

**Record 1 of 1****Title:** Practical Aspects Regarding Implementation of Real Time WSN Applications based on IEEE 802.15.4**Author(s):** Stangaciu, V (Stangaciu, Valentin); Pescaru, D (Pescaru, Dan); Micea, MV (Micea, Mihai V.); Cretu, V (Cretu, Vladimir)**Book Group Author(s):** IEEE**Source:** 2013 21ST TELECOMMUNICATIONS FORUM (TELFOR) **Pages:** 295-298 **Published:** 2013**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Cited Reference Count:** 21

**Abstract:** Nowadays, systems based on Wireless Sensor Networks are intensively used in various fields. However, there are few real time applications employing WSNs. The problem resides in various limitations especially at the level of their communication capabilities. Various researches were conducted in this direction but theoretical models are still far from physical reality. The work presented in this paper aims to identify some hard-to-be-modeled aspects using practical measurements on a real time WSN. Experiments were conducted on a network using IEEE 802.15.4 compliant communication modules, including the widespread ZigBee solution.

**Accession Number:** WOS:000349857500070**Language:** English**Document Type:** Proceedings Paper**Conference Title:** 21st Telecommunications Forum (TELFOR)**Conference Date:** NOV 26-28, 2013**Conference Location:** Belgrade, SERBIA

**Conference Sponsors:** IEEE, Telecommunicat Soc, Univ Belgrade, Sch Elect Engn, IEEE Commun Soc, Serbia & Montenegro COM Chapter, IEEE Reg 8, Telekom Srbija, VLATACOM d o o, ERICSSON, HUAWEI, Int Business Machines d o o, Minist Educ, Sci & Technol Dev, Minist Foreign & Internal Trade & Telecommunicat, Nokia Solut & Networks Serbia, Publ PTT Enterprise SRBIJA, Republ Agcy Elect Commun Serbia, Serbian Natl Register Internet Domain Names, Serbia & Montenegro Air Traf Serv, Teri Engn, BIT Projekt, IBIS INSTRUMENTS, IEEE Serbia & Montenegro Sect, INTRACOM TELEKOM, ROHDE & SCHWARZ Osterreich Ges m b H, VIP MOBILE, APEX Solut Technol, MDS Informaticki Inzenjering

**Author Keywords:** WSN; real time applications; IEEE 802.15.4; ZigBee**Addresses:** [Stangaciu, Valentin; Pescaru, Dan; Micea, Mihai V.; Cretu, Vladimir] Politehn Univ Timisoara, DCSE, Timisoara 300223, Romania.**Reprint Address:** Stangaciu, V (reprint author), Politehn Univ Timisoara, DCSE, 2 Vasile Parvan Blvd, Timisoara 300223, Romania.**E-mail Addresses:** valys@dsplabs.cs.upt.ro; dan@cs.upt.ro; micha@dsplabs.cs.upt.ro; vladimir.cretu@cs.upt.ro**Publisher:** IEEE**Publisher Address:** 345 E 47TH ST, NEW YORK, NY 10017 USA**Web of Science Categories:** Engineering, Electrical & Electronic; Telecommunications**Research Areas:** Engineering; Telecommunications**IDS Number:** BC0ZC**ISBN:** 978-1-4799-1420-3**Source Item Page Count:** 4