

# ISO/TR 11636:2009-12 (E)

## Health Informatics - Dynamic on-demand virtual private network for health information infrastructure

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Terms and definitions .....	1
3	Abbreviated terms .....	3
4	Network features in the healthcare field .....	4
4.1	Pattern of current or expected information services in the healthcare field .....	4
4.2	Category of healthcare information to be protected (information assets) .....	5
4.3	Network requirements in the healthcare field .....	6
5	Concept of network construction in the healthcare field .....	6
5.1	Overview .....	6
5.2	Responsibility to manage security of healthcare information exchange including personal information between independent institutions .....	7
5.3	Security concepts in network systems for medical institutions .....	8
6	Threat analysis and measures .....	9
7	Network construction in the healthcare field .....	10
7.1	Minimum guidelines for security management of healthcare information exchange including personal information between external institutions .....	10
7.2	Technical and operational checklists for evaluation of network security .....	11
7.3	Application of an on-demand VPN .....	11
8	Cases of security measures in a dynamic on-demand VPN for exchange of healthcare information with external institutions .....	12
8.1	Introduction .....	12
8.2	Regional healthcare cooperation model with a healthcare portal .....	12
8.3	Online maintenance model .....	13
8.4	Regional cooperation model with the lead taken by a regional core hospital .....	14
8.5	Model for teleradiology, remote maintenance and network conferencing with the cooperation of university hospitals, research institutions and regional hospitals .....	15
8.6	University hospital model centred around teleradiology, telepathology and network conferences conducted between a university hospital and regional hospitals .....	16
Annex A (informative)	Threat analysis and measures .....	18
Annex B (informative)	Security management of medical information exchange including personal data between independent institutions (see reference [6]) .....	25
Annex C (informative)	Technical and operational checklists for the guideline .....	35
Annex D (informative)	Technology used: Dynamic on-demand VPN .....	62
Bibliography .....		70