

Article 7/10 Advisory Group Working Group 1

Discussion paper

Collecting data for an Asset Rating – skills and competences

The precise definition of the calculation procedure to be adopted as the Asset Rating tool remains to be confirmed. However, we have produced the following summary of the key elements of the process which are likely to be required if the methodology is to be robust in meeting the Directive's requirements.

In order to define a building in sufficient detail to allow any calculation of energy performance to be undertaken, it will be necessary to cover at least the following four elements:

- Geometry
- Construction
- Activities
- Services

For a new building, at the design stage or immediately after construction, full details on all these elements will be available from drawings. However, the same process has to be applicable to existing buildings, where information is often much harder to find. For these buildings, some form of survey will be required, which ought not to be allowed to take too long.

For each of the four elements above, a number of key activities are likely to be required. These are summarised in the following table. In each case, we have indicated the type of expertise or skill set needed to obtain the information in the most reliable and repeatable way. Options would in general only be selectable from constrained lists (eg from drop-down menus). Only where the surveyor's expertise allows, and where auditable evidence exists, will certain parameters be able to be over-ridden.

In order for the process to be repeatable and consistent, even when a surveyor possesses the basic experience and skill set, training in the approved tool will be needed to cover, for example:

- The assumptions behind it
- The interpretation of the various instructions
- The definitions of the different activities
- The process of matching actual complex buildings to a small, fixed set of options
- The rules for grouping areas, etc in order to speed up the process

In addition, when the rating is required in order to generate a performance certificate, the Directive requires the provision of recommendations for improvements. Although the expectation is that any tool can give guidance on such recommendations, they will need to be subjected to evaluation by a 'competent person'. This will be necessary in order to ensure that recommended measures are practical, realistic, legal, safe, etc.

Element	Minimum indicative skill set
<p>Geometry</p> <ul style="list-style-type: none"> • Defining size, shape and orientation • <u>Either</u> relatively accurately • <u>Or</u> by selecting generic footprint or form • Defining glazing area proportion 	Basic surveying
<p>Construction</p> <ul style="list-style-type: none"> • Defining fabric details for walls, floor, roof • Selecting glazing specification • <u>Either</u> providing full details • <u>Or</u> inferring specification based on age, construction system, etc • Amending thermal performance parameters if known • Assessing air-tightness 	Surveying Design and/or construction experience Energy consultancy
<p>Activities</p> <ul style="list-style-type: none"> • Selecting activities from defined list • Allocating to specific areas in geometry • <u>Or</u> attributing as proportion of total area 	Facilities management Surveying
<p>Services</p> <ul style="list-style-type: none"> • Identifying predominant lighting system (lamps, luminaires, controls) • Identifying heating system type(s), by zone • Identifying ventilation system(s) by zone • Identifying cooling system(s) by zone • Editing efficiency assumptions if necessary • Identifying control system(s) in place • <u>Either</u> using known specific data • <u>Or</u> answering questions from inference tool(s) • Separating fixed building-linked plant from 'temporary' additions linked to activity (process) 	Building Services Energy consultancy
<p>Recommendations</p> <ul style="list-style-type: none"> • Checking and filtering stock suggestions • Checking compliance with regulations, other requirements, etc • Adding specific recommendations based on expertise 	Energy consultancy

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