

**Environmental Engineering (EE);
Monitoring and Control Interface for Infrastructure Equipment
(Power, Cooling and Building Environment Systems used in
Telecommunication Networks)
Part 1: Generic Interface**

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Foreword

This final draft ETSI Standard (ES) has been produced by ETSI Technical Committee Environmental Engineering (EE), and is now submitted for the ETSI standards Membership Approval Procedure.

The present document is part 1 of a multi-part deliverable covering power, cooling and building environment systems control and monitoring guidance, as identified below:

Part 1: "Generic Interface";

Part 2: "DC power system control and monitoring information model";

Part 3: "AC UPS power system control and monitoring information model";

Part 4: "AC distribution power system control and monitoring information model";

Part 5: "AC diesel back-up generator system control and monitoring information model";

Part 6: "Air conditioning system control and monitoring information model";

Part 7: "Other utilities system control and monitoring information model";

Part 8: "Remote power feeding system control and monitoring information model";

Part 9: "Alternative power systems control and monitoring information model";

Part 10: "AC inverter power system control and monitoring information model".

1 Scope

The present document applies to monitoring and control of Infrastructure Environment i.e. power, cooling and building environment systems for telecommunication centres and access network locations.

Interoperability of heterogeneous management interfaces and systems with multi-vendor equipment is the key issue. The present document gives a general approach from equipment to management system.

The multi-part deliverable is composed of a generic core part (the present document) and several specific parts for equipment category (ES 202 336-2 and following [15] and [i.14]).

The core document defines:

- The site equipment map and its division in functional subsets e.g. DC system which introduces part 2 and following parts of this multi-part deliverable.
- The generic set of exchanged information required at the interface of equipment, which is instanced for each equipment subset in part 2 and following parts of this multi-part deliverable.
- The minimum requirement for network architecture allowing some compatibility with old existing interface and the mechanism to exchange data between network element.
- The data interface protocol for remote or local site management (Machine to Machine Interface MMI) and Human Machine Interface HMI for monitoring and controlling.
- Recommendations for sure management network such as dependability, data back-up, data coherence and synchronization all along the management network, response time, fault detection and partial service in case of failure.

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2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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2.1 Normative references

The following referenced documents are necessary for the application of the present document.

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| [1] | ETSI ETS 300 132-1: "Equipment Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 1: Operated by alternating current (AC) derived from direct current (DC) sources". |
| [2] | ETSI EN 300 132-2: "Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 2: Operated by direct current (DC)". |
| [3] | ETSI EN 300 132-3: "Environmental Engineering (EE); Power supply interface at the input to telecommunications equipment; Part 3: Operated by rectified current source, alternating current source or direct current source up to 400 V". |
| [4] | ETSI EN 302 099: "Environmental Engineering (EE); Powering of equipment in access network". |
| [5] | ITU-T Recommendation M.3010: "Principles for a Telecommunications management network". |