


HYPERLOOP APPLICATIONS – Generic guideline for design, operation and certification			
	Revision: 1.0		

[Redacted]

[Redacted]

1.3 Capsule Guidance..... 37

[Redacted]

[Redacted]

[Redacted]

1.4 Capsule Propulsion and Braking 39

[Redacted]

[Redacted]

1.5 Capsule Interiors 40

1.6 Capsule Doors 41

[Redacted]

[Redacted]

1.7 Capsule Environmental Control and Life Support 42

[Redacted]

[Redacted]

[Redacted]

[Redacted]

1.7.6 Capsule Emergency Equipment..... 44

2 Causeway..... 45

2.1 Free-Span Tube 45

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]


2.2 Pylons 48

[Redacted]

[Redacted]

[Redacted]

[Redacted]

HYPERLOOP APPLICATIONS – Generic guideline for design, operation and certification			
	Revision: 1.0		

[Redacted]

[Redacted]

5.3 Communications..... 76

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

6 Electromagnetic Compatibility (EMC)..... 77

6.1 Legal requirements..... 77

6.2 Management of electromagnetic compatibility (EMC)..... 78

6.3 Emissions from the whole Hyperloop system to the outside world..... 78

[Redacted]

[Redacted]

[Redacted]

6.4 Emissions and immunity of capsule systems and equipment..... 78

6.5 Emission and immunity of stationary control, signaling, and communication systems and equipment..... 79

6.6 Emissions and immunity of stationary energy conversion, distribution and storage systems and equipment..... 79

6.7 Exposure of people to electromagnetic fields (EMF)..... 79

6.8 Electromagnetic compatibility related to functional safety 82

IV. Operation and Maintenance 83

1 Organization 83

1.1 General 83

1.2 Executive Board 83

1.3 Safety and Operation Management 84

1.4 Maintenance Management 84

1.5 Operational and Maintenance Staff 84

2 Operation..... 84

2.1 General 84


2.2 Operational Planning 84

2.3 Operational Modes 85

[Redacted]

[Redacted]

[Redacted]

HYPERLOOP APPLICATIONS – Generic guideline for design, operation and certification			
	Revision: 1.0		

[Redacted]

[Redacted]

2.4 Operational Conditions 87

[Redacted]

[Redacted]

2.5 Passenger Flow Management 88

[Redacted]

[Redacted]

3 Maintenance 88

3.1 General 88

3.2 Maintenance Planning 89

3.3 General Maintenance Requirements 89

[Redacted]

[Redacted]

[Redacted]

3.4 System Specific Maintenance Requirements 90

V. Fire Protection and Evacuation 91

1 Fire Protection 91

[Redacted]

[Redacted]

[Redacted]

2 Evacuation 92

[Redacted]

[Redacted]

[Redacted]

VI. Security 94

1 Security Concept 94

2 Physical Security 94

3 Information Security 94


3.1 Information Security Risk Assessment and Targets 94

[Redacted]

[Redacted]

[Redacted]

3.2 Information Security Management System (ISMS) 96

HYPERLOOP APPLICATIONS – Generic guideline for design, operation and certification			
	Revision: 1.0		

3.3	Network and System Security of Industrial Automation and Control Systems IEC 62443	96
VII.	Certification	97
1	Purpose	97
2	Scope	97
3	Qualification	97
4	Implementation	98
4.1	Evaluation standards and criteria	98
	[Redacted]	
	[Redacted]	
4.2	Inputs	98
4.3	Audits	99
4.4	Assessment Phases	99
	[Redacted]	
	[Redacted]	
	[Redacted]	
	[Redacted]	
	[Redacted]	
	[Redacted]	
	[Redacted]	
4.5	Certificate	104
5	Regular inspections	104
	Disclaimer	105

Proprietary and Confidential