

# ISO/IEC 24392:2023-07 (E)

## Cybersecurity - Security reference model for industrial internet platform (SRM-IIP)

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Abbreviated terms .....	3
5	Overview .....	4
6	IIP-specific security threats to industrial internet platforms .....	6
6.1	Characteristics of IIPs .....	6
6.2	Security threats to IIPs .....	8
7	Security reference model of industrial internet platform .....	12
7.1	General .....	12
7.2	Security domains of IIPs .....	12
7.2.1	General .....	12
7.2.2	Edge security domain .....	13
7.2.3	Cloud infrastructure security domain .....	13
7.2.4	Platform security domain .....	14
7.2.5	Application security domain .....	14
7.3	System life cycle .....	14
7.3.1	General .....	14
7.3.2	Development and production stage .....	15
7.3.3	Utilization and support stage .....	16
7.3.4	Retirement stage .....	17
7.4	Business scenarios and roles .....	19
7.4.1	General .....	19
7.4.2	Production optimization .....	19
7.4.3	Product customization .....	20
7.4.4	Multilevel security production .....	20
7.4.5	Transnational cooperation .....	21
8	Security objectives and controls for IIPs .....	23
8.1	Security objectives .....	23
8.2	Security controls .....	24
8.2.1	General .....	24
8.2.2	Physical security .....	24
8.2.3	Network security .....	25
8.2.4	Access security .....	25
8.2.5	Communication security .....	26
8.2.6	System security .....	26
8.2.7	Application security .....	27
8.2.8	Operation and maintenance security .....	27
8.2.9	Security management .....	28
Annex A (informative)	Typical IIP use cases .....	29
Bibliography .....		32