Geneva, June 15th, 1933.

LEAGUE OF NATIONS.

ADVISORY AND TECHNICAL COMMITTEE FOR
COMMUNICATIONS AND TRANSIT.

PERMANENT COMMITTEE ON ROAD TRAFFIC.

REPORT

ON THE EIGHTH SESSION OF THE COMMITTEE

Held at Geneva from May 29th to June 1st, 1933.

Present: All the members of the Committee, with the exception of M. Roubik, replaced by M. Z. JANAK, Chief Adviser to the Air and Automobile Department of the Ministry of Public Works of the Czechoslovak Republic.

Also attended the meeting:

For the International Tourist Alliance: M. James QUINCLET, Secretary-General of the Swiss Touring Club at Geneva;

For the International Society of Recognised Automobile Clubs: Colonel G. PÉRON, Secretary-General of the Association;

For the International Chamber of Commerce: M. A. KUNDIG, President of the International Federation for Commercial Motor Transport;

For the Permanent International Commission for First Aid on Roads: M. CLOUZOT, member of the Commission;

For the International Labour Office: M. J. DRBOHLAV.

1. OPENING SPEECH BY THE CHAIRMAN.

The Chairman made an opening speech, in which he paid a tribute to the memory of M. Pflug, member of the Committee appointed by the German Government, and to that of M. Romein, Secretary of the Committee.

2. INTERPRETATION OF THE INTERNATIONAL CONVENTION OF 1926 ON MOTOR TRAFFIC AND OF THE CONVENTION OF 1931 CONCERNING THE UNIFICATION OF ROAD SIGNALS.

Guarded and Unguarded Level-Crossings.

The Committee noted the correspondence on this subject exchanged between M. Pflug, M. Rothmund and the Secretariat (Annex 1).

After having also heard the interpretation of the words "guarded level-crossings" given by the countries of which the members of the Committee were nationals, the Committee noted that all these countries, with the exception of Switzerland, interpreted this term as meaning "level-crossings guarded by gates". The Committee interpreted the 1926 Convention to the effect that only level-crossings provided with a gate should be held to be "guarded", but those without gates should be signalled by the figure showing a locomotive, even if provided with sound or light signals.

The Committee then considered whether it would be desirable to create an additional signal for unguarded level-crossings when the crossing was provided with a system of sound and light signals, but was of opinion that it was most important to avoid multiplication of signals. Furthermore, the question of additional signals for level-crossings is on the agenda of the Committee and will be carefully investigated. The Committee drew attention to the necessity for a uniform interpretation of the 1926 Convention.
3. Examination of the Desirability of Additional Signals for Level-Crossings.

After an exchange of views, the Committee adopted the following resolution:

"The Permanent Committee on Road Traffic,

"After having taken cognisance of the Secretariat's note of May 1st, 1933 (Annex 2), referring to the question of a possible examination of the desirability of additional signals at level-crossings, from which it would appear that, at the twelfth session of the Railway Congress, held at Cairo in January 1933, the Railway Administrations, among others:

"(1) Recognised that the most satisfactory solution of the problem of road and rail crossings would consist in the total abolition of level-crossings and the construction of under and over bridges, but that this solution could not be made a more or less general rule in view of the exorbitant cost it would involve;

"(2) Was of opinion that the abolition of gates at level-crossings would mark a definite progress, as the stoppage of road traffic would be reduced to a minimum and the risk of accidents caused by closed gates across the road, quite apart from the passage of trains, would be eliminated;

"(3) Recommended the use of automatic signalling for certain categories of level-crossings;

"Since, for the use of such signals, no uniform principle of regulation internationally adopted at present exists, either in respect of the types of signals or in respect of the legislation or regulations concerning them;

"And whereas the fortunate results of the unification of road signals might be reduced in value and the danger both for road traffic and for railways at the moment of passing a level-crossing considerably increased should automatic signalling at level-crossings not be established on the same principles in all countries;

"Recognising, furthermore, that this danger would be still further increased by the more and more frequent use of rail motors travelling at very great speed, even on small railway lines;

"And being of opinion that this problem does not fall within its exclusive competence:

"Considers it desirable that the whole problem should be examined by a special committee composed of a limited number of particularly competent experts, both from the point of view of railways and from the point of view of roads;

"And therefore requests the Advisory and Technical Committee for Communications and Transit to set up such a Committee very shortly.

"The Permanent Committee on Road Traffic authorises its Chairman to suggest to the Chairman of the Advisory and Technical Committee three experts as members of the Special Committee. The same number of experts might be suggested by the Permanent Committee for Transport by Rail."

4. Resolution adopted by the European Conference on Road Traffic with regard to Light Signals.

The Committee took cognisance of a statement by Dr. Boström, of Stockholm, on colour-blindness (Annex 3), a summary of which was communicated by the Secretariat (document C.C.T/C.R.80), from which it would appear that the system of three-colour light signals (red, amber, green) is particularly difficult to be understood by colour-blind persons, whereas the one-colour system does not involve any difficulties for such drivers.

On the other hand, the Committee noted that, according to statistics compiled in the United Kingdom and in Sweden, the number of persons suffering from colour-blindness represented a very small minority (between 4 and 5 per cent for men and less than 1 per cent for women), and that furthermore it has not been shown that colour-blindness is the cause or even one of the contributory causes of the accidents that have been reported. Further, in certain countries the issue of a driving-licence either for all drivers or for those who drive certain kinds of vehicles, such as motor lorries and heavy public passenger vehicles, is made subject to a medical examination including a sight test.

