

## Spaceopal launches its precise point positioning service NAVCAST

*Munich, 29 October 2018* - With the aim to actively support and to accelerate the most widespread adoption of Galileo, Spaceopal announces the launch of NAVCAST, its GNSS Precise Point Positioning (PPP) service featuring high accuracy positioning enhancement for end users worldwide.

NAVCAST provides Galileo and GPS real time orbit and clock corrections based on an algorithm RETICLE (REal-Time CLock Estimation), developed by the German Aerospace Centre (DLR e.V.). Galileo and GPS observations, from more than 100 receivers of the world-wide IGS network, are used to estimate the current corrections which are broadcasted to registered users relaying on the standard NTRIP protocol. NAVCAST corrections improve the user error down to the centimetre level, making it very attractive for a large number of applications.

Since today, it is possible to appraise the accuracy levels and convergence times achievable using NAVCAST (Galileo + GPS) corrections combined with a precise point positioning (PPP) engine, on the Spaceopal website (spaceopal.com). The underlying PPP engine (dual frequency, ionosphere free observations) estimates the local troposphere delays and fixes the carrier phase integer ambiguities. NAVCAST can be considered as proof of concept and Spaceopals contribution to high accuracy GNSS services. NAVCAST corrections, which are today broadcasted over the Internet, could be in future via satellite constellation (i.e MEO satellites).

### About Spaceopal

Spaceopal GmbH, is a joint venture founded in 2009 by the partners DLR Gesellschaft für Raumfahrtanwendungen (GfR) mbH and Telespazio S.p.A., a Leonardo (67%) and Thales (33%) joint venture.

In December 2016, at the occasion of the Galileo Initial Service Declaration, the European GNSS Agency (GSA) awarded Spaceopal the Galileo Service Operator (GSOp) contract following a competitive tendering process.

As Service Operator of the Galileo system, Spaceopal, together with its partners, is providing high-quality positioning, navigation and timing services in compliance with the Galileo Services performance requirements to the European Commission and users across the whole world. With its strong and unique expertise Spaceopal, together with its Shareholders, has successfully contributed to all major Galileo Project achievements since 2010.

Galileo is Europe's own Global Navigation Satellite System (GNSS), providing a highly accurate, guaranteed global positioning service under civilian control. It is interoperable with GPS and Glonass, respectively the US and Russian global satellite navigation systems. Together with the SBAS regional augmentation service EGNOS (European Geostationary Navigation Overlay Service), it is the European contribution to the Global Navigation Satellite System.