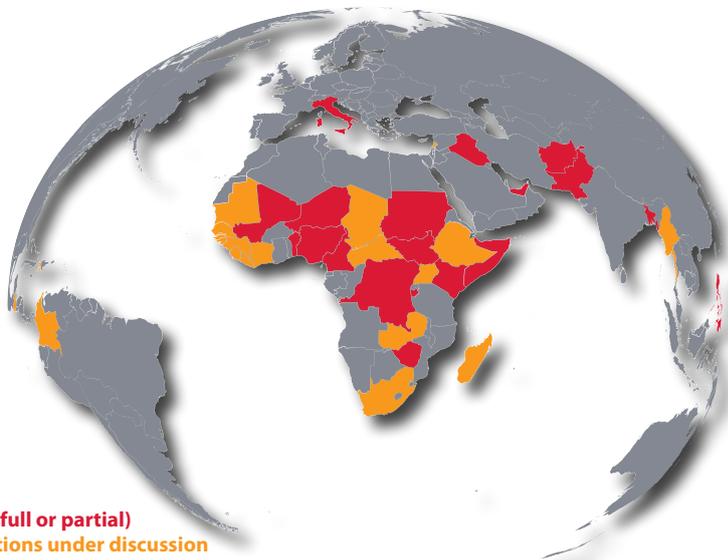
Danimex can work with you to design a system that's fits your country's needs, covering your **Critical Communication and Operational Communications** with one network.

Danimex has a **PROVEN** history of carrying out successful network designs and 'turnkey solutions' for Humanitarian partners.

In the past year alone Danimex has been involved in 7 'turnkey' digital migration projects for the humanitarian sector. These solutions have not only been multi-site, covering cities, they have included country wide REMOTE solutions. The Danimex design philosophy includes:

- » Step-by-step design, with a 'phased rollout' approach.
- » Reusing existing networks equipment.
- » Designs that match your actual 'in-country' communications needs.
- » Training of your staff. This we see as key, as you, the end user **MUST** be capable of running the network after the deployment phase has finished.

Humanitarian IT Services (HITS)



DMR live (full or partial)
DMR solutions under discussion

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DanimexTM
WHEN YOU NEED TO TALK

The main benefits of a digital mobile radio (DMR) environment are for you as humanitarian UN, covering your critical communication requirements:

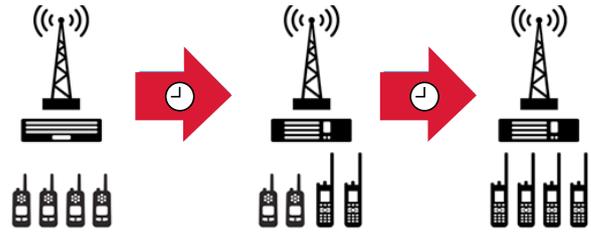
- **A fully tiered approach, thus there can be entry level solutions through to extremely complicated country-wide networks:**
 - IPSC (IP-site connect)
 - CP (Capacity plus, single & multi-site modes)
 - Capacity Max

CONVENTIONAL (Single-Site)	IP SITE CONNECT (Multi-Site)	CAPACITY PLUS (Single- & Multi-Site)	CAPACITY MAX (Single- & Multi-Site)
CONVENTIONAL		TRUNKING	
1 SITE	1-15 SITES	1-15 SITES	1-250 SITES
Up to 200 users	Up to 200 users	Up to 1600 users/site	Up to 3000 users/site

- **Radio improvements:**
 - All the basic 'voice' functionality of analogue are included with the extra functionality of a **TRUNKED network:**
 - PRIVATE (one to one) calls.
 - Group calls can be made to a specific group of users, or to a global group as an announcement to ALL users of the system.
 - All of the above is applicable to voice and SMS (text) style solutions.
 - **Seamless roaming** from site to site, thus all the user has to worry about is who to call. **No need for channel selection** in Capacity Plus (single or multi-site) or Capacity Max modes.
 - Double the capacity using the same frequencies.
 - Extended coverage range.
- **Control rooms solutions:**
 - Full access to your network can be made from the internet, through radio room dispatchers
 - Directed emergency calls. If a user presses the panic button, the call is diverted to the security team that are allocated to deal with the 'alert', and they can make a decision BEFORE all other parties are involved (which is the case in analogue today).
 - Remote radio room solutions are now possible; thus, you can monitor far ends of the networks without the need for extra staffing. See attached flyer for information.
 - See attached flyers for full list.
- **It is possible to inter-connect to other networks through 'gateways':**
 - Analogue
 - TETRA
 - DPMR
 - GSM, 3G and 4G
 - SIP
 - It is also possible to connect to Motorola WAVE clients (see <https://waveoncloud.com>)
- **Improved maintenance of your radio networks. As the network now has an IT backbone it is possible to remotely monitor the network, thus enabling PROACTIVE maintenance:**
 - RM (radio management software)
 - OTAP (Over-The-Air programming)
 - PTP (point-to-point link monitoring)
 - Servers (WATCH) <http://trbonet.com/products/watch/>

Examples of best practice in the Danimex 'turnkey' projects:

- » Phased approach, thus ensuring a smooth migration.
- » The design is phased, with a priority order on sites and essential features over optional. Hence the rollout / migration can be done as locations become priority and versus funds available.



- **Remote design phase:**
 - Lots of interaction with the customer.
 - Danimex works on a **FREE design.**
- **Build phase:**
 - We have found that it best to carry out the build in Denmark, WHY:
 - **Saves funds**, as less on ground time. Thus, no extra DSA, flights or weekend days paid.
 - Easier for us to swap in and out staff, thus we can ensure the best skilled staff are available, not just send one person. Again, saves costs and ensures high skilled resource is utilised throughout the project.
 - We can test all, and should there be any out of the box hardware failures we can replace on the spot.
 - Once the equipment has been configured and tested in Denmark we ship as plug and play.
- **Deployment phase**
 - Because the equipment has been preconfigured / assembled in Denmark, this phase can be shorter again money saving.
 - During this phase, we very much work as a **JOINT TEAM**, forming a single team with the customer.
 - WHY can be summed up with one word, **EMPOWERMENT** of the customer's ICT staff. We have found that by working together during the install phase it ensures the UN team take and feel ownership of the project, thus gain a higher level of on the job-training and skills. Which in turn leads to more long-term savings. As the staff are now better trained they are in a better position to carry out proactive maintenance of their network, and can carry out future upgrades by themselves and or with remote only support.
- **Training – EMPOWERMENT of local UN teams:**
 - FREE on line training.
 - Class room based training sessions (see <http://danimex.com/academy/mototrbo-courses>).
 - As mentioned above in the deployment phase, lots of 'on-the-job' training takes place.
- **Purchasing of equipment**
 - All is in line with the LTA, which also INCLUDES staffing costs.
 - If you purchase through the LTA direct from to Danimex, it **saves costs as no 'middle man' admin fees and or double shipment costs.**

So, as you can see in the above, Danimex have lots of experience not only with the DMR technology but also more importantly with deployments and in turn where costs can be made without jeopardising the successful outcome of the project.