

## Response to Spring Package

### Consumer Protection

April 2011

Pilot Systems are pleased to respond to this consultation. We have helped co-ordinate the response from ESTA (Energy Services and Technology Association) and Pilot Systems aim to offer solutions to the problems currently faced with the Program identified by the industry.

- i) Slow progress of Han development
- ii) Inter-operability
- iii) Consumer meeting the cost of non-conformant early movers
- iv) Policing rules to ensure consumers get value for money

To a large extent these problems are routed in stake-holders vying for pole position. There is not enough separation between the various core competence offerings. Developing a single specification for tender is unlikely to deliver a medium or long-term solution because of changing requirements, and will be costly to the end consumer. The specification must evolve with energy market requirements and availability of solutions, and the Wan and Han must be able to support this evolution.

Pilot Systems are disappointed that the metering standard protocol and software **CHIRPS** does not appear to have been considered further. It has over 50 million meter-years experience in UK since 1990 and should not be ignored. It has already solved many of the UK's inter-operability problems and has allowed many vendors to achieve future-proof technology.

Pilot Systems have submitted paper's on **CHIRPS** to the various WGs, COTEs and other Ofgem groups on the basis of open discussion, but have had no feedback on its suitability or reasons why its concepts are not being considered further. All we can do at this stage is guess what the objections might be, and overcome them. The benefits have been explained at length in previous papers (see appendices).

Our main concerns are for the average consumer (domestic and industrial) and not necessarily for the fuel poor or pre-payment – these groups are already well represented.

### Possible Objections to the use of CHIRPS

- a) seen as a solution by many vendors but discarded as a threat to their business
- b) not a registered standard (like DLMS or Zigbe Energy profiles)
- c) issues with security
- d) issues with accessibility
- e) danger of it becoming a monopoly
- f) outdated and difficult to use

a) **Threat** – understandable fear of a system taking away the value of its components. Actually, as vendors who use it will admit, **CHIRPS** does not do this – it has two “open” ends to allow vendors to offer value at both component and system level. Most “protocols” are single ended with the value ending up only with the “protocol” vendor. Such systems will not provide value to the consumer through free vendor competition. **CHIRPS** has overcome these challenges.

b) **Standard** – **CHIRPS** is based on the **FLAG** protocol standard which all UK meters use. DLMS is in fact based on **FLAG**, but contains the “application specific” data items making it bigger, less adoptable and less interoperable. Every time a new feature is required, DLMS has to be updated. **FLAG** is a bit like XML, whereas DLMS is more like populated XML.

Similarly for Zigbe “energy profiles”. The industry would do well to separate the data items from the RF technology. Evaluate the data items in DLMS and Zigbe “energy profiles” in their own right. Do they meet UK requirements today? No, they will need to be enhanced. And when does this enhancement stop? With that model, never, there will always be change.

We should note that **CHIRPS** and **FLAG** specification is fixed – they do not need enhancement to meet new data item requirements, only new communication requirements (e.g. RF, PLC). It thus makes them ideal for the meter interface standard.

c) **Security** We should note that CHIRPS has been used to set tariffs and configurations in fiscal meters for over 20 years. Security for this involves a “PIN-sentry” type process similar to that used for internet-banking. To date we are not aware of any successful hacks into this process.

d) **Accessibility** The FLAG protocol is dependent on vendors releasing their meter data items, which many are reluctant to do. CHIRPS gets over this by allowing vendors to release encrypted CHIRPS scripts instead. These perform the necessary functions for the application, and are available to all with a CHIRPS license. The CHIRPS license is fixed and irrevocable.

e) **Monopoly** This is possible of course, but is not as dangerous as, for example, a British Gas system becoming a monopoly. Carefully negotiated contracts will ensure that **CHIRPS** remains a free-market option. Also in the 20 years that it has been used, we have received no complaints about monopolistic behaviour. We were in fact very pleased last year to have Landis plus Gyr sign up with **CHIRPS** – this means they will be well-equipped to ensure the solutions they provide to British Gas and others will be interoperable.

f) **Legacy** So are most well-working processes. They evolve from incremental improvement. Pilot Systems appreciate that there is still some work to do on RF and PLC, as well as supporting the “generic” HDLC layer of DLMS. But this work is small compared to the amount of work required to develop a

complete working system from scratch, which is what the suppliers want to do. Can we justify that cost on the consumer – and for what purpose? To preserve suppliers monopoly on metering ? Not really in consumer's interest is it ?

Pilot Systems would welcome the chance to dialogue directly with Ofgem and DECC on **CHIRPS** will solve many of the issues in the Program that currently appear unsolvable. In any event we do need feedback as to why this approach may not be taken further, in the interests of a good working metering market, and the best benefit to the consumer and UK PLC.

Nigel Orchard

## **Appendices**

- i) proposal to Technology Strategy Board to accelerate smart meter roll-out
- ii) feedback on this ("one to watch")
- iii) Smart Meter Systems Specification, PSD-238
- iv) A "Vision for the Future" written 13 years ago and still true today