Support brings network-less mobiles closer to reality

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A new, open source mobile phone technology developed by Flinders University's "digital blacksmith" Dr. Paul Gardner-Stephen and which promises to revolutionize telecommunications has earned him a $400,000 Fellowship from the prestigious philanthropic Shuttleworth Foundation.

[The Serval Project](), created by Dr. Paul Gardner-Stephen in response to the devastating 2010 Haiti earthquake, aims to provide mobile telephony in the absence of conventional telecommunications infrastructure.

"The Haiti earthquake demonstrated how the infrastructure-oriented mode of communications has no resilience," Dr. Gardner-Stephen said.

"If the towers are knocked out, mobile phone handsets become useless lumps of plastic in our hands. The Serval Project has proven that there is no reason for that to be the case," he said.

Using sophisticated mesh network technology, the Serval Project enables mobile phones to communicate to create a "virtual network" where no network coverage exists.

This funding will enable Dr. Gardner-Stephen's team to take the technology from concept-proven capacity to make voice calls, send SMS and map locations and features through to a refined, end-user ready product.

"Communications around the world are tightly tied around big enterprise and big infrastructure and it's good to have as a service. But that service isn't available to millions of people in remote and poverty-stricken areas," he said.

"The Serval Project isn't a threat to the telcos. In fact, it will complement the conventional carriers by offloading 'edge-traffic' from the networks which will be burdened by increasing data volumes and video calls.

"With the generous support of the Shuttleworth Foundation, we'll be able to advance the cause of the Serval Project to address these global communications needs."

Dr. Gardner-Stephen anticipates that the Serval Project software will be available free to the public within 12 months.

"That will allow friends travelling in convoy in the Outback, for instance, to call each other for free from car to car," he said.

"Indeed, we are actively working with Outback communities to trial the technology to provide remote communities with mobile phone and Internet access."

He also extended an invitation to "the world" to participate in the development of the software which was made available to developers and potential contributors on the Android Market earlier this month.

"We would expect that in five years' time every [mobile phone](link) that's manufactured will have our technology," he said.

"We are excited to welcome Dr. Gardner-Stephen to the Shuttleworth Foundation fellowship programme. Innovative approaches like his are necessary to enable ubiquitous, affordable access to

telecommunications," says Karien Bezuidenhout, COO of the Shuttleworth Foundation.

Provided by Flinders University