

## **PRESENT DEVELOPMENTS IN THE SUBJECT OF DURABILITY DESIGN MADE BY INTERNATIONAL ORGANIZATIONS**

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### **SUMMARY**

During the last decade numerous activities have been developed at international level in addition to those made in the different more concerned countries. In present communication mainly the activities developed in RILEM will be commented. Mention will be made to the finalization of the new Model Code and its Durability Chapter by *fib* and on the Probabilistic Code being made at the Joint Committee of Structural Safety, JCSS.

From the realization of the increasing number of damages due to reinforcement corrosion, very numerous papers have been published in the current literature trying to present improvements to the limited life of the reinforcement. In particular it has been very notorious the effort to develop models of calculation of the time to corrosion. These efforts have been stimulated by the possibilities given by computers that have enlarged tremendously the horizon of calculations.

In Rilem also the activity regarding durability has been very important being several Technical Committees, TC's, working in the subject. In present paper a summary will be made of the work done in the TC-178-TMC on "Testing and modelling chloride penetration into concrete" which has also worked funded by the EU in a project named "Chlortest" and a new TC-MAI named "Model assisted integral service life prediction of steel reinforced concrete structures with respect to corrosion induced damage". In the TC-178 a set of Rilem Recommendations and two round robin tests were performed on chloride testing and modelling and the new TC-MAI it is intended to make a state of the art on the subject of modelling corrosion of reinforcement for the sake of service life prediction.

All this activity has reached a state in which certain rational and need or synthesis is needed. In a recent Workshop organized in Madrid on "Durability Indicators" it has been analyzed present situation and classification of different alternatives in modelling has been discussed. It is based in the principle of classifying in "levels" the different modelling approaches. This will enable to keep all the initiatives that have shown to be valid, but at the same time the models are classified in alternatives that should provide similar results and those been more simple can be suggested for present standards and Codes.