For these reasons, the Committee did not think that the disadvantages for colour-blind persons of the three-colour system were sufficient for it to recommend the abolition of this system, which had been adopted by a great number of countries.

The Committee further noted that, in cases where the three-colour system was used, the meaning of the amber light varied slightly from one country to another and that the same was the case so far as concerns the order in which the three colours follow each other. Thus, in the United Kingdom, the red light first appears alone, then at the same time as the amber to show clearly that the prohibition to go forward is still in force; then the red and amber disappear and the green appears alone; it is only at that moment that motorists are allowed to proceed. Then amber appears before red; motorists are not allowed to go forward, nevertheless those who are at a crossing must clear it. In the other countries where the three colours generally follow each other without two of them appearing at the same time, amber alone replaces amber and red in the British system.

In view of the uniformity already existing in the use of the three-colour system, which is sufficiently general to enable motorists to drive in international traffic without danger, the
Committee thought that it should merely make the meaning of the amber colour clear, and adopted the following resolution:

"The Permanent Committee on Road Traffic,

After having taken cognisance of the recommendation on light signals adopted by the European Conference on Road Traffic, of the Secretariat's note of May 20th, 1933, and of the statement made by Dr. Boström of Stockholm, communicated with the said note:

"Notes that it is clear from the information supplied by the members of the Committee that, so far as concerns the question of regulating traffic at cross-roads by means of light signals, there are at present in Europe two main systems:

"(1) The single-colour system which is used, for instance, in France, the only colour used being red—meaning stop;

"(2) The three-colour system, which is used, among other countries, in the United Kingdom, Germany and Italy, in which red means stop, green means all clear, and, as an intermediary signal, amber, the exact meaning of which should be made uniform and decided on.

"The Committee is of opinion that the one-colour system has the advantage of being simple; the three-colour system has the advantage of making it possible to make finer distinctions in the information given, thus making it easier for drivers to stop less abruptly and in sufficient time in all cases.

"On the other hand, in countries which do not make the driving licence for all kinds of vehicles subject to medical examination at suitable intervals, or which do not contemplate refusing the driving licence to colour-blind persons, the Committee considers that the one-colour system should be recommended. In any case, the Committee is of opinion that the two systems defined above, as between which the Governments should remain free to choose, are the only ones which should be contemplated, for, otherwise, unfortunate complications would arise, and that the system should be uniform as within each country.

"As for the exact meaning of the amber signal, the Committee, after having been informed of the use which is made of it in the chief countries which use the three-colour system, is of opinion that the meaning should be the following:

"(1) For a driver who has not yet entered the cross-roads the amber signal forbids him to enter the said cross-roads;

"(2) In the case of a driver who has already entered the cross-roads, the amber signal orders him to clear the crossing.

"So far as concerns signals for obstacles round which the driver has to drive his car, such as a refuge, the Committee draws attention to the fact that it is undesirable to use either red or green; orange might be used. In any case, such obstacles should be signalled in the same manner throughout each individual country."

Signal Beacons.

During its sixth session, the Committee discussed a memorandum prepared by the Ministry of Transport of the United Kingdom concerning light signals, where it was recommended that use should be made of red flashing warning beacons, the use of which was contemplated by the United Kingdom. The Committee expressed the opinion that the red light, whether flashing or not, should be reserved for signals forbidding vehicles to pass. The British Government then sent to the Secretariat a letter by which it expressed its regret at not being able, by reason of special circumstances, such as intense night traffic and climate, to give up using such beacons. The British member of the Committee explained that the United Kingdom intended to continue using such red beacons in view of the fact that the white lights with which experiments had been made had proved to be insufficiently visible. After a fresh examination of the question, the Committee continued to be of opinion that the use of a red circular light other than a stop signal was dangerous, since it might lead to misunderstanding. It therefore requested the British member to draw the attention of his Government to the fact that the Committee had expressed this opinion.

5. Height at which Signals are placed.

One member of the Committee having drawn attention to the fact that signals were often placed too high to be seen by drivers of low-bodied vehicles, such as are at present being built, the Committee decided to draw the attention of Governments and tourist associations to the desirability of finding a remedy for the difficulties arising out of this state of things.

6. Recommendation adopted by the European Conference on Road Traffic, concerning Signals to be made by Officials Directing Traffic and the Signals to be made by Drivers of Motor Vehicles.

1. Signals to be made by Traffic Police.

It would appear from the statements made by members of the Committee that the system of signals to be made by traffic police as shown in Table V of document C.23.M.17.1929.VIII is applied so far as its central characteristics are concerned in the United Kingdom, Czechoslovakia, 

1 See document C.C.T./C.T. 45 (1).
Finland, France, Roumania, Sweden and Switzerland, whereas a simplified system which reduces the number of signals to be made by police officers is in force in Germany and Italy, and will probably be introduced in Spain.

The representatives of the tourist organisations present said that those organisations had no criticisms to make with regard to the system shown in Table V of the document.

There is no contradiction between the practice at present followed by countries represented in the Committee and the system shown in Table V of document C.23.M.17.1929.VIII. The Committee were thus of opinion that this system, which provides a satisfactory means of signalling, should be maintained as a general basis and followed so far as its general principles are concerned. The actual practice in each country may, however, be simplified on certain points and it is understood that the following recommendations will be followed:

1. The traffic policeman should be so dressed and so placed as to be fully visible to all road-users;
2. The signals should be easily understood and as few as possible;
3. Each country should have a single system of signals to be used by traffic police;
4. The system shown in Table V does not exclude the possibility that police officers may make additional signals which may be required by local traffic conditions.

