

# IEEE DySPAN 2014 Demonstration Track

## Introduction

This is a call for proposals to demonstrate systems, prototypes, critical technology components and algorithms at IEEE DySPAN 2014, which will be held in McLean, VA, USA from April 1<sup>st</sup> – 4<sup>th</sup>, 2014. All up to date information about the symposium is available at <http://www.ieee-dyspan.org/2014>

Similar to IEEE DySPAN in 2007, 2008, 2010, 2011, and 2012 IEEE DySPAN 2014 will provide the opportunity to conduct live demonstrations of dynamic spectrum systems. The event will offer an invaluable opportunity to **demonstrate and interact** with other world-leading researchers in the field of dynamic spectrum access. Apart from demonstrations performed by participating groups, IEEE DySPAN 2014 will create a unique opportunity to **conduct experiments**. These include (but are not limited to) spectral occupancy measurements, and co-existence and system interaction measurements.

To participate in the demonstration and experimentation activities, candidates shall complete the demonstration form to provide a description of the planned demonstration and/or experimentation. The IEEE DySPAN 2014 Demonstration Committee will evaluate the proposals based on the three criteria:

- **Technical Significance:** how important and novel is the demonstration to the community.
- **Demonstration Maturity:** the demonstration must be mature enough “to leave the lab.” Demonstrations involving RF transmissions must include *a priori* or *in situ* risk mitigation measures to ensure regulatory compliance and coexistence with other spectrum users.
- **Demonstration Supportability:** how the intended demonstration will fit to the IEEE DySPAN program, and will it be possible to conduct such demonstration given regulatory and physical constraints, e.g., space and time span.

All proposal submissions shall attach a maximum 2-page paper, which describes to the general audience the purposes and functionalities of the developed demonstrator. Papers from accepted demonstrations will be included in the IEEE DySPAN 2014 proceedings and included in the IEEE Xplore database. External reviewers appointed to IEEE DySPAN 2014 Demonstration Track will review the accompanying 2-page description papers to ensure quality and fairness. Review results will have influence on the final decision of the Demonstration Committee. Visit <https://edas.info/newPaper.php?c=15773&track=42943> to submit a paper.

During IEEE DySPAN 2014, a Best Demo Award will be given to the best university team and best industry team participating in the Demonstration Track. All demos will be evaluated based on visitors’ votes (gathered during the conference) and the Award Committee, which will be introduced during the conference venue. More information on the award procedure will be provided at <http://www.ieee-dyspan.org/2014>

*PLEASE NOTE: To be published in the IEEE [name of event] Conference Proceedings and IEEE Xplore®, an author of an accepted paper is required to register for the conference at the full (member or non-member) rate and the paper must be presented by an author of that paper at the conference unless the TPC Chair grants permission for a substitute presenter arranged in advance of the event and who is qualified both to present and answer questions. Non-refundable registration fees must be paid prior to uploading the final IEEE formatted, publication-ready version of the paper. For authors with multiple accepted papers, one full registration is valid for up to 3 papers. Accepted and presented papers will be published in the IEEE [name of event] Conference Proceedings and submitted to IEEE Xplore®.*

## Important Dates

December 1, 2013

[Time zone: Anywhere on Earth  
(UTC-12); Time: 19:10:00  
GMT+12]

January 10, 2014

April 1-4, 2014

Complete proposal form (submit directly to IEEE DySPAN demo Chairs) and 2-  
page demonstration paper (submit to  
<https://edas.info/newPaper.php?c=15773&track=42943>)  
Notification of demonstration proposal acceptance  
IEEE DySPAN 2014 Symposium

## Regulations and Transportation

Regulatory licenses will be negotiated and procured by the demonstration committee based on submitted system capabilities. It is therefore necessary to have knowledge of **all possible frequency ranges** a device is capable of using, as certain frequencies are restricted for experimental use in McLean, VA, USA.

