



LOON™

Natural Disasters can cause massive damage to telecommunications infrastructure.

Recovery takes weeks while users need immediate service.



An aerial photograph of a vast, rugged landscape. In the foreground, a single white balloon floats in the sky. The terrain is a mix of brown, rocky hills and valleys, with a winding river or stream visible. In the background, a range of snow-capped mountains stretches across the horizon under a clear blue sky. The overall scene is desolate and expansive.

Our solution: Loon

Provide emergency LTE network through
the sky, accessible to all.

THE NETWORK: OUR FUNDAMENTAL BUILDING BLOCKS



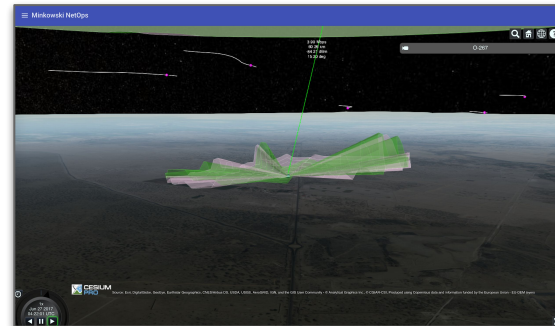
Ground station

Backhaul; weatherproof antenna tracks balloon from the ground



Balloons

Each balloon covers up to 40km radius, with mesh links up to 400 km



Software

Loon EPC enables dynamic wireless network topology and routing changes

LOON'S UNIQUE VALUE PROPOSITION

Weather Resilient



Balloons flying above weather at 20km. Ground equipment can be stored, moved, mounted.

Power Resilient



Each balloon is solar powered (not reliant on power grid).

Easy deployment



No local staff involved for activation or deployment. No shipment of equipment. No logistics.

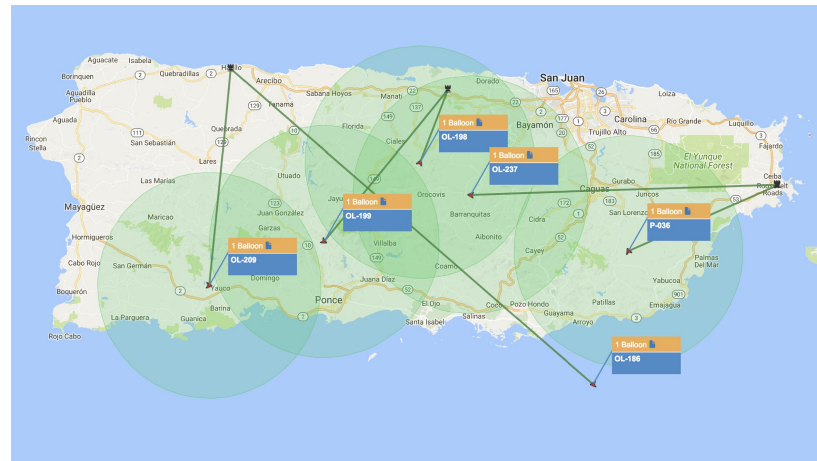
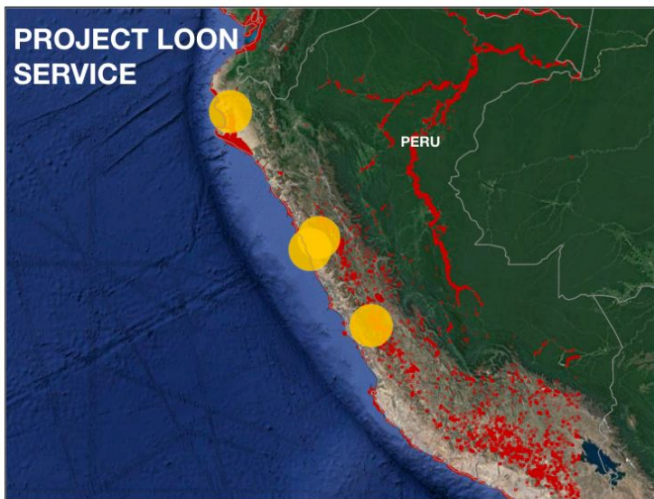
Fast activation



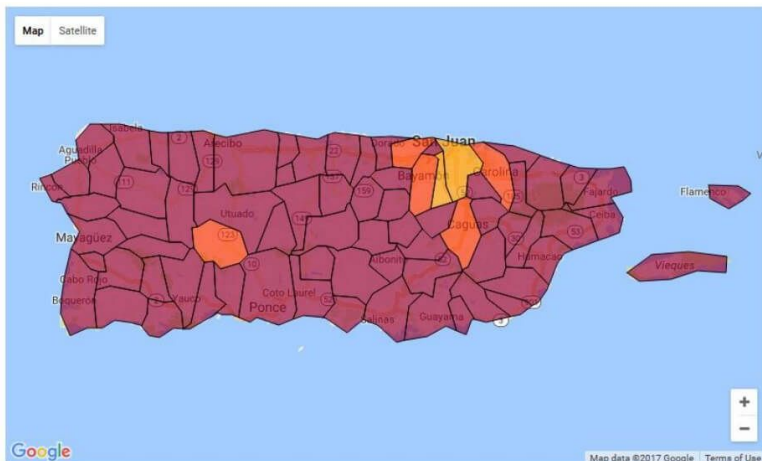
Balloons are “stored” in the vicinity prior to strike. Active service : strike + 72h*

EMERGENCY DEPLOYMENTS

Telefonica



CONNECTIVITY: POST-HURRICANE



1 - 20 21 - 40 41 - 60 61 - 80 81 - 100

*Red = connectivity knocked out
as of Friday October 6*



Humacao, Puerto Rico

*FCC, Hurricane Maria Communications Status Report, % cell sites down by county

A CALL FOR ASSISTANCE



Luis Arocho

Chief Information Officer at Government of Puerto Rico
1d · Edited



It all started with a [LinkedIn](#) message to [Google](#) asking for help and a 5am phone call to an amazing human being. [Anna Prouse](#). “We need your help, our entire communications systems are down” .. A couple of weeks later; a reality that helped 100k American citizens to communicate with their friends and family!