2. Signals to be made by Drivers of Motor Vehicles.

The Committee noted that there were certain disadvantages attached to the proposal for two systems of signals to be made by drivers of motor vehicles, one kind of signals for road-users and the other for traffic police, since these different signals would have to be made almost at the same time.

Furthermore, whereas drivers of closed cars and of most motor lorries cannot make the necessary signals in such a manner as to be fully visible both from the front and from the rear in order to show their intention of changing direction or stopping, unless they use mechanical devices, the Committee adopted the following resolution:

"The Committee,

"Considers that the signals shown in Tables 6 and 7 of document C.23.M.17.1929.VIII, which must be made either to give information to road-users or to warn traffic police, lead in practice to difficulties, seeing that both signals cannot be made simultaneously or almost simultaneously;

"And that it is preferable to employ a single signalling system to give the necessary information to road-users, including pedestrians and traffic police.

"At present, in order to give notice of a change of direction in the absence of mechanical device, Table 6 provides that the driver, whether he intends to turn to the left or to the right, should put out his arm on the side on which he is sitting, the only difference between the warnings 'I am going to the left,' and 'I am going to the right,' being that, in the one case, the arm is kept steady while, in the other case, it is moved up and down. This distinction between the motionless arm and the moving arm is, however, apt to cause confusion. In practice, two systems are actually used:

"(1) The first consists in holding the arm out of the vehicle on the side on which the driver is sitting, there being nothing to show whether he intends to turn to the left or the right; this system is inadequate;

"(2) In the second, the driver holds his arm out of the vehicle on the left side if he intends to move to the left and on the right if he intends to move to the right. This system works well with motor-cycles and cycles with auxiliary motors and may prove satisfactory in the case of certain vehicles with an open body when the driver can make visible arm-signals on both sides of the vehicle. It is, however, impracticable for all closed-in vehicles and most lorries.

"On the other hand, mechanical devices (these were also dealt with in document C.23.M.17.1929.VIII) which enable drivers to indicate their intentions clearly in the case of every kind of vehicle and every kind of motor-car body are already employed extensively.

"The Committee accordingly recommends, at least for all closed-in vehicles and for lorries where arm-signalling by the driver is not completely visible from the front and from the rear, the general employment of mechanical devices projecting on both sides beyond the body of the vehicle and the load, and visible day and night, in order to give notice of a change of direction. These appliances which the driver will control from his seat, before changing direction, will serve to warn drivers of other vehicles, pedestrians and traffic police.

"The Committee brings this recommendation to the attention of Governments with a view to regulations being arrived at on these lines at the earliest possible moment.

"Naturally, this system of indicating change of direction does not release the driver from the obligation to indicate by means of arm-signalling his intention to slacken speed or to allow an overtaking vehicle to pass.

"Moreover, it is desirable that general use should be made at the rear of vehicles of a 'stop' signal indicating that the brakes are being applied."
“Cycles and motor-cycles are not affected by the foregoing. Cyclists and motor-cyclists, as well as all drivers of vehicles who are in a position to give perfectly visible arm-signals, should be instructed, when intending to change their direction, to hold out their arm on the side to which they wish to go, and, if they slacken speed or wish an overtaking vehicle to pass them, to make other appropriate arm-signals.

“Document C.23.M.17.1929.VIII will have to be corrected by another document taking into account the foregoing observations.”


Since the report of the Committee on Signalling has been communicated officially to Members of the League, and has, to a great extent, formed the basis of the regulations for signalling in a number of countries, the Committee requests the Advisory and Technical Committee for Communications and Transit to take the necessary measures for the publication of a new edition of this report in the form of a pamphlet to replace the 1929 edition.

8. COMMERCIAL MOTOR TRANSPORT.

After an exchange of views in which M. Kündig, representing the International Chamber of Commerce, took part, the Committee adopted the following resolution:

“The Permanent Committee on Road Traffic,

After having taken cognisance of the resolutions concerning commercial motor traffic adopted by the European Conference on Road Traffic, which was held at Geneva in March 1931, and by the Advisory and Technical Committee for Communications and Transit during its sixteenth session, held in May and June 1931;

Whereas the question of commercial motor traffic is in full evolution and, as the problem at present stands — since it is characterised on the one hand by very different legal conceptions in respect of this matter in the various countries, and, on the other hand, by the fact that it is impossible to make a sufficiently definite forecast as to what will be the economic development of such traffic and its effects on transport in general and therefore on the whole economic life of the various countries—it would be undesirable to draw up international regulations which would be likely rather to hamper than to facilitate the national development of such traffic in accordance with legal, technical and economic possibilities;

Decides for the moment not to continue an investigation of this question, but to keep it on its agenda with a view to a detailed enquiry at a moment when the Committee may consider more favourable for such an enquiry.”

9. TRIPTYCH SYSTEM.

The Committee took cognisance of the summary of replies received from Governments to the Circular Letter (Appendix, Annex 4) communicating the resolution of the Advisory and Technical Committee for Communications and Transit (Annex 4), of the full reply of the French Government to the said Circular Letter (Annex 5) and of the recommendation adopted by the International Touring Association at its general assembly at Copenhagen in May 1932 (Annex 6).

