

Difficulties are many ; the committee's recommendations could not have been made easily. Before the war the quality of picture given by the television receiver was a standard of 405 lines. This gave (according to the official report ; opinions of similar services overseas are varied) a satisfactory picture (size 8 in. by 10 in.) in the home, but one which was not adequate for the large cinema screen which needs (to equal the clarity and detail of cinema films) a definition of about 1,000 lines. Increasing the size of the screen and of the picture merely spaces the lines farther apart, making the image coarser-grained, and reducing detail. Greater clarity, greater detail, and a larger picture—which can be seen comfortably by more than about three persons—are obtained only by increasing the number of lines.

Present Limitations

With even the small screen, television, because of its lack of definition, must rely heavily on close-ups. It can show you a figure, but not much of the background ; in a group the individual becomes nearly indistinguishable. This limitation seriously restricts television's entertainment value ; transmission of sports, for instance at present has to be confined as far as possible to close-ups of single figures, such as the batsman at the wicket or the man with the football, with as many as possible " long " shots to give a general impression of the game as a whole and the relationship among players. All programmes (presentation of plays, for instance) involving more than one or perhaps two persons are—with 405 line definition—of course, similarly affected.

Only by adoption of higher line definition can this limitation be overcome completely. Eventually, the Television Committee reported, television transmission should be of a standard of 1,000 lines. The question—perhaps the most important affecting the future of the industry—to be decided is whether the 405-line slate should be wiped clean now and a higher line standard adopted, or whether the change should be delayed.

Reasons for its recommendation—advising the resumption of the pre-war

system of television as soon as possible—were given by the committee as follows :—

(a) Transmissions, which were of " a high degree of reliability and afforded consistently good entertainment value in the home " by 1939, could be expected to be even more efficient ; the receivers of better design and quality—without any basic change.

(b) Much research, as well as new buildings and studios, would be needed before a markedly improved service could be operated. Such a lapse of time (probably several years) with no television service would dampen interest and—more important—seriously retard commercial development in Great Britain.

(c) An immediate re-establishment of a television service would stop the loss of highly specialized staffs previously employed in the industry before they began work for the war effort. Work could be given, too, to the men and women who during the war have gained valuable experience in different types of radio research.

(d) Further research and experience with the 405-line system would give those in control more chance to lessen the problems—both technical and programme—which will inevitably arise with the introduction of a new and improved system.

(e) It is most important that there should be no avoidable delay in restarting a service if Great Britain is to hold a leading position in the television field.

Equipment may be Outmoded

Disadvantages of continuing with the old system are that customers will be asked to buy equipment which before many years will almost certainly be obsolete. If the change was made now, present receivers would have to be scrapped (much transmission equipment, too) ; but later the cost to the public and the television authorities would be immeasurably greater—it has even been suggested in the United States that a later change might go by default, for fear of jeopardizing too large a public investment. To overcome this potential waste, the Television Committee suggested that when the time comes it may be possible to make two transmissions of the same