



FOR RELEASE:

FOR MORE INFORMATION CONTACT

Stephen Vastagh
(703) 841-3281
ste_vastagh@nema.org

SPC to Propose a Standard Solution For Remote Servicing

ROSSLYN, Va., November 27, 2002— The Joint NEMA/COCIR/JIRA Security and Privacy Committee (SPC) will present its white paper about remote servicing of medical imaging technology, “Remote Service Interface Solution (A): IPSec over the Internet Using Digital Certificates” at this year’s RSNA (Radiological Society of North America) in Chicago, Illinois. The paper can be read at www.nema.org/medical.

Remote servicing makes it possible to perform service checks and adjustments on a device such as a CT scanner in a hospital from the servicing company's home office, which may be thousands of miles away. Through secure remote servicing, expert help is available anywhere, at any time. Remote servicing offers customers several advantages. The most important is that maintenance or repair response times could be reduced, and availability of equipment increased. Remote servicing could result in lower costs for customers since on-site maintenance visits would be reduced. Furthermore, innovative services, such as scheduled preemptive maintenance to avoid unplanned accidental downtime, could be offered.

The SPC was jointly founded by the Medical Imaging Informatics Section of NEMA (National Electrical Manufacturers Association) and trade associations COCIR (European Coordination Committee of the Radiological and Electromedical Industry) and JIRA (Japan Industries Association of Radiation Apparatus). The SPC addresses security and privacy regulations for the healthcare sector in Japan,

Europe, and the United States that have the potential of introducing incompatibility and unnecessary complexity in product design. The regulations that are currently under investigation are the United States's Health Insurance Portability and Accountability Act (HIPAA), Europe's EC 95/46 Directive, and Japan's HPB 517 legislation.

This remote servicing white paper is one of the latest publications of the SPC and has been officially approved by NEMA, COCIR, and JIRA. "This paper gives a guideline to healthcare providers and vendors on how to implement remote servicing of medical imaging technology in a standardized and secure way," says GE Medical Systems' John Moehrke, who coordinated the SPC's work on this issue.

Wolfgang Leetz of Siemens Medical Solutions, chairman of the SPC, describes the situation: "Today, remote servicing is a growing business and many individual solutions, offering different levels of data security and data privacy, are being developed independently, wasting time again and again for specific developments and local implementations." The SPC recommends one possible solution that respects the data security and data privacy concerns in a large number of markets and that minimizes individual development efforts of both healthcare providers and vendors.

"Choosing these recommendations of the SPC vendors and healthcare providers can significantly minimize their burden of developing individual new remote service solutions," says Stephen Vastagh of NEMA, which serves as the Secretariat to the SPC.

The SPC arrived at technical solutions for three domains that need to be considered:

- The remote service center (RSC) that becomes a logical extension of each health care facility (HCF) to which it is connected.
- The HCF that processes and stores quantities of identifiable patient data and eventually is responsible for their protection.

- The communications medium between the access points of the remote service center and the health care facility.

The publicly accessible Internet can be made a secure transport medium through the use of IPsec (Internet Protocol Security) to set up a Virtual Private Network (VPN) between the RSC and the HCF, providing means for strong authentication of both partners and offers efficient access control. To reduce possible interoperability problems between equipment of different IPsec vendors, a list of necessary hardware, software, and configuration requirements for the access points of the VPN is included.

Besides some administrative procedures, the RSC needs to implement technical measures. They mainly focus on the network architecture, on how to safeguard accountability of actions performed, and on the treatment of identifiable patient data. Similar activities have to be conducted at the HCF in order to protect the data traffic between health care facilities' access point and the equipment under service.

A key component of this architecture is accountability. It is provided through a layered approach. The RSC must provide an individual authentication that is coupled with audit trails to show accountability throughout the entire system. The health care facility has full control of the VPN access point and thus can track and restrict activity as desired.

“It is the first industry consensus approach to a fully secured remote servicing of healthcare systems,” said Charles Parisot of GE Medical Systems, chairman of the NEMA MII-PACS Section that sponsors this activity in the United States.

NEMA is the leading trade association in the United States representing the interests of over 400 electroindustry manufacturers. NEMA's Diagnostic Imaging and Therapy Systems Division represents more than 95% of U.S. manufacturers of x-ray imaging, computed tomography, diagnostic ultrasound, radiation therapy, magnetic resonance, nuclear medicine imaging and medical informatics equipment.

###