

DIN EN ISO 15118-2:2016-08 (E)

Road vehicles - Vehicle-to-Grid Communication Interface - Part 2: Network and application protocol requirements (ISO 15118-2:2014); English version EN ISO 15118-2:2016, only on CD-ROM

Contents		Page
Foreword		v
Introduction.....		vi
1 Scope		1
2 Normative references		1
3 Terms and definitions		3
4 Symbols and abbreviated terms		7
5 Conventions		8
5.1 Definition of OSI based services		8
5.2 Requirement structure		8
5.3 Usage of RFC references		8
5.4 Notation used for XML schema diagrams.....		9
6 Document overview.....		9
7 Basic requirements for V2G communication		11
7.1 General information		11
7.2 Service primitive concept of OSI layered architecture		11
7.3 Security concept.....		12
7.4 V2G communication states and data link handling		21
7.5 Data Link Layer.....		26
7.6 Network Layer.....		26
7.7 Transport Layer		28
7.8 V2G Transfer Protocol		32
7.9 Presentation Layer		36
7.10 Application Layer		46
8 Application Layer messages		55
8.1 General information and definitions.....		55
8.2 Protocol handshake definition.....		56
8.3 V2G Message Definition.....		60
8.4 V2G Communication Session and BodyElement Definitions		62
8.5 Complex data types.....		104
8.6 Identification Modes and Message Set definitions		137
8.7 V2G communication timing		170
8.8 Message sequencing and error handling		184
8.9 Request-Response Message Sequence examples		206
Annex A (informative) Mapping of Part 1 use case elements		214
Annex B (informative) Mapping of ISO 15118 message element names to SAE J2847/2 terms		250
Annex C (normative) Schema definition		254
Annex D (informative) Message examples		278
Annex E (informative) Application of certificates		299
Annex F (normative) Certificate profiles		313
Annex G (informative) Encryption for the Distribution of Secret Keys		321
Annex H (normative) Specification of Identifiers		323
Annex I (informative) Message sequencing for renegotiation.....		326
Annex J (informative) Overview on XML Signatures		330

Annex K (informative) Summary of requirements..... 334
Bibliography 341