Dear GNSS Professional,

Many people are surprised when they learn that Galileo does <u>not</u> plan to overlay the GPS L2 signal. (See the article on page 30 of the June 2003 issue of *GPS World*.) They plan to overlay L1 and L5 but not L2. A committee of Satellite Navigation and Positioning Professionals has been formed to encourage the European Union to reconsider this plan. To that end we have prepared the attached petition and need your help to gather as many signatures as possible. The sponsors are:

Dr. Michael Bevis Dr. Yehuda Bock Dr. Fritz K. Brunner Dr. Elizabeth Cannon Dr. Clark Cohen Dr. Anthea J. Coster Mr. Ronald R. Hatch Dr. Gerard Lachapelle Dr. Richard B. Langley Mr. Keith McDonald Dr. Pratap Misra Dr. Bradford W. Parkinson Dr. Chris Rizos Mr. Neil Vancans Mr. Phil Ward Dr. Randolph Ware Dr. Dave Wells Dr. Larry Young

If you agree with the committee, please distribute this petition to others and seek as many signatures as possible. Return the signatures as described on the signature page.

Many thanks,

Galileo Petition Committee

Open Letter and Petition to The European Union from Satellite Navigation and Positioning Professionals regarding the Galileo Signal Structure

WHEREAS:

- 1. The world civil user community is delighted that the European Union (EU) has begun development of Galileo, a worldwide radionavigation satellite system (RNSS);
- 2. Combining signals from both Galileo and GPS will substantially improve positioning geometry, providing important accuracy, integrity, and availability benefits to all RNSS users, worldwide;
- 3. Obtaining maximum navigation and positioning benefit from the combined use of Galileo and GPS requires that the signals be compatible and highly interoperable;
- 4. The most important aspect of interoperability is signal center frequency;
- 5. Commercial receiver manufacturers, in order to provide maximum benefit at minimum cost, will favor signals from Galileo and GPS which have common center frequencies;
- 6. Modernized GPS satellites will provide three civil signals, at L1, L2, and L5 frequencies;
- 7. Published Galileo signals overlay only two of the civil GPS frequencies, at L1 and L5;
- 8. The net effect of this Galileo design choice is to eliminate one valuable civil signal from the range of options favored by manufacturers and available to users, because it will not be common to both systems; and
- 9. Three common signals are technically valuable to high precision scientific, survey, and machine control applications, offer added redundancy and robustness to all commercial applications, and provide a wider range of signal design options for single frequency RNSS applications.

RESOLVED:

The signatories of this document urge the European Union to provide maximum benefit to RNSS users, worldwide, by overlaying all three GPS civil signals, including L2, with interoperable open service Galileo signals.

To maximize interoperability and minimize U.S. national security concerns, it is recommended that a Galileo L2 overlay have similar spectral characteristics as the announced civil GPS L2 signal.

Galileo L2 Petition Signature Sheet

Signature	Signature
Printed Name	Printed Name
Affiliation (optional)	Affiliation (optional)

Signature	Signature
Printed Name	Printed Name
Affiliation (optional)	Affiliation (optional)

Signature		
Printed Name		
Affiliation (optional)		

Gather as many signatures as possible and:

In Order of Preference

- (1) Scan the page and e-mail to: Galileo_L2@Cox.net
- or (2) Mail the page to: Galileo Petition P.O. Box 3136 PVP, CA 90274 USA
- **or** (3) Fax the page to 310-541-2793