2.2 Cyclic and Reactive Maintenance Delivery

The *Client* takes a proactive approach to preventative maintenance by programming cyclic maintenance Items across asset types wherever it can be sufficiently prescribed. Where a failure in cyclic maintenance occurs or an unpredictable Defect manifests itself, reactive maintenance is instructed by the *Client*. Where such a Defect is identified, the *Client* prioritises its rectification and instructs the *Contractor* to undertake the necessary reactive Item. Such reactive Items may consist of a make safe and/or temporary or permanent repair Item. The instruction includes a rectification occupancy period that is determined by the *Client* with which the *Contractor* complies.

A Defect to the Affected Property is that it:

- Causes an unintended hazard, nuisance or danger to the users of the Affected Property;
- Represents a deterioration from the normal condition;
- Prevents an item from acting in the intended manner;
- Is damaged;
- Is likely to increase the rate of deterioration of another item.

The data provided by the *Contractor* following cyclic and reactive maintenance Items helps to inform the *Client*'s management of its assets. This in turn allows the *Client* to develop the forward programme of capital investment.

Projects identified by the *Client* are based on the prioritised needs of the Affected Property according to asset condition data, inspections and data fed back from maintenance Items carried out by the *Contractor*. Capital investment is as described in the *Client*'s Operations Directorate Programme Development Management Manual and Value Management Requirements. The *Contractor* therefore has no direct involvement with the project identification process.

The *Contractor* records performance in accordance with the requirements of the Scope and uses measurement data to continually improve its performance.

2.2.1 Key Operational Processes for the Contractor

The *Contractor* carries out its maintenance Items and provides accurate and continuous feedback of the actions taken in a manner that provides support to the *Client* to provide a 'special defence' under Section 58 of the Highways Act 1980.
The *Contractor* includes fully detailed Processes, Procedures and timescales in the Quality Plan in relation to cyclical and reactive maintenance Items.

Figure 3- Maintenance and Response Requirements Flow Diagram

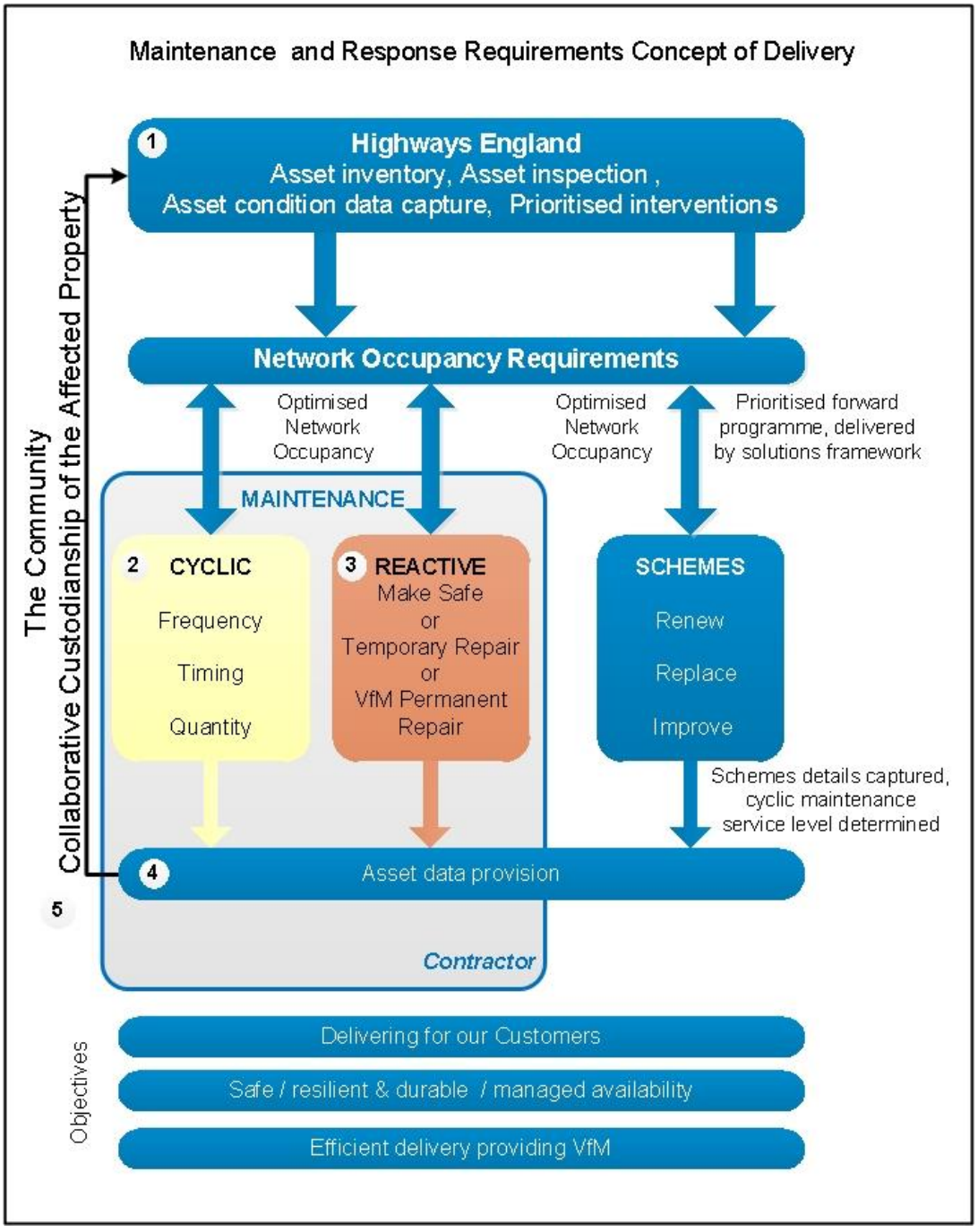

Table 2- Maintenance and Response Requirements Item Notes for Figure 3

	INSPECT	
1	The *Client* … Reviews existing records and establishes all sources of information where information can be gained about asset condition. Establishes risk characteristics in the context of the variable nature and character of the Affected Property and develops a programme of inspections to suit. This is coordinated in order to avoid unnecessary lane closures. Has procedures in place for undertaking all inspections and checking and controlling the quality of inspections. Updates records and systems as necessary in accordance with the Integrated Asset Management.	The *Contractor* … Notifies the *Client* of any Defects it finds on the Affected Property.

	CYCLIC	
2	The *Client* … Prescribes cyclic maintenance Items across asset types wherever it can be sufficiently prescribed. These area also optimised where deemed necessary.	The *Contractor* … Adopts a proactive approach in programming cyclic maintenance Items across asset types to meet the frequencies defined in the Cyclic and Reactive Maintenance Delivery (CRMD) Plan.

	REACTIVE	
3	The *Client* … Prioritises Defects in order to enable appropriate response times for reactive works. Taking into account the physical location of the Defect and the potential danger to users of the Affected Property. Monitors Defects that have the potential for deterioration and could cause a risk to the achievement of the *Client* Outcomes or cause a danger to the users of the Highway. The *Client* adjusts its inspection regime accordingly. Decides on the condition of the Defect and what type of repair is required and instructs a works order to the *Contractor* (make safe/temporary/permanent repair as deemed appropriate). Prioritisation is made on the basis of risk to achievement of the Outcomes and danger to users of the Highway. Issues an instruction (works order) for the *Contractor* to display warning notices of the condition of the Highway in relation to Defects that could cause danger to the users of the Affected Property.	The *Contractor* … Ensures that on completion of making safe the Defect there is no danger to the user of the Highway.