Wireless on-demand network systems and services have become pivotal in shaping our future networked world. Starting as a niche application over Wi-Fi, they can now be found in mainstream technologies like Bluetooth LE, LTE Direct and Wireless LANs, and have become the cornerstone of upcoming networking paradigms including mesh and sensor networks, the Internet of Things, cloud networks, vehicular networks, disruption tolerant and opportunistic networks, underwater and intra-body networks.

The challenges of this exciting research field are numerous. Examples include how to make smart use of these novel technologies when multiple technologies or a mix of permanent services and on-demand networking opportunities are available to a network node, how to provide robust services in highly dynamic environments, how to efficiently employ and operate heavily resource-constrained devices, and how to develop robust and lightweight algorithms for self-organization and adaptation. Finally, there are many application-specific challenges.

WONS, now in its thirteenth edition, is a high quality forum to address these challenges. WONS aims to provide a global platform for rich interactions between experts in their fields, discussing innovative contributions in a stimulating environment.

This announcement solicits original contributions of high-quality research providing novel insights on all aspects of wireless on-demand networks and systems; from protocol and network design, modeling, performance evaluation, energy efficiency, QoS models and mechanisms, practical implementations, service level aspects, application use-cases, to the integration of multiple wireless network technologies.

**Topics of interest comprise, but are not limited to:**

- Cognitive radio networks
- Mobile computing and services
- Cross-layer design
- Modeling and optimization
- Energy-efficient protocols and power management
- Network management
- Heterogeneous wireless networks
- New architectures for on-demand wireless systems
- Implementations and testbeds
- Novel applications and services
- Integration and co-existence of heterogeneous technologies
- Opportunistic, delay-tolerant, and dissemination-based protocols
- Intra-body and biomedical on-demand systems
- Performance evaluation through simulations and experiments
- Green wireless networks
- Pervasive and ubiquitous computing
- Localization and mobility management
- Security, privacy, and trust
- MAC and advanced PHY technologies
- Social and economic aspects
- Middleware aspects
- Underwater on-demand networked systems
- Mobile peer-to-peer systems
- Underwater on-demand networked systems

**Manuscript submissions:**

Authors are invited to submit double-column long papers (up to 8 pages) and short papers (up to 4 pages) as a PDF file in IEEE format with a font size no smaller than 10pt. All paper submissions must be written in English. The mandatory IEEE template in Microsoft Word and LaTeX format can be found at the IEEE templates page. All submitted manuscripts must be at least 3 pages in length. Short papers should present future research directions and ongoing work with visionary, innovative ideas; accepted short papers will populate poster sessions at the conference and will be included in the conference proceedings. Submitted papers must not have been published elsewhere and must not be currently under review by another conference or journal. Submission implies the willingness of at least one of the authors to register and present the paper. All submitted papers will be peer-reviewed. Accepted papers will appear in the conference proceedings and will be submitted to the IEEE Xplore Digital Library.

Further submission instructions are published on the conference web site http://2018.wons-conference.org/