Accepted Manuscript

A Novel Communication System Approach for a *Smart City* based on the Human Nervous System

N. Uribe-Pérez, C. Pous

PII: S0167-739X(16)30864-0
DOI: http://dx.doi.org/10.1016/j.future.2016.12.035
Reference: FUTURE 3276

To appear in: *Future Generation Computer Systems*

Received date: 15 October 2015
Revised date: 7 December 2016
Accepted date: 29 December 2016

Please cite this article as: N. Uribe-Pérez, C. Pous, A Novel Communication System Approach for a *Smart City* based on the Human Nervous System, *Future Generation Computer Systems* (2016), http://dx.doi.org/10.1016/j.future.2016.12.035

HIGHLIGHTS

Analysis of the main existing communication architectures for *Smart Cities.*

Review of approaches found in literature to address services in a *Smart City.*

Design of a communication framework for a *Smart City* inspired in the nervous system.

Definition of the *Smart Gateway,* able to reduce data traffic and processing resources.

Simulation of several communication channel scenarios with different technologies.