CE Marking: What is the "CB Scheme" and how does it relate to CE marking and the IEC?

IEC is the International Electrotechnical Commission. This is the international body which publishes standards for electrical apparatus. They have a web site at www.iec.ch and the page http://www.iec.ch/conformity/ab_iecee.htm gives details of their certification schemes.

In fact, IEC does not itself do certification, instead it simply acts as a co-ordination body for members of the "CB Scheme". This scheme includes big international test houses such as UL, BSI, TUV etc. and the idea is that they each recognise test reports issued by one another so that a manufacturer does not have to have a product re-tested many times if they want to use a particular certifying body's test mark on their product. The scheme is based on the use of international (IEC) Standards but if some member's national standards are not yet completely harmonised with IEC Standards, national differences are permitted if clearly declared to all other members. The CB Scheme utilises CB Test Certificates to attest that product samples have successfully passed the appropriate tests and are in compliance with the various requirements of the relevant IEC Standard and with the declared national differences of various member countries.

This is particularly useful when dealing with some of the more restrictive markets such as Argentina or Australia where a mandatory safety approval is required before the product can legally be sold. You can take your product to a local test house such as UL, get them to test it to the IEC standard and issue a CB report, and then take this report to (say) IRAM (the Argentinian state testing authority) in Argentina. They will then recognise the test work which UL has done and will only do additional tests where there is a difference between the tests which were done by UL and the ones which are required for Argentina (the differences are known as "special national conditions"). The CB report route would be more expensive than getting a basic UL approval on your product, but less than getting separate approvals from UL and IRAM.

The CE marking procedure is not part of the CB Scheme. However, because of the similarity between the standards used for CE marking and the ones used by the IEC, the CE marking procedure provides (at the least) a good indication of any likely problems which may arise during the formal IEC approval.