



**Machine-to-Machine Focus Group
(M2M-FG)
Smart Grid (SG) Vertical Study**

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Table of Contents

EXECUTIVE SUMMARY	4
1.1 PROBLEM STATEMENT	4
1.2 SCOPE OF EFFORT	4
1.3 ASSESSMENT AND CONCLUSIONS	5
1.4 RECOMMENDATIONS.....	5
2 INTRODUCTION.....	6
3 DEFINITIONS.....	6
4 USE CASE OVERVIEW.....	7
4.1 THE SG-NET DIAGRAM	7
4.2 THE SGIP/OPENSF REQUIREMENT SPECIFICATION.....	9
4.3 USE CASE ANALYSIS	11
5 ARCHITECTURAL FRAMEWORK.....	19
5.1 ETSI TC M2M ARCHITECTURE	19
5.2 SMART GRID CO-ORDINATION GROUP (SG-CG).....	20
5.3 ITU FOCUS GROUP ARCHITECTURE	22
6 PROTOCOL ANALYSIS	23
6.1 SMART ENERGY PROTOCOL (SEP)	23
6.2 ZIGBEE SMART ENERGY.....	24
7 USE CASE ANALYSIS.....	24
8 LEGAL / REGULATORY SUMMARY	28
8.1 U.S. POLICY & REGULATION	28
8.2 CONSIDERATIONS FOR ATIS M2M FOCUS GROUP.....	28
8.2.1 <i>Critical Infrastructure Protection (CIP)</i>	29
8.2.2 <i>Consumer Privacy</i>	29
8.2.3 <i>Net Energy Metering</i>	29
8.2.4 <i>Renewable Energy Generation</i>	29
9 CONCLUSIONS & RECOMMENDATIONS.....	29
9.1 STANDARDS NEEDS.....	29
APPENDIX B: MACHINE-TO-MACHINE FOCUS GROUP MEMBERS.....	34

EXECUTIVE SUMMARY

1.1 Problem Statement

Concern over the environment (e.g., CO₂ emissions), scarcity of resources (e.g. fossil fuels), and concerns for safety (e.g., safeguarding nuclear plants) are precipitating a universal move to re-examine the electric grid.

The smart grid is defined as a radical evolution of the energy supply and consumption infrastructure that will give providers and consumers unprecedented levels of reliability and control while reducing the adverse environmental impact of energy generation and consumption.

1.2 Scope of Effort

By integrating an end-to-end, advanced communications infrastructure into the electric power system, a smart grid can provide consumers with near-real-time information on their energy use, support pricing that reflects changes in supply and demand, and enable smart appliances and devices to help consumers avoid higher energy bills.

Conceptual Model

