

ISO/IEC 15067-5:2026-04 (E)

Information technology - Home Electronic System (HES) application model - Part 5: A safety framework and guidelines for control and data communication messages

| Contents | Page |
|--|------|
| FOREWORD..... | 2 |
| INTRODUCTION..... | 4 |
| 1 Scope..... | 7 |
| 2 Normative references | 7 |
| 3 Terms, definitions, and abbreviated terms | 7 |
| 3.1 Terms and definitions..... | 7 |
| 3.2 Abbreviated terms..... | 9 |
| 4 Conformance | 9 |
| 5 Enhancing safety for users of networked products | 9 |
| 5.1 Objectives of safety protection | 9 |
| 5.2 Messages creating unsafe conditions..... | 10 |
| 5.3 Sources of unsafe message | 10 |
| 5.4 Protection from unsafe messages | 10 |
| 5.5 Safety protection benefits | 11 |
| 6 General guidelines for product safety | 11 |
| 6.1 Combining message and product safety..... | 11 |
| 6.2 Design guidelines for product safety | 12 |
| 6.3 Installation guidelines for product safety | 12 |
| 7 Mitigating safety risks for networked products | 12 |
| 7.1 Screening messages that cause unsafe options..... | 12 |
| 7.2 Message types and risks..... | 13 |
| 7.3 Safety and connectivity | 13 |
| 7.3.1 Safety for hcs connectivity | 13 |
| 7.3.2 Additional safety features for HES connectivity..... | 14 |
| 7.4 Hazard severity for products | 14 |
| 7.5 Factors affecting safety..... | 15 |
| 7.6 Requirements for enhancing safe product operation..... | 16 |
| Annex A (informative) Examples of unsafe messages | 17 |
| A.1 Unsafe messages | 17 |
| A.2 Cook top | 17 |
| A.3 Lighting..... | 17 |
| A.4 Robotic cleaner..... | 17 |
| Bibliography..... | 18 |
| Table 1 – Factors affecting the operational safety of relatively safe products | 15 |
| Table 2 – Factors affecting the operational safety of relatively unsafe products | 16 |