Project Loon delivers internet to 100,000 people in Puerto Rico
yahoo.com

LOON'S EMERGENCY RESPONSE

On The Ground



Launch Site

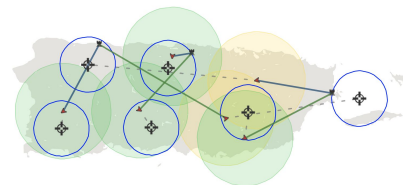


Ground Network

Loon HQ

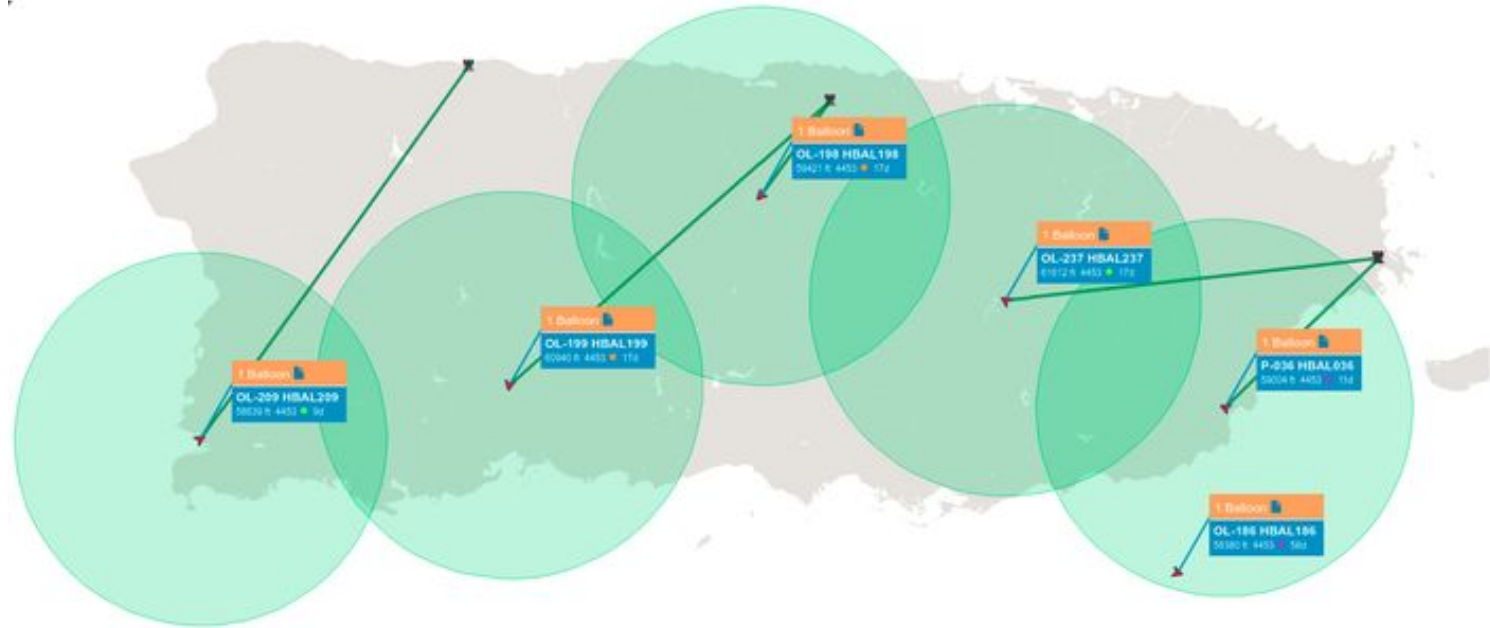


Industry & Partners



Balloons

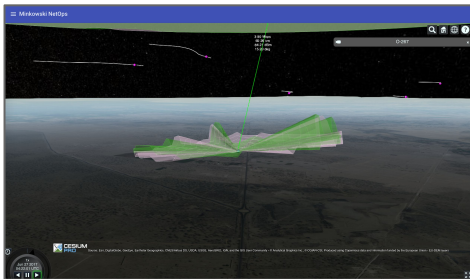
EXPEDIENT, BROAD COVERAGE



250,000+ LOON USERS IN PUERTO RICO

TIME TO PREPARE INSTEAD OF REACT

“Cloud”



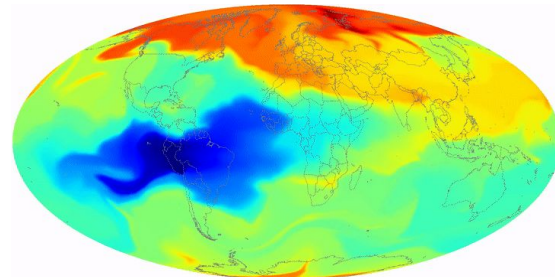
Network Interoperability,
Architecture, & Routing

Ground



Spectrum &
Ground Infrastructure

Sky



Fleet Planning
& Testing

TO RECONNECT AS MANY PEOPLE AS POSSIBLE, AS QUICKLY AS WE CAN

