Evaluation of market relevant of the proposal: **Space Systems: Standard Time Intervals and Time Scales**

By the proposer

1. ***What is the potential of this project to contribute to international trade and production?***

**Grade 4**

Rationale:

There are no normative vehicles defining time intervals and time scales specifically. Laws and practices rely on concepts that have diverse and variable definitions and no guidance for implementation. Innumerable software systems and international trade and production process are vulnerable to unpredictable emergent behavior if the definition of civil time changes without a firm baseline from which the impact of change can be determined.

2. ***What is the potential of this project to contribute to economic efficiency, health, safety, or the environment?***

**Grade 5**

Rational:

Normative definition of time scales and fundamental time intervals is pivotal for health, safety, and sustaining the environment. This particularly the case for the space environment in which objects move with velocities of kilometers per second.

3. ***How great is the need to harmonize national approaches in this subject area that may serve as barriers to international trade?***

**Grade 4**

Rationale:

Lack of normative definitions and guidance for time intervals and time scales is a principal barrier to international trade. Different interpretations and implementations affect operations and transactions that must be synchronized world-wide.

4. ***What is the feasibility of achieving consensus on International Standard(s) in this subject area by the proposed target dates?***

**Grade 4**

Rationale:

Consensus is essential, and ISO is the only collaborative and pervasive entity that can achieve this. The last consensus on this matter was in 1972 in ITU-R-460-1. Because the outcome was not normative, nations and industries have diverged, leading to processes that are not interoperable and inefficiencies associated with resolving discrepancies individually. This work item has the greatest opportunity for consensus of any.

5. ***What priority should be assigned to the development of International Standard(s) in this subject area?***

**Grade 5**

Rationale:

This is absolutely critical, since the ITU is scheduled to consider changing civil time dramatically in the next three years. ISO had had no voice in this process. In particular, industry has been disenfranchised in the ITU process. The authority of an approved ISO work item is essential to enfranchising the preponderance of stakeholders.

**Total points: 22**

**By proposer**: David Finkleman

AGI’s Center for Space Standards and Innovation

Colorado Springs, CO 80920 US

E-mail: dfinkleman@centerforspace.com