



PAWR PROJECT OFFICE: REQUEST FOR INFORMATION (RFI)

DESCRIPTION

The Platforms for Advanced Wireless Research (PAWR) program is a joint effort by the National Science Foundation and a 28-company wireless industry consortium to create city-scale testing platforms accelerating fundamental research on wireless communication and networking technologies. The PAWR Project Office (PPO), run by US Ignite, Inc., and Northeastern University (see <https://www.advancedwireless.org/>), is managing this \$100 million public-private partnership to stand-up and oversee these eventual testing platforms.

The PPO has completed the first round of the PAWR RFP and issued awards to two platforms, one in Salt Lake City, and another in New York City. The Platform for Open Wireless Data-driven Experimental Research (POWDER) led by University of Utah will provide Software Defined Radios, network boxes that can add or change features by just reprogramming the software, combined with “software-defined networking” and cloud computing. POWDER will also provide next-generation equipment from Reconfigurable Eco-system for Next-Generation End-to-End Wireless (RENEW) developed at Rice’s Center for Multimedia Communications. These include “massive MIMO,” an industry acronym for “multi-user, multiple-input, multiple-output,” a transmission scheme that uses base stations with hundreds of antennas to simultaneously serve many users on the same frequency.

Led by researchers at Rutgers, Columbia and NYU, the Cloud Enhanced Open Software Defined Mobile Wireless Testbed for City-Scale Deployment (COSMOS) platform will leverage technologies such as mm-Wave and Software Defined Radios, Edge Cloud and Advanced wavelength division multiplexed Optical Networking to enable experimentation and research.

It is anticipated that a second-round Request for Proposal (RFP) will be released in late summer 2018. To inform preparation of this RFP, the PPO solicits input from the research community, local communities, and industry on potential **applications or use-cases providing community benefit AND the transformative wireless technologies needed to enable those applications** (i.e., technologies as or more transformative than those awarded in round I, and which will also benefit from access to PAWR platforms). The PPO emphasizes the interplay of applications and wireless technologies. As noted in the [original set of FAQs](#), the PPO seeks a diversity of platforms across technology areas, topology, demography, and geography, and seeks to avoid significant overlaps with the first two platforms awarded.

We recommend that responders be as specific as possible

about the requirements of their proposed application areas and enabling wireless technologies, and highlight relevant trade-offs and implications, as it pertains to city-scale platforms. For those responders who participated in the round I RFP, the PPO would also like to hear how it could help proposing teams in round II, in addition to steps it will be taking based on feedback provided at the end of round I (e.g., adding an RFI phase, providing more time for responses, clarifying the Industry Consortium contribution process). The PPO would also like to know whether it should consider providing match-making assistance (e.g., matching cities to researchers with unique wireless capabilities or researchers to cities with unique needs).

RESPONSES

Interested parties are requested to respond to this RFI with a short white paper, to not exceed 2 pages. White papers in PDF format are due no later than **Thursday, May 31, 2018, 5:00 PM EDT**. Responses shall be submitted via e-mail only to info@advancedwireless.org. Please use the subject line “RFI Response – [Institution/City/ Company Name].”

Interested parties are also invited to attend a PAWR Information Day in Honolulu, HI on **Wednesday, April 18, 2018, 3:30 PM HST** at IEEE INFOCOM or a second one to be held on **Wednesday, May 23, 2018 (time TBD)** at IEEE ICC 2018 in Kansas City, MO, during which the PPO will provide guidance on the RFI and answer questions about the overall RFI/RFP process. In addition, representatives from the first two winning platforms will provide an overview of their technical and proposal preparation approaches.

For those who will not be able to travel and attend either Information Day, the PPO will be available for phone or video conferences as well. Details will be posted soon at <https://www.advancedwireless.org/>.

DISCLAIMER:

THIS IS A REQUEST FOR INFORMATION (RFI) ONLY. This RFI is issued solely for information and planning purposes—it does not constitute a Request for Proposal (RFP). This request for information does not commit the PPO to contract for any service. Further, the PPO is not at this time seeking proposals and will not accept unsolicited proposals. Responders are advised that the PPO will not pay for any costs incurred in response to this RFI; all costs associated with responding to this RFI will be borne solely by responder. Not responding to this RFI does not preclude participation in any future PAWR RFP.