

ISO/IEC 30101:2014-11 (E)

Information technology - Sensor networks: Sensor network and its interfaces for smart grid system

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative References	1
3	Terms and Definitions	1
4	Symbols (and abbreviated terms)	2
5	Smart Grid Reference Models and Architectures	3
5.1	General	3
5.2	Smart Grid Architectures Adopted for Developing Sensor Network & its Interfaces for Smart Grid System	3
5.3	IEEE 2030 Smart Grid Interoperability Guideline Standard	4
6	Sensor Network Interface with SG Entities	10
7	Sensors in Smart Grid System	16
7.1	Introduction	16
7.2	Sensors in Bulk Generation Domain	18
7.3	Sensors in Transmission Domain	26
7.4	Sensors in Distribution Domain	36
7.5	Sensors in Customer Domain	45
8	Networks in Smart Grid Domains	45
9	Sensor Network Architecture Supporting Smart Grid System	47
9.1	Architecture of Sensor Network and its Interfaces for Smart Grid System	47
9.2	SG Domain	48
9.3	Sensing Domain	48
9.4	Network Domain	50
9.5	Service Domain	50
9.6	Tasks and Activities in Sensor Networks Enabled by the Domain Functions	51
Annex A (informative) Other Smart Grid Reference Models and Architectures		53
Annex B (normative) IEEE 2030 Descriptions of Entities and Interfaces		62
Annex C (informative) Type of Sensors in Smart Grid Domains		84
Annex D (informative) Sensor Network Applications and Services for Smart Grid		89
Grid System		99
Bibliography		101