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THE ROLE OF MAPS IN LAND REGISTRATION

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THE ROLE OF MAPS IN LAND REGISTRATION

by

Mr. D.E. Warran F.R.I.C.S.

Director, Directorate of Overseas Surveys
England

1. It is not possible to prepare a satisfactory register of properties and to guarantee title to those properties unless the properties have been positively identified i.e. unless it is possible to identify the boundaries of the properties with certainty. It is for this reason that in most modern systems of Registration of Title the Registrar requires that each property shall be unambiguously defined by representing its boundaries on a registry index map before recording the ownership of the property in the official register.

Methods of preparing Registry Index Map

2. A registry index map can be prepared from two different types of survey document; a cadastral plan or a topographical map. In order that the distinction is clear between these two kinds the following definitions are given:

a. A cadastral plan depicts only property boundaries. Physical features are not shown on this kind of plan unless they happen to be property boundaries and it follows that boundaries shown on the plan are not necessarily indicated by physical features on the ground.

b. A topographical map depicts all detail which exists on the ground which is capable of being shown at the scale of the map. All hedges and fences are shown on such a map whether or not they are property boundaries. On the other hand, legal property boundaries which do not coincide with physical features are not shown.

3. The methods used by the Land Registry in preparing registry maps from these two kinds of documents prepared by surveyors are quite different. The ownership of properties and the positions of property boundaries must be adjudicated before the cadastral plan can be compiled and the registry map is prepared by simply tracing the cadastral plan omitting the survey data normally shown on such a plan. However, before preparing a registry map from topographical maps it is necessary to carry out adjudication to determine which physical features are property boundaries and frequently it is necessary to carry out additional survey to be able to show on the registry map those property boundaries which are not physical features and which are in consequence not shown on the topographical map.

4. Normally, the cadastral plan will be prepared from cadastral surveys using the monument and co-ordinate method. There are exceptions to this, for example, cadastral plans are prepared in Kenya by air survey methods of the hedges which form property boundaries of the consolidated plots in the land reform areas.

5. There is provision for 'fixing' boundaries under the topographical map system whereby a request can be made for a boundary to be surveyed and enough survey information is included on the topographical map to enable the map to be used as conclusive evidence of position. In theory, all the boundaries shown on cadastral plans are 'fixed' i.e. the plan is deemed to be conclusive evidence of position of all boundaries at least within the limits set by the map scale, but in many cases within the accuracies specified by other supplementary legislation (e.g. a Survey Act). In practice, however, in most countries, the position of an undisturbed monument is accepted if it conflicts with the position deduced from the cadastral plan so that boundaries can seldom be 'guaranteed' by survey, or by the existence of a cadastral plan.

6. The use of topographical maps for the production of registry index maps is based on the philosophy of 'general boundaries'. As stated previously, the use of topographical maps assumes that, in general, boundaries will be physical features, and it is the use of these physical features as boundaries which leads to the term 'general boundaries'. In the past some leading authorities have described 'general boundaries' as 'a euphemism for uncertain boundaries'. Certainly, the physical features which represent these boundaries are not necessarily surveyed to the precision which is normally required for a cadastral survey but since the boundary is a feature such as a fence, hedge or wall, there should be no doubt as to where is the boundary. It will be noted that it is not necessarily the survey which is uncertain but the boundary adjudication on which the survey depends, a point I have referred to in my other paper. The exact line is normally left undetermined, however, being contained within the physical feature. The determining of the precise line within the feature results in a boundary being 'fixed' as described above.

7. The two systems have largely developed for historical reasons. The cadastral survey system, or the Torrens system as it is more generally known in English-speaking countries, developed in countries such as Australia where it was policy to allocate to settlers parcels of undeveloped land and those parcels were demarcated on the ground by monuments. The 'general boundaries' system, on the other hand, was adopted in England in the late 19th Century at a time when the country was very much developed and when most properties were already bounded by fences or hedges or some other feature.

Methods of maintenance of Registry Index Map

8. Although it is essential for the initial registry map to be prepared from a systematic adjudication and survey, provision must be made for the maintenance of the map as and when mutations occur. Changes will be made in the Registry Map as a result of amendments made to the cadastral plan or topographical map which supports the registry map.

9. The cadastral plan is kept up to date as a result of surveys carried out by licensed or government surveyors at the request of the owners of the

parcels. In general, additional monuments are placed to indicate subdivisions or exchanges and a survey is carried out to enable the necessary changes in the cadastral plan to be plotted.

10. The topographical map is kept up to date by government surveyors undertaking continuous revision. Any changes in topographical detail which are brought to the notice of the team are shown as revision on the topographical map.

Functions of Registry Index Map

11. The Lawrance Mission to Kenya defined the functions of the Registry Index Map as follows:

"Maps are required by a registry firstly to identify on the ground a plot shown on the register, secondly to assist in the relocation of a boundary should it be moved, thirdly to enable subdivision to be effected, and fourthly for the calculation of plot areas."

12. The first function is, of course, fulfilled equally well whether the registry map is prepared from a cadastral plan or a topographical map, perhaps better in the case of the latter. In the case of the second function, however, there is a great difference between the two systems. The cadastral plan, backed by a cadastral survey, will enable a boundary to be relocated to fairly precise limits, since the accuracy of the cadastral survey is normally specified in a Survey Act and the survey will not be accepted unless it conforms to the specified standard of accuracy. The topographical map, however, although precise enough to locate a feature, would not enable that feature to be re-established with any great precision, certainly not better than the plottable accuracy of the map, if, indeed, the map is even of that standard. It is seldom, however, that a physical feature which previously formed a parcel boundary will disappear without trace and small traces are enough to indicate the original position of the boundary. The bombing of London during the second world war can be cited as a good example of the last statement since the destruction of whole blocks did not give rise to any tremendous difficulties in the re-establishment of parcel boundaries.

13. The subdivisions, and mutations of other kinds, are effected by the use of a simple system of unique numbering on the Registry map. Every new parcel which is created is given a new number and the old number is not used again. This system is to be preferred to subdivisions of the original number which can lead to confusion. It is possible to use temporary subdivisional numbers at the preliminary stages of planning and survey but these should be converted to unique numbers when the registry map is amended.

14. Most countries find the registry map very useful in the field of land administration and the inclusion of areas proves to be a useful adjunct to the map even though in some countries the Registrar might not consider areas to be an essential part of the Registry record system.