Accepted Manuscript

5G Internet of Things: A Survey

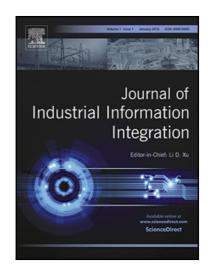
Shancang Li, Li Da Xu, Shanshan Zhao

PII: S2452-414X(18)30003-7 DOI: 10.1016/j.jii.2018.01.005

Reference: JII 55

To appear in: Journal of Industrial Information Integration

Received date: 15 January 2018 Revised date: 19 January 2018 Accepted date: 20 January 2018



Please cite this article as: Shancang Li, Li Da Xu, Shanshan Zhao, 5G Internet of Things: A Survey, *Journal of Industrial Information Integration* (2018), doi: 10.1016/j.jii.2018.01.005

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.

ACCEPTED MANUSCRIPT

5G Internet of Things: A Survey

Shancang Li^a, Li Da Xu^{b,c,d}, Shanshan Zhao^e

^a University of the West of England, UK (email: shancang.li@uwe.ac.uk)
^b Institute of Computing Technology, Chinese Academy of Sciences, Beijing 100190,
China

^cShanghai Jiao Tong University, Shanghai 200052, China

^dUniversity of Science and Technology of China, Hefei 230026, China; Old Dominion

University, Norfolk, VA 23529, USA (e-mail: lxu@odu.edu).

^eEngineering Modelling and Simulation (EMS) research group, University of the West of

England, UK (e-mail: shanshan.zhao@uwe.ac.uk)

Abstract

The existing 4G networks have been widely used in the Internet of Things (IoT) and is continuously evolving to match the needs of the future Internet of Things (IoT) applications. The 5G networks are expected to massive expand today's IoT that can boost cellular operationgs, IoT security, and network challenges and driving the Internet future to the edge. The existing IoT solutions are facing a number of challenges such as large number of conneciton of nodes, security, and new standards. This paper reviews the current research state-of-the-art of 5G IoT, key enabling technologies, and main research trends and challenges in 5G IoT¹.

Keywords: Internet of things (IoT), 5G, wireless communication,

1. Introduction

The evolving of fifth generation (5G) networks is becoming more readily available as a major driver of the growth of IoT applications [2]. According to the International Data Corporation (IDC) report, the global 5G services will drive 70% of companies to spend \$1.2 billion on the connectivity management solutions [2]. New applications and business models in the future IoT require new performance criteria such as massive connectivity, security,

¹Received October 9, 2017; Revised December 16 2017

Download English Version:

https://daneshyari.com/en/article/6950068

Download Persian Version:

https://daneshyari.com/article/6950068

<u>Daneshyari.com</u>