It would appear from the explanations given by the French member of the Committee that his Government is contemplating the adoption of a new law allowing the French Customs to take proceedings in respect of abuses committed under the triptych system and that, once this law has been passed, the French Customs authorities will consider the extension of the triptych system. The Committee therefore contends that it is not necessary to recommend the Advisory and Technical Committee to alter the terms of its resolution but confines itself to expressing its hope that the States which have not yet adopted the system recommended by the Advisory and Technical Committee will proceed to a fresh examination of the question based on the principles set forth in the Advisory Committee’s resolution.

The Committee also took cognisance of a resolution with regard to this question adopted by the Fifth Congress of the International Chamber of Commerce and dealing with the extension of the triptych system to all motor vehicles. The Committee was of opinion that the present time was not a suitable one for considering such an extension of the triptych system.

10. RESOLUTION ADOPTED BY THE PERMANENT INTERNATIONAL COMMISSION FOR FIRST AID ON HIGHWAYS REGARDING THE MARKING OF AMBULANCE VEHICLES AND FACILITIES TO BE GRANTED TO THEM WHEN CROSSING FRONTIERS.

After having considered the resolution adopted by the International Commission for First Aid on Highways and the summary of the discussions of that Commission (Annex 7) and having heard the additional explanations given by its representative, the Committee decided to request the Governments to consider the adoption of bilateral agreements facilitating the crossing of frontiers by ambulance vehicles, as defined in the Permanent International Commission’s resolution (Annex 7, Appendix) such agreements being based on the previously existing agreement on this subject between France and Belgium.
II. INSTRUMENTS ADOPTED AT THE EUROPEAN CONFERENCE ON ROAD TRAFFIC; PRESENT SITUATION WITH REGARD TO SIGNATURES, RATIFICATIONS OR ACCESSIONS.

The Committee noted the present situation with regard to signatures, ratifications or accessions as set out in the note by the Secretariat (Annex 8).

The French member of the Committee explained that, so far as concerns the Convention on road signals, a bill for ratification was at present before the French Parliament, and that, in any case, the Convention was applied in practice.

The Italian member stated that the two Conventions concluded by the European Conference were at present in process of ratification and that the Convention on signals was already applied in practice on national highways and in towns.

The Swiss member stated that the two Conventions were already applied in practice, but that the procedure for ratification had been delayed by reason of the necessity of preparing translations in German and Italian.

So far as concerns Germany, the necessity of preparing a translation of the text of the Conventions had also delayed the procedure of ratification.

12. RESOLUTION OF THE SIXTH CONGRESS OF THE INTERNATIONAL CHAMBER OF COMMERCE CONCERNING HIGHWAY FINANCE.

The Committee noted this resolution, which had been communicated to it for information (Annex 9).

13. CLAIMS PUT FORWARD BY MOTOR-DRIVERS.

The Committee noted a programme of claims by professional motor-drivers which had been communicated to it by the International Transport Workers' Federation (Annex 10), and a letter from the Director of the International Labour Office on the same question (Annex 11).

The Advisory and Technical Committee for Communications and Transit considered this question at its sixteenth session and adopted a resolution (Annex 12), by which it had divided the questions raised into three groups, the first of which should be studied exclusively by the International Labour Office; the second should be studied jointly by the International Labour Office and the Communications and Transit Organisation; and the third group should be studied exclusively by the Communications and Transit Organisation.

The Advisory and Technical Committee for Communications and Transit instructed the Permanent Committee on Road Traffic to take action in pursuance of this resolution on all matters concerning the Communications and Transit Organisation.

The representative of the International Labour Office, who was present at the meeting at which this question was discussed, stated that the International Labour Office had no objections to make with regard to the allocation of questions made by the Advisory and Technical Committee for Communications and Transit.

The Permanent Committee proceeded to a summary examination of those questions in respect of which co-operation with the International Labour Office was contemplated, and of those which fell exclusively within its own sphere. This examination showed that, among those questions some would appear to be such as should be left for settlement by the national regulations of the various countries. In the case of the second group of questions, the Committee was of opinion that it was desirable to make a study of them.

Point 5: Physical Fitness of Motor-Drivers.—The Secretariat was instructed to collect documentation with regard to the legislation in force in the various countries.

Point 6: Age required for obtaining a Driving-Licence for a Mechanically-propelled Vehicle.—The Committee noted this question with a view to considering it later, but was, however, of opinion that it could only be settled by means of a revision of the 1926 Convention.

Point 11: Desirability of a Compulsory Examination for All Candidates desiring to obtain a Driving-Licence.—Since this question was very important from the point of view of international safety, the Committee recommended States to comply strictly with the 1926 Convention so far as concerns the issue of an international driving-certificate.

Point 13: Introduction of a Different Driving-Licence for Professional Drivers intending to drive Different Categories of Vehicles.—The Committee was of opinion that there was no reason to change the principles contained in the 1926 Convention.

Point 14: Issue and Withdrawal of Motor-Drivers' Licences.—The Committee instructed the Secretariat to collect documentation with regard to the manner in which this question was regulated in various countries, particularly so far as concerns the withdrawal of the driver's licence, and the driver's right of appeal.

Points 15 and 21: Issue by All Countries of International Driving-Certificates valid in All Countries which have acceded to the 1926 Convention.—The Committee did not think that it was possible to allow countries which had not acceded to the 1926 Convention to issue driving-certificates valid in the countries which had acceded to it.

