CONTENTS

INTRODUCTION 5
1 Scope 6
2 Normative references 7
3 Terms and definitions 7
4 Abbreviated terms 8
5 General 8
6 Information exchange models overview 9
7 Operational functions 11
7.1 General 11
7.2 Association and authorisation model 11
7.3 Control model 12
7.3.1 General 12
7.3.2 Direct control / Select before operate (SBO) 13
7.3.3 Operate / TimeActivatedOperate 13
7.3.4 Normal security / Enhanced security 13
7.4 Monitoring, reporting and logging model 13
8 Management functions 15
8.1 General 15
8.2 User management/access security model 15
8.3 Setup model 15
8.4 Time synchronisation model 15
8.5 Diagnostic (self-monitoring) model 15
9 The ACSI for wind power plant information models 16
9.1 General 16
9.2 Services of association and authorisation 16
9.3 Services of GenServerClass 17
9.4 Services of GenLogicalDeviceClass 17
9.5 Services of GenLogicalNodeClass 17
9.6 Services of GenDataObjectClass 17
9.7 Services of DataSetClass 18
9.8 Services of ReportControlBlockClass 18
9.9 Services of LogControlBlockClass and LogClass 19
9.10 Services of ControlClass 20
Annex A (informative) Examples of reporting and logging services 21
A.1 Reporting example 21
A.2 Logging example 22
Annex B (normative) Relationship between ACSI services and functional constraints 23
Annex C (informative) Relationship between ACSI defined in IEC 61850-7-2 and IEC 61400-25-3 25
Annex D (normative) ACSI conformance statement 27
D.1 General 27
D.2 ACSI basic conformance statement 27
D.3 ACSI models conformance statement 27
D.4 ACSI service conformance statement 29
Bibliography 31
Annex ZA (normative) Normative references to international publications with their corresponding European publications 32

Figure 1 – Conceptual communication model of the IEC 61400-25 series 7
Figure 2 – Association and authorisation model (conceptual) 11
Figure 3 – Control model (conceptual) 12
Figure 4 – Monitoring, reporting and logging model (conceptual) 14
Figure 5 – Conceptual information exchange model for a wind power plant 16
Figure 6 – Buffered report control block – conceptual 19
Figure 7 – Log control block – conceptual 20
Figure A.1 – Mapping of information models to data sets for reporting (example) 21
Figure A.2 – Logging basics (example) 22
Figure C.1 – Conceptual service model of the ACSI 26

Table 1 – Information exchange models 10
Table 2 – Comparison of the information retrieval methods 15
Table 3 – Data filter 19
Table B.1 – Relationship between ACSI Services and Functional Constraints 23
Table D.1 – Basic conformance statement 27
Table D.2 – ACSI models conformance statement 28
Table D.3 – ACSI service conformance statement 29
Table D.4 – Time 30