~~A COMMUNICATIONS PROCESS AND SYSTEM ASSOCIATED WITH MONITORING AND CONTROLLING RESOURCE CONSUMPTION~~

A COMMUNICATIONS PROCESS, DEVICE AND SYSTEM

FIELD

The present invention relates to a communications process and system that may be used for monitoring and/or controlling consumption of a resource. In particular, the invention relates to a communications architecture for interrogating and controlling a network, or grid, of meter devices, and a concentrator of the communications architecture.

BACKGROUND

In communications systems for monitoring and controlling consumption of resources (such as water, electricity and natural gas), a meter may be configured to transmit meter data representing use of the resource to an associated management server. These systems have a number of limitations:

(i) The meter data provided is typically very limited.

(ii) Collecting required data from each meter for use in reporting to a National Electricity Market (NEM) is very slow and resource intensive.

(iii) Each meter is typically limited to a particular communications protocol, and if a new communications system is installed, the legacy meters need to be replaced.

(iv) The operation of the meter typically relates to the resource merely by measuring one or two quantities associated with the resource (e.g. electrical voltage and current, or water volume / rate), thereby limiting the information available to a system operator.

(v) A meter is typically a pure measurement device, and any action in respect of the resource, such as shutting off a resource supply, must be done manually, e.g. by a service person visiting the meter.

(vi) The degree of interaction available between a meter and a consumer at their premises is very limited.

It is desired to address or ameliorate the above, or to at least provide a useful alternative.