1 Questions 3 (b) (Insurance of the Vehicle), 4, 7, 8, 9, 10, 12, 16, 17, 20, 25, 29.
Point 18: Drawing up by the Competent Authorities of Statistics of Traffic Accidents and their Causes.—The Committee recommended the compilation of such statistics.

Point 28: Desirability of insisting on the Presence of a Brakesman on a Trailer if the Brake of the Trailer cannot be worked from the Driver’s Seat of the Motor Vehicle.—The Committee thought that this question was a very important one and should be examined with a view to a revision of the 1926 Convention.

Point 30: Annual Verification of the Reliable Working of all Motor Vehicles.—The Committee, without desiring to recommend such examination for all categories of vehicles or to insist on it being carried out at regular intervals, was of opinion that it was desirable from time to time for motor vehicles used for regular passenger or goods services.

In the case of a third group, the Committee found that the questions raised had already been settled or were being studied elsewhere. For instance, questions 22 and 26 had been settled by international Conventions (1926 Convention concerning road traffic, 1931 Convention concerning the unification of road signals).

Point 27 raised the question of mechanical devices making it possible to indicate change of direction. This question was covered by the resolution adopted by the Committee at its present session concerning signals to be made by drivers of motor vehicles.

The Committee decided that the results of its discussion of these questions on which it has already expressed an opinion and which will have to be studied in co-operation with the International Labour Office should be communicated to that Office, which might submit its observations. When the reply of the International Labour Office reaches the Secretariat, the Secretariat will get into touch with the Chairman of the Permanent Committee, who will decide on the procedure to be followed in the future. He will be able either to communicate the opinion of the Committee to the Chairman of the Advisory and Technical Committee, having authority, if necessary, to make drafting changes taking account of the views of the International Labour Office, or he might set up a sub-committee to consider the question along with the International Labour Office, or refer the question back to the Committee for a fresh examination. The questions in respect of which the Secretariat has been instructed to collect documentation will be examined at a later session of the Committee.


The Committee took note of the documentation collected by the Secretariat at the request of Mr. Franklin (Annex 13). It was of opinion that the consideration of this question should be adjourned to a future session.
LIST OF ANNEXES

Annex 1.—Interpretation of the International Convention of 1926 on Motor Traffic and of the Convention of 1931 concerning the Unification of Road Signals...

Annex 2.—Examination of the Desirability of Additional Signals at Level-Crossings...

Annex 3.—Recommendation adopted by the European Conference on Road Traffic with regard to Light Signalling...

Annex 4.—Triptych System: Summary of Replies from Governments to Circular Letter 277.1930.VIII, dated October 20th, 1930...

Annex 5.—Triptych System: Reply from the French Government to Circular Letter 277.1930.VIII of October 20th, 1930...

Annex 6.—Triptych System: Letter from the General Secretary of the International Touring Association, dated September 17th, 1932...

Annex 7.—Resolution, adopted on November 24th, 1932, by the Permanent International Commission for First Aid on Highways, regarding the Marking of Ambulance Vehicles and the Facilities to be granted to them when crossing Frontiers...

Annex 8.—Instruments adopted at the European Conference on Road Traffic, held at Geneva from March 16th to 30th, 1931: Situation with regard to Signatures, Ratifications or Accession on June 1st, 1933...

Annex 9.—Resolution of the Sixth Congress of the International Chamber of Commerce concerning Highway Finance...

Annex 10.—Programme of Claims put forward by Motor-Drivers...

Annex 11.—Claims put forward by Motor-Drivers: Letter from the Director of the International Labour Office...

Annex 12.—Programme of Claims put forward by Motor-Drivers: Resolution adopted by the Advisory and Technical Committee for Communications and Transit at its Sixteenth Session...

Annex 13.—Regulations for Pedestrians...

Annex 1.

INTERPRETATION OF THE INTERNATIONAL CONVENTION OF 1926 ON MOTOR TRAFFIC AND OF THE CONVENTION OF 1931 CONCERNING THE UNIFICATION OF ROAD SIGNALS

[C.C.T./C.R.78.]
May 9th, 1933.

SIGNALLING OF GUARDED AND UNGUARDED LEVEL-CROSSINGS.

In a letter dated August 27th, 1931, the late M. Pflug drew the Secretariat's attention to the fact that he had informed it that the Swiss authorities used a triangular sign with the figure of a gate at level crossings which were not provided with gates, and which were guarded by light or sound signals; while Sweden, which employed a large number of light and sound signals at level-crossings not provided with gates, considered them as unguarded and employed as a warning sign at these crossings a triangular plate with the figure of a locomotive. In Germany, the tendency was to keep signs showing the figure of a gate for level-crossings actually provided with a gate. M. Pflug expressed the desire that this question should be studied by the Permanent Committee on Road Traffic.

The Secretariat communicated the contents of M. Pflug's letter to M. Rothmund, who consulted the authorities of the Swiss Federal Railways on the subject.

Their opinion was communicated in turn to M. Pflug, who obtained the opinion of the German railway authorities on the memorandum transmitted by M. Rothmund, and himself prepared a memorandum on the question. M. Pflug, in a letter dated December 10th, 1931, emphasised the necessity of a study of this question by the Permanent Committee on Road Traffic, in order to ensure a uniform interpretation and application of the Convention in the future. He regarded this examination as particularly important, as the signalling of level-crossings by the use of flashing lights would spread to the majority of countries, and it would be easier to arrive at an international agreement during the period of development of this system than later on. M. Pflug also prepared a draft questionnaire, which is communicated to the members of the Committee below.
Lastly, M. Rothmund sent to the Secretariat the observations of the Railway Division of the Federal Department of Posts and Railways on the opinion expressed by the late M. Pflug. M. Rothmund adds, in his letter of January 26th, 1932:

"The Railway Division maintains the view already outlined in its letter of October 9th, 1931. In my opinion, reasoned arguments may be put forward in favour of both solutions. As the question is not without importance, particularly owing to the fact that, according to our technical railway advisers, an increasing number of level-crossings will in future be provided with sound and light signals, I should be glad if you would refer this matter as soon as possible to the Permanent Committee on Road Traffic for a preliminary opinion."

