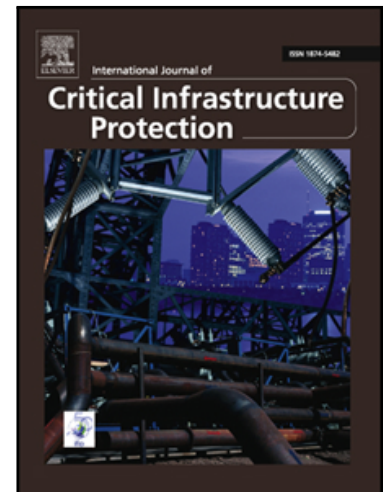


## Accepted Manuscript

Information and power terminals: A reliable microgrid infrastructure for use in disaster scenarios

Pio Lombardi, Kathleen Hänsch, Bartłomiej Arendarski, Przemysław Komarnicki

PII: S1874-5482(17)30175-0  
DOI: [10.1016/j.ijcip.2017.10.005](https://doi.org/10.1016/j.ijcip.2017.10.005)  
Reference: IJCIP 230



To appear in: *International Journal of Critical Infrastructure Protection*

Received date: 21 December 2015  
Revised date: 2 October 2017  
Accepted date: 20 October 2017

Please cite this article as: Pio Lombardi, Kathleen Hänsch, Bartłomiej Arendarski, Przemysław Komarnicki, Information and power terminals: A reliable microgrid infrastructure for use in disaster scenarios, *International Journal of Critical Infrastructure Protection* (2017), doi: [10.1016/j.ijcip.2017.10.005](https://doi.org/10.1016/j.ijcip.2017.10.005)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Information and power terminals: A reliable microgrid infrastructure for use in disaster scenarios

Pio Lombardi<sup>1</sup>, Kathleen Hänsch, Bartłomiej Arendarski, Przemysław Komarnicki

*Fraunhofer Institute for Factory Operation and Automation, Joseph von Fraunhofer Str. 1, 39106 Magdeburg, Germany*

---

## Abstract

An absence of information during a catastrophe or terrorist attack significantly increases panic in the affected population. Ensuring that the communications infrastructure is operational during crisis situations is therefore essential. Solutions that safeguard the energy supply and data transmission are needed to assure communications. During a major disaster, the supply of electricity to communications equipment may be disrupted and the communications network may be overloaded or elements of it may be destroyed. This paper discusses the use of information and power terminals that leverage microgrid systems to provide information and power to a population during a major disaster.

---

## Keywords

Information and Power Terminals; Microgrid; Disasters; Power Supply; Information Dissemination; Emergency Response; Public Awareness

**Manuscript No.: IJCIP\_2015\_66**

**Submitted: December 21, 2015; Revision 1 Submitted: May 1, 2017; Revision 2 Submitted: October 2, 2017; Accepted: October 20, 2017**

---

<sup>1</sup>Corresponding author: Pio Lombardi (pio.lombardi@iff.fraunhofer.de)

Download English Version:

<https://daneshyari.com/en/article/6747659>

Download Persian Version:

<https://daneshyari.com/article/6747659>

[Daneshyari.com](https://daneshyari.com)