



Prague, 27 May 2014

PRESS RELEASE

Test Confirms that Galileo Increases the Accuracy of Location Based Services

Tests conducted by Rx Networks and the European GNSS Agency (GSA) confirm that, when used in addition to GPS and/or GLONASS, Galileo significantly improves the accuracy of location-based services when used in challenging environments.

Today the GSA and Rx Networks Inc., a leading mobile location technology and services company, announced the results of tests conducted by the company measuring the performance of Galileo when used in various combinations with GPS and GLONASS.

Tests were conducted in real-world environments, including urban canyons and indoors. These environments pose significant challenges to location accuracy due to multipath and obstructed views of satellites. Each test consisted of a three-hour data capture of GNSS signals, which was later replayed to produce hundreds of fixes using a multi-constellation GNSS receiver from STMicroelectronics.

The results showed that using Galileo with one or more other GNSS constellations provides significantly more accurate location fixes compared to GPS alone, when indoors or in urban canyons. As expected, the GPS+Galileo combination did not exceed the performance of GPS+GLONASS, due primarily to there only being four Galileo satellites available at the time of the testing. It is expected that, as more Galileo satellites are launched, the combination of Galileo with GPS will show further improvements in performance.

Timely Results

According to Gian-Gherardo Calini, Head of Market Development at the GSA, “Dual-constellation GNSS” designs are the standard for many smartphones and other devices. The combination of GPS and Galileo provides a robust solution and is expected to offer performance that will meet or exceed end-user expectations.”

Adrian Stimpson, Senior Vice-President of Sales and Marketing, Rx Networks said, “The results should be encouraging to any GNSS chipset manufacturer who is considering adding Galileo as a competitive differentiator.”

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TEST RESULTS

Recent test results confirm that Galileo significantly improves accuracy in challenging environments:

	Urban Canyon #1	Urban Canyon #2
GPS	331.9m	76.2m
GPS+GLONASS	42.9 (13%)	7.6m (10%)
GPS+Galileo	10.7 (3%)	5.4m (7%)
GPS+GLONASS+Galileo	43.0 (13%)	24.7m (32%)

Positive numbers indicate improvement over GPS.

	Indoor #1	Indoor #2
GPS	278.7m	70.3m
GPS+GLONASS	68.4m (25%)	11.8m (17%)
GPS+Galileo	24.6m (9%)	10.1m (14%)
GPS+GLONASS+Galileo	64.0m (23%)	15.8m (23%)

Positive numbers indicate improvement over GPS.

The tables above show the summary results for various scenarios and constellation combinations. The GPS row shows the absolute 2D errors in meters. All other rows show the improvement (+) or degradation (-) in meters and percentages relative to GPS-only fixes. All measurements are within the 95th percentile.

About the European GNSS Agency www.gsa.europa.eu

As an official European Union Regulatory Agency, the European GNSS Agency (GSA) manages public interests related to European GNSS programmes. The Agency's strategic objectives include the achievement of a fully operational GALILEO system. This includes the laying of foundations for a fully sustainable and economically viable system and its security.

About Rx Networks Inc. www.rxnetworks.com

A mobile positioning technology company, Rx Networks develops hybrid positioning solutions that unify GNSS, Wi-Fi, cellular and sensor signals for an unmatched mobile location user experience outdoors, indoors, and in 3D.

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