We attach below the following documents giving the opinions of the German and Swiss authorities, and showing the practice adopted in certain other countries:

I. Letter, dated October 9th, 1931, from the Director of the Railway Division to M. Rothmund, the Chief of the Police Division of the Federal Department of Justice and Police at Berne;

II. Letter, dated November 25th, 1931, from the General Directorate of the German Reich Railway Company to the Minister of Communications of the Reich;

III. Observations by M. Pflug on the remarks of the Director of the Railway Division of the Swiss Federal Department of Posts and Railways concerning warning signs at guarded and unguarded level-crossings;

IV. Questionnaire prepared by M. Pflug;

V. Memorandum by the Railway Division of the Swiss Federal Department of Posts and Railways.

I. Letter, dated October 9th, 1931, from the Director of the Railway Division to M. Rothmund, Chief of the Police Division of the Federal Department of Justice and Police at Berne.

[Translation.]

1. It should be observed, in the first place, that, apart from negligence on the part of drivers of road vehicles, the cause of most of the accidents occurring at level-crossings is that drivers fail to notice in time gates which are being opened or closed, or which are already closed. This is the cause of all the accidents or risks of accident which are usually described by the statement that a vehicle has broken through the gates or has been shut in between the gates. To prevent such accidents or risks, improvements have been made in the signalling of gates which should enable a careful driver to notice a gate in time and also to discern whether the gate is closed. For this purpose a triangular sign, with a red light or red reflectors, is installed at the barrier itself, as prescribed in Article 4 (a) of the Federal Council's Ordinance of May 7th, 1929, on level-crossings. To prevent accidents, it was therefore necessary to indicate by means of a sign that the level-crossing was literally closed by means of a gate. Nevertheless, if the driver does not notice the sign, the drawback or danger presented by the gate itself remains. For modern road traffic however, there is a growing tendency to mark crossings by signs, and the gate itself should nowadays constitute essentially a sign and not as previously an actual obstacle, since a collision occurs if the gate, as a sign, is not noticed in time. Nowadays, therefore, the gate constitutes nothing more than a sign, with a drastic and compulsory stop—i.e., a collision—if it is not noticed in time. If gates are replaced by light and sound signals, worked by the railway staff or automatically by the train, the drawbacks and dangers of the gates disappear. The experience acquired up to the present in Switzerland confirms this assertion. In spite of a better marking of gates, the number of accidents has not decreased, whereas no accidents have yet occurred at level-crossings provided with light and sound signals. The latter, as prescribed by the above-mentioned ordinance regarding level-crossings, are therefore preferable to gates in very special cases—preferable to gates from the point of view both of traffic and of safety. This, of course, is the case only if these signals work properly and are obeyed by road-users. It therefore seems advisable—if only for the reasons stated above—to assimilate level-crossings with light and sound signals to level-crossings provided with gates—i.e., to guarded level-crossings.

2. With a view to throwing further light on this question from the formal and technical points of view, the following particulars may be added:

In Switzerland, as in some other countries, an unguarded level-crossing is marked by a cross. By this sign the railway administration simply gives the public a general warning to exercise care in crossing the line. On the other hand, this sign provides no indication to road-users as to whether a train is approaching the level-crossing. All that is indicated is the presence of the crossing; but, before using it, the road-user must, on his own responsibility, satisfy himself that no train is approaching and that he can cross the line without danger. In the case of a guarded level-crossing, on the other hand, the railway administration stops traffic by closing the gates or by placing a keeper at the crossing with a red flag or a red light before the passage of trains. In the same way, the crossing is closed before the arrival of a train by means of light and sound signals which are worked by the railway staff or automatically by the train, the only difference
being that these signals constitute not an actual barrier, like the gate, but a barrier by signal. In principle, however, the crossing is closed on the passage of the train both by closing the gates and by light and sound signals. In No. 1 above, we have explained that closing by signals should be regarded in the same way as closing by means of an actual barrier, and that the former is even superior from the point of view of traffic and safety. Light and sound signals therefore do not merely represent a warning, as it is usually described abroad, but are equivalent to an absolute barrier by signalling. In other words, they constitute a signal barrier having the same effect as an actual gate, since they forbid the crossing of the line. Like the closing of the gate, the operation of the light and sound signals is carried out by the railways; it has the same meaning as the closed gate. It follows that a level-crossing provided with light and sound signals, as defined in Switzerland by the Federal Council's Ordinance under the name of "barrier by signal", cannot logically be regarded otherwise than as a level-crossing guarded by the railway. Hence, a level-crossing provided with these safety arrangements must be regarded like a level-crossing closed by gates, as a guarded level-crossing.

