IMPORTANT INFORMATION ON ACOUSTIC TELEMETRY & COMPATIBILITY

The European Tracking Network aims to deliver state of the art and relevant science utilizing a global network of equipment and scientists that work together to achieve common goals. As such, ETN requires a **completely compatible** telemetry system that allows for flexibility to operate tags and equipment produced by **all** the equipment manufacturers.

In recent years, one of the major manufacturers of acoustic telemetry equipment has introduced a new encrypted operating system for their tags and receivers. Importantly, this means that:

1. Tags from this manufacturer will **not** transmit to receivers from other manufacturers;
2. Receivers from this manufacturer will **not** detect tags from other manufacturers;
3. Tags from this manufacturer may transmit **different** IDs to receivers from other manufacturers;
4. Researchers will **not** be able to "mix and match" telemetry equipment from different manufacturers so their needs are best addressed, and may be tied to a single operating system.

The reliance on a single manufacturer could **stifle innovation** within the telemetry community and restrict the scope, type and flexibility of research. This would also lead to reduced competition, resulting in **increased unit prices**. In Europe, the operation of and reliance on a single manufacturers system would not meet the requirements of EU competition legislation, and prevent organization bidding for European funds. This would also operate at a national government level.

In essence, this means that buying into this new encrypted operating system will lead to acoustic systems being **incompatible** across Europe (see Table below). The result will inevitably be that the European Tracking Network will fail its primary objective of broad scale collaboration, and the important work we do will come to an end.

As a network, we believe this new system would have **major consequences** for future research by **compromising collaborations** between acoustic telemetry users. Existing long-term research projects on large and wide-ranging pelagic species could suffer if existing global telemetry networks differed in their implementation of the new operating system. For instance, tuna tagged in Europe with multi-year tags operating on the existing system may not be detected by colleagues operating the new non-compatible system in North America. Species with not yet known large migrations patterns will also go undiscovered.

The network therefore asks that European acoustic telemetry users take this into consideration when buying equipment to ensure the future of scientific research on aquatic animals in Europe.

For further information, please visit: http://www.europeantrackingnetwork.org/compatibility

For enquiries contact: etn@lifewatch.be

Table 1. Tag Protocols

Old name	Thelma	Sonotronics	Lotek	MAP-110*	MAP-112*	MAP-113*	MAP-114*	MAP-115*
	OPi	OPi	OPi	-	-	-	-	-
	OPs	OPs	OPs	-	-	-	-	-
R64K	A69-1303	A69-1303	A69-1303	A69-1303	A69-1303	A69-1303	A69-1303	-
S256	A69-1105	A69-1105	A69-1105	A69-1105	A69-1105	A69-1105	-	-
R04K	A69-1206	A69-1206	-	A69-1206	A69-1206	-	-	-
R256	A69-1008	-	-	A69-1008	-	-	-	-
*Unique code sets **NON**-compatible between manufacturers*								
	HS256	ACT	Lotek Map			A69-9006	A69-9006	A69-9006
	DS256				A69-9005			
	R01M				A69-9004	A69-9004	A69-9004	A69-9004
	S64K				A69-9002	A69-9002	A69-9002	A69-9002
					A69-9001	A69-9001	A69-9001	A69-9001
					A69-1602	A69-1602	A69-1602	A69-1602
				A69-1601	A69-1601	A69-1601	A69-1601	A69-1601

N.B. Protocols of the same colour are **compatible**. For example, Thelma A69-1303 protocol equipment is compatible with all other equipment using A69-1303, **except** for Vemco/Innovasea MAP-115, where this protocol is no longer supported.

OPi and OPs are new Open Protocols, available for **ALL** manufacturers and supported by the ETN. OPi for ID tags and OPs for sensor tags.

*Vemco/Innovasea protocol sets