



Project DEMETRA – a Horizon 2020 Project
GALILEO NEXT GENERATION SPACE TECHNOLOGY
PROVIDING IMPROVEMENTS TO BUSINESS OPERATIONS

Torino April 18th , 2017

Letter of recommendation

To whom it may concern

In 2015-16 I had the pleasure to coordinate a European project named DEMETRA, aiming to develop and test a demonstrator of European time services, based on GALILEO (www.demetratime.eu). This project was supervised by **GSA** (**G**lobal **N**avigation **S**atellite **S**ystems **A**gency) and brought together 15 partners from 8 different EU countries.

One of the partner was the **Polish company ELPROMA** and I have no hesitation in saying that ELPROMA gave an exceptionally high contribution to the project.

Within 2 years ELPROMA successfully designed, developed and implemented, a new cryptographic time transfer technology named:

“NTP Trusted Time Distribution with Auditing and Verification Facilities”

Its performance was successfully tested at INRIM Time & Frequency laboratory in Torino/IT and confirmed later in cooperation with European NMI in United Kingdom and Poland, namely:

NPL *National Physical Laboratory in London/UK,*

GUM *Central Office of Measures in Warsaw/PL.*

The DEMETRA Project, including the ELPROMA Service, were presented at leading international scientific conferences including: ION Precise Time and Time Interval, IEEE Metrology in Aerospace and Frequency control symposium, European Frequency and Time Forum, International Time and Synchronization Forum.

In addition we can confirm that ELPROMA's special low-noise version of NTP/PTP Time Server model **NTS-3000** was successfully tested as part of the DEMETRA Core Infrastructure developed by Thales Alenia Space and, by courtesy of ELPROMA, it is still currently in operation in INRIM powering the Time Laboratory devoted to INRIM institutional duties.

The ELPROMA team was supervised by Mr. Tomasz Widomski, who provided his team with state of the art technology and professional support proving ELPROMA's skills in the Time & Frequency business. Not only, ELPROMA has always been very proactive in finding possible users of the DEMETRA time services, in actively participating to the discussion with the users and stakeholders, attending meeting with the European Commission and the GSA to explore possible timing needs in the different applications like energy, telecom, finance, and quantum cryptography.

I'm very happy to recommend the company ELPROMA as a trustworthy and reliable business partner and a professional Time & Frequency solution supplier.

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