Only in this way is it possible to indicate and mark level-crossings and the closing of passages over the line in an absolutely logical manner, as is done in the Federal Council's Ordinance of May 7th, 1929—namely:

**Unguarded level-crossing**: Simple indication, Article 2, No. 3;
**Sign in the form of a cross**: General warning, Article 4 (c) and Article 5 (c);

**Guarded level-crossing**: Triangular signs;
**Gate**: Actual barrier, Article 4 (a);
**Flashing light signals**: Barrier by signal, Article 4 (b).

The crossing is closed by the railway administration before the passage of the train: Article 2, Nos. 1 and 2.

3. If the installation of light and sound signals is considered to constitute the guarding of the line, simple and clear provisions can also be laid down as regards railway police and as regards penal consequences. In this connection, we would refer to Article 11 of the Ordinance of May 7th, 1929, concerning level-crossings. Under No. 2 (a) of this article, light and sound signalling by means of flashing lights and bells ensures the barring of a level-crossing within the meaning of Articles 3 and 4 of the Railway Police Law to the same extent as a closed gate. The only difference resides in the fact that, in the former case, the barring is effected by means of a signal, whereas the gate constitutes an actual barrier. When the light and sound signal is working traffic on foot or by vehicle is therefore prohibited in the same way as by a gate which is closed or which is in process of being closed or opened. If no notice is taken of the flashing light signal when the latter is working, the situation is the same as when someone opens the gate or passes under it when it is closed, or breaks it down. If light and sound signals were regarded, not as appliances constituting a guarding of the line, but simply as warning signals, there would be two different categories of unguarded level-crossings, which would lead to confusion, particularly from the penal point of view. As far as we know, Sweden, which of course was the first country to use light and sound signals, punishes the non-observance of these signals in the same way as is done in Switzerland.

We hope that, in the foregoing outline, we have explained to you the reasons why Switzerland has decided to place advance signs for guarded level-crossings before crossings with light and sound signals. We think that, if foreign countries could accept the Swiss view, it would be to the general advantage. There is a growing tendency to regard gates as obsolete. A signal is more suitable for modern traffic requirements. Just as it is frequently necessary for road traffic in other circumstances, a signal can advantageously replace gates, which are often actually dangerous, at level-crossings. This system presupposes, however, that the closing of the line by means of light and sound signals will be assimilated to closing by means of gates, and that level-crossings provided with such appliances will be considered to be guarded level-crossings, it being understood that closing by signals is equivalent to a real barrier—i.e., that it orders the driver to stop and is not intended simply to warn him. We would urge you to support this view, which was shared by all those present when the matter was discussed, and has also been approved by the Federal Council.

(Signed) HUNZIKER.

**II. Letter, dated November 25th, 1931, from the Head Office of the Deutsche Reichsbahn Gesellschaft to the German Minister of Communications.**

[Translation.]

As desired, we have enquired of various European railway authorities regarding the use of the different types of automobile warning signs at level-crossings.

From the replies it appears that, in Austria, Belgium, Denmark, Estonia, Finland, the Netherlands and France, the locomotive sign is employed at level-crossings which are not equipped...
with gates and where the safeguards used are light signals. In future, it is proposed to employ the same method in Norway, Czechoslovakia, the Saar Territory and Sweden wherever light signals are in use. The only exception is Switzerland, where in such cases the gate sign is preferred (cf. Reichsbahn 1929, No. 23, page 437). In the case of level-crossings not equipped with gates, where a crossing-keeper is on guard permanently or merely when certain trains are due, the locomotive sign is also used in Czechoslovakia, Denmark and Estonia, as in Germany. In the other countries, such intermittently guarded level-crossings do not exist. In these countries, all crossings with keepers are equipped with gates.

It is clear from the above that, in all countries, with the exception of Switzerland, the passages gardés and passages non gardés used in the original French text of the International Convention on Motor Traffic are merely regarded as a means of distinguishing between level-crossings with and without gates.

Italy and Poland have not yet replied to our enquiries. We shall transmit their replies in a later communication.¹

(Signed) Krafft.

III. Observations by M. Pfung on the Remarks of the Director of the Railway Division of the Swiss Federal Department of Posts and Railways concerning Warning Signs for Guarded and Unguarded Level-Crossings.

[Translation.]

Berlin, December 10th, 1931.

In Germany's view, the impression produced by the sign on the driver of a motor vehicle is the decisive factor in determining whether level-crossings provided with flashing lights should be notified to road traffic by means of a triangular plate with the figure of a locomotive. The important point is to find the most rational solution from the point of view of road traffic. A picture of a gate gives the driver of a motor vehicle the impression of the existence of a gate. If this sign is employed when there is no gate, it confuses the driver, who looks for a gate and does not find one. It would therefore be better to employ the figure of a locomotive at level-crossings provided with flashing lights. In Germany, complete agreement prevails on this point between the Reich Railways, the Reich Ministry of Communications and all the other parties concerned, although differences of opinion still exist with regard to the value of flashing lights and the legal consequences which should be attached thereto.

Although I believe, unlike the Swiss Railway Administration, that, for the problem we have to solve, the question of what value and what legal significance should be attached to flashing lights is not of decisive importance, I venture to submit herewith a few detailed observations on the view put forward by the Swiss Railway Administration.

At present, there are in Germany five flashing light installations which have been installed as an experiment and have been operating for some time as auxiliary safety appliances at level-crossings not provided with gates. In so far as it is possible to form an opinion on the basis of these experiments, it may be concluded that there is no reason to anticipate that cases in which flashing lights fail to function owing to mechanical or electrical defects will be more frequent than cases of failure to close gates worked by hand owing to inattention or negligence on the part of those in charge. It is proposed in Germany to proceed shortly to more numerous experiments, and to replace gates protecting single-line crossings by flashing lights. Opinion in Germany is still far from unanimous as to the value of flashing lights and the part they may be called upon to play as auxiliary safety appliances or as installations to replace gates. For this reason, I should like to emphasise that what I give below is only my personal opinion.

