

1453
Pyl

3rd FEHRL-FWD MODERATORS MEETING
DRI, ROSKILDE, DENMARK

Wednesday and Thursday 2nd and 3rd February 1993

- Moderators present:
- J Jansen (DRI, Denmark)
 - P Lepert (LCPC, France)
 - K Saathof (DWW, Netherlands)
 - L Wiman (VTI, Sweden)
 - B W Ferne (TRL, UK)
 - E Beuving (CROW, Netherlands)

1 The status and the format of this group was discussed. It was agreed that in order to help progress of the aims of the group and recognition of its activities a chairman and secretary should be selected and a formal report on progress be submitted to the official FEHRL committees as soon as possible. The Chairman and secretary were chosen to be K Saathof and B W Ferne respectively.

2 With regard to calibration and standardization of FWD's Mr Beuving reported on the latest comparison trials of FWD equipment in the Netherlands which took place on 5th October 1993. Fifteen machines took part, mostly from the Netherlands but with participants from Germany, Belgium and Sweden. Comparable measurements were made on twelve different locations on a range of different subgrades. As with earlier trials similar machines gave similar results but there were large differences between manufacturers. The mean of the Dynatest machines was taken as the reference mainly because there were several of these machine taking part. Although correction for machine type could reduce variability there was still significant variability apparently linked to subgrade type. Further investigation suggested that this was a function of the frequency response of the deflection sensors. Christ van Gorp of the TUD is investigating this further in cooperation with the manufacturers.

3 The fourth draft of the FWD Harmonization Guide was discussed in some detail. It was agreed that the report should be retitled to reflect its latest contents which at this stage are to concentrate on the measurement and processing of FWD measurements for project evaluation. ie "HARMONISATION OF FWD MEASUREMENTS AND DATA PROCESSING FOR FLEXIBLE PAVEMENT EVALUATION". This would entail some reorganization of the draft, in particular the removal of detailed statements on traffic, visual condition, residual life estimation and overlay design and their summarizing in just one chapter to be possibly expanded at a later stage. It was also agreed that the text style should be designed to indicate to the reader what the "status" was of each element of the document. For example certain sections would be statements that could be relatively easily agreed on, eg the choice of 300mm as the diameter of the loading plate, whereas other sections would be less clear giving general guidance with examples, eg the use of segmented loading plates to ensure good contact with the road surface. It was also agreed that certain terminology used in the document will need to be clearly

explained in an Appendix possibly with the aid of diagrams.

4 On the basis of the discussions at this meeting Mr Beuving agreed to prepare a new draft of the guide. This will be circulated to the moderators for comment hopefully within two weeks of the meeting (ie 18/02/94?). Mr Beuving will then further modify the document according to comments received and then circulate to all those ^{attending} attending the next full meeting of the FEHRL/FWD group in May.

5 The draft agenda prepared by Mr Jansen for the next full meeting of the FEHRL FWD Group in Denmark on 17th and 18th May was discussed. At present 32 participants are to be invited based on those attending the previous meetings in Delft and Nantes. The outline draft was agreed in principle but with the following possible modifications:

i The moderators would meet on the Monday at the Gentofte Hotel in the evening to discuss the potential contributions to the seminar, in particular the comments on the harmonization document. Moderators should plan to arrive at Copenhagen Airport by at least 1600.

ii In session 1 the moderators would present the latest draft of the Guide, already circulated to the attendees, together with comments on any major comments already raised. Contributors of selected comments would then be invited to briefly present their comment in no more than 5 minutes. These will be unprepared contributions, but selection will be carried out by the moderators group at Monday meeting. Conclusion by the moderators in Session 2 will include a statement on the way forward.

iii Mr Jansen will clarify whether there is any strong intention of CEN taking up the standardization of FWD procedures. If so this will be covered by an invited representative, probably ^{from} Denmark, in Session 3 with an upper time limit of 30 minutes. Otherwise this subject will be omitted.

iv It is hoped that some of the persons attending will offer short, 10 minute or less, presentations for particular sessions. Provision to offer such will be provided on the registration form. However it may be ~~necessary~~ ^{appropriate} to invite further contributions to certain sessions, eg Per Ullidtz, Olle Tholen and a representative from France regarding Session 4.

v The three main FWD manufacturers will be invited by Mr Jansen to make a presentation on their products of around 15 to 20 minute duration on the Tuesday evening between 1800 and 1930. They will also be asked to jointly sponsor the evening dinner at 2000. If all are not willing to contribute then the cost will be included in the registration fee.

vi The FWD Calibration Session 6 will include standardization of equipment. The order of presentation

should be Richter, Van Gorp followed by the manufacturer's representatives. Mr Ferne is to write to each of the manufacturers raising the need for standardization of frequency response of the deflection sensors and inviting them to comment on these and other relevant matters within a ten minute presentation each.

vii It was agreed that there was a need for an extra session on the back analysis of stiffness moduli. Cheryl Richter would be invited to contribute on behalf of SHRP. Brian Ferne could present a summary of the UK findings and other participants would be asked to contribute.

viii It was decided that the proposed visit to the Dynatest Workshops was not to be included in the Seminar nor was the lunch to be hosted by Dynatest but a list of all participants would be circulated to the manufacturers who may wish to invite those to visit their establishments after the seminar. The Seminar will close officially at 1300 on the Wednesday.

ix The moderators will meet in the early afternoon of the Wednesday to agree the next stage in the production of Stage 1 of the Harmonization Guide, plan future meetings and the next Seminar.

B W Ferne
Secretary, FEHRL FWD Moderators Group
11th March 1994