

telemedicine  
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## Advanced Technology and Medical Care/Prehospital Care

### Croatian Telemedicine Strategy Supports the Multilateral European Dynamic Partnership Work Program Through Cooperative Content Development

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#### Main Goal and Objectives

1. Promote partner and regional cooperation;
2. Assist in pre-planning for future TeleMED (telemedicine) coalitions; service to remote/small locations;
3. Contribute to NATO, and operate with NATO forces;
4. Become a respectable partner with NATO and other regional partners; and
5. "To improve dialogue between NATO and regional partners in issues and scenarios related to military emergency medicine, emergency planning".

#### Activities

1. Installation of TeleMED equipment in small, as well as expert medical centers (MCs);
2. Professional TeleMED Center responsible for all TeleMED activities has to be founded/inside VPN, based on the highest professional standards (rational, efficient, highly ethical, i.e., the Croatian Center for Telemedicine);
3. All "partners" are offered the possibility of contact with physicians from their settings, as needed, thus directly and significantly improving the Croatian TeleMED offer; and
4. Real-time application/various TeleMED activities; information provided at once, better decisions.

#### Benefits

1. "Tele-presence" of the worldwide well-known authorities in any MC of the Adriatic region/southeast Europe;
2. Emergency planning;
3. Intervention and momentary consultation available 24 hours a day in remote MCs;
4. Protection and successful emergency response;
5. Application of the latest technologies are followed closely and implemented in the health/telehealth care of both domicile population and foreign guests;
6. Supervision of TeleMED activities will be performed nationally; and
7. International agreements of the supervision should be developed, and the possible need for international registration of doctors practicing TeleMED internationally shall be evaluated/developed.

#### Technical Details

1. The equipment (which is going to be purchased during

the project), is capable of simple transition from ISDN technology to the next generation network technologies such as IP and ATM; and

2. The next generation networks (NGN) concept brings inevitable switch to data-oriented package networks based on fiber optic medium, DWDM systems, and dominant IP technology; these networks will provide for integrated turnover of data, speech, and video; through unique infrastructure all TeleMED data will be stored in the medical imaging high-performance support system (CfTeleMED-WMC Digital) / 2 x 43 TB.

**Keywords:** consultation; cooperation; Croatia; medical centers; NATO; partnerships; planning; technology; TeleMED; telemedicine

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### Defense Technology to Improve Civilian Prehospital Care: The E-Medics Project

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Developed healthcare systems aspire to be "paperless." Central to this is the implementation of an integrated electronic health record (EHR). This EHR must begin with pre-hospital care; but to encourage the prehospital care provider to record findings and actions contemporaneously the EHR must be more than just a computerized report form. "E-medics" is an electronic patient management system, developed for the National Health Service market using defense technology. It is a novel, icon-based, clinical treatment system that allows the user to consider trauma, medical, toxicological, and environmental priorities simultaneously. National ambulance service guidelines have been developed within the project, and underpin the management system. Voice-activated and touch-sensitive treatment screens give the medic, paramedic, or doctor clinical support together with real-time data recording. A situation report with digital images and automatic vital sign recording can be forwarded to the chosen hospital's emergency department. The system can provide management support to the medical commander at the scene of a multiple casualty incident. The military applications of this system currently are being exploited.

**Keywords:** data; electronic health record; "E-medics"; guidelines; management, system for; medical records; military; multiple casualty incident; prehospital

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### NATO Telemedicine Interoperability Study

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Military operations increasingly rely on multi-national medical support and, to date, no studies have been carried out analysing the clinical use of telemedicine in a deployed field setting across national lines. This presentation will