It is the responsibility of each demonstration participant to secure shipping and handling of their equipment to and from the demonstration site. Those companies/research institutions that will ship equipment from outside of McLean, VA, USA may wish to arrange a Carnet. The Carnet is a type of “Merchandise Passport” that can be used as proof that you are temporarily importing commercial samples or professional equipment for exhibition in the host country. USA is part of the Carnet program as are many other countries. Demonstrators from countries that do not participate in this program will need to contact their local customs officials to facilitate transportation. For more information on Carnets, you may refer to <http://www.atacarnet.com>.

Other points to take note:

- Moving large amounts of electronics through an airport (especially customs) is going to take time. Consider using airfreight for transferring equipment. Otherwise, prepare well in advance and be sure to have all supporting documentation on hand.
- It is also advised that participants consider insurance for any hardware during the symposium and shipping process.

## Demonstration Committee Contact Information

WWW: <http://www.ieee-dyspan.org/2014>

Submission and general inquiries:

Demonstration Chairs	Email Address	Contact Number
Przemysław PAWELCZAK	<a href="mailto:p.pawelczak@tudelft.nl">p.pawelczak@tudelft.nl</a>	+31 614 23 80 42
Peter STANFORTH	<a href="mailto:peter@spectrumbridge.com">peter@spectrumbridge.com</a>	+1 40 77 18 31 81

# DySPAN 2014 Demonstration Proposal

Complete the following form with as much detail as possible. This information will be used to evaluate suitability of admission into the IEEE DySPAN 2014 Demonstration Session based on the technical significance to the symposium, demonstration maturity, and demonstration supportability.

## Contact Information

Primary Contact Name

Organization

Address

Phone Number

Email Address

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## Abstract

Provide a concise (300 words) summary of the proposed demonstration and its technical significance.

## Description

The description should include sufficient detail such that the evaluators can understand the purpose, configuration, design, and conduct of the demonstration/experiment.

### Primary technical goals

### Description

Pictures, screen shots, and system drawings are encouraged (attach as necessary)

### Operational parameters

Frequency Ranges

Bandwidth

Peak Input Power to Antenna

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Antenna polarization and gain

Waveforms (modulation type)

## Technical Significance

Address the technical significance of the demonstration/experiment.

Description of the technologies

A discussion of the perceived impact of the demonstration to dynamic spectrum in general and the DySPAN audience in particular

## **Technical Maturity and Operational Capabilities**

Provide sufficient detail regarding the maturity of the demonstration/experimentation.

Current state of the technology, hardware, and software

Amount and type of work yet to be done prior to DySPAN

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Risk mitigation methods to be implemented to ensure proper operation within regulatory constraints

Previous experience and trials of demonstration equipment's coexistence with other communication systems

Note that a summary of existing test results may be useful in conveying the operational readiness and stability of the demonstration/experiment

## Logistical Needs

Include the logistical needs for supporting the demonstration/experiment at DySPAN. These details allow the planners to properly acquire and allocate resources to support the demonstrations.

Amount of space required (sq. ft or sq. m)

Number of demonstration tables required

Input power requirements and number of outlets (note: USA uses 120V, 60 Hz NEMA 5-15 USA 3 pin power plug which has 2-pin and rectangle shape). Transformer may be provided upon request.

Approximate power consumption

Storage and security requirements for equipment

Instrumentation and other support equipment requested of DySPAN

Internet/network access (wireless, wired, number of ports, etc.)

Other needs

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## Information About Two-Page Demonstration Paper

Paper should be written using the IEEE conference style. Provide abstract, description of primary technical goal, operational parameters, general idea, block diagrams, measurement results (necessary!) and list of references. Do not provide logistic information, since it is only required for our internal use.

We strongly advise to prepare the papers using LaTeX or Microsoft Word. Please look into <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6472867> (Demonstration section) for similar papers.

## Checklist

- Contact information is complete and accurate
- Abstract
- Description is complete, including all operation parameters requested



- Technical specification
- Technical maturity and operational capabilities
- Logistical needs described as fully as possible
- Two-Page demonstration paper
- We grant permission to make the information in this proposal public.