Flashing lights have the advantage over gates in that their operation is less expensive, since they enable gate-keepers to be dispensed with; furthermore, the closing of the road is automatically reduced to the time absolutely indispensable; lastly, it is not possible for motor-cars to find themselves shut in on the line, as happens with gates. On the other hand, flashing lights have the drawback that they do not notify the closing of the crossing in such a definite, practical and unmistakable manner as a visible gate. It has not yet been proved, at any rate in Germany, that the driver of a motor or horse-drawn vehicle or the other users of the road will recognise flashing lights with sufficient certainty as signs that the crossing is closed and will obey them in consequence. Moreover, with flashing lights it is not yet possible to obtain sufficient safety at level-crossings over two or more lines. At such level-crossings a train may conceal from the flashing lights fail to function owing to mechanical or electrical defects will be more frequent than cases of failure to close gates worked by hand owing to inattention or negligence on the part of those in charge. It is proposed in Germany to proceed shortly to more numerous experiments, and to replace gates protecting single-line crossings by flashing lights.

In a letter dated December 21st, 1931, the Head Office of the Reichsbahn informed the German Minister of Communications that, according to their replies, Italy and Poland use the gate sign exclusively to indicate crossings equipped with gates and the locomotive sign to indicate crossings not so equipped, whether provided with light signals or not.

¹
danger, whereas in reality a train is already arriving in the other direction. It is true that light signal appliances have been proposed for double tracks also, but the possibility of the practical utilisation of these appliances is doubtful. The opinion expressed above as to the value of flashing lights is therefore substantially different from that of the Railway Division of the Federal Department. As regards the details of the Swiss standpoint, I venture to submit the following observations.

Ad 1.—The Swiss memorandum duly recognises the undeniable advantage of closed gates as possessing the maximum efficacy, since they have what is termed the compulsory stop by a collision if they are disregarded. This advantage is not, however, considered as giving the preference to the gate system, which could not be fully replaced by a system of flashing lights. The drawbacks to the gate system pointed out in the Swiss memorandum, and the dangers presented during the opening and closing of the gates, can be avoided by careful attention on the part of the staff and by making the gates themselves sufficiently visible, particularly if they are properly lighted at night. Owing to the advantage presented by a well-designed gate visibly closing the road by a barrier—an advantage which cannot be achieved by a flashing light—I am unable, at any rate for the moment, to accept the Swiss view that the flashing light is preferable to the gate from the point of view of traffic technique and safety.

Ad 2.—In Germany, all level-crossings are marked by St. Andrew's crosses arranged differently according to the category of level-crossing (single-track unguarded crossings, multiple-track crossings, or crossings with gates). Although these crosses are described as warning signals, their principal purpose is not a warning but (according to the text of the Decree) an indication, in accordance with the traffic regulations, of the place at which vehicles and animals should stop when the crossing is closed, when at a crossing with gates the sound signal is heard or when a train is approaching. At a crossing without gates but with a flashing light operated by the train, the actual warning is given by this light. As has already been explained above, we cannot, at any rate for the moment, regard this flashing light as having the same efficacy as a gate. Furthermore, from the legal point of view, the warning given by the flashing light cannot be interpreted as a prohibition to use the level-crossing taking effect at the moment when the light changes. It is hardly possible to place on the same footing the actual closing of the line (gate) and the closing which is only signalled (flashing light). The closing of the line by signals cannot be regarded as a guarding of the crossing in the true sense, for it does not provide the safety based on actual observation of the traffic.

Ad 3.—As will be seen from the foregoing, we do not regard it as possible to assign to the flashing light the same significance as to a gate as a prohibition signal from the point of view of the railway police and penal law. This is justified by the very fact that those in charge of the gates can personally take into account the traffic conditions on the road at the actual moment when they operate the gate, and that, indeed, they must do so if they obey their instructions properly. The flashing light is put into operation by the approaching train according to arrangements made in advance irrespective of the circumstances mentioned above; and, although it is supposed to signify, as soon as it comes into action, a complete stoppage of traffic on the road and hence a prohibition to pass over the level-crossing hurriedly before the train arrives, it may, owing to its rigidly automatic character, lead to accidents contrary to the purpose it is supposed to fulfil.

Contrary to the Swiss view, we feel bound to express the opinion that, by the utilisation of flashing lights, two categories of unguarded crossings are created according to the greater or less danger which they present; but even that one of the two categories which, thanks to this additional measure, offers the best guarantees of safety to road traffic is still far from equal to a level-crossing provided with a gate. It is therefore impossible to designate both categories with the same warning sign (triangle with figure of a gate). This sign, which should inform the road-user that he is approaching a level-crossing where the most complete and effective safety measures available have been taken in his interest, must be reserved for level-crossings supplied with a gate. As apart from this sign there is only one other sign used in international agreements for denoting railway crossings (a triangle with figure of a locomotive), this latter sign must be the only one utilised in all other cases, even for level-crossings the safety of which may be better ensured by means of the flashing light but which are nevertheless unprovided with a gate. Even Sweden, which, according to the Swiss memorandum, provides the same penalties as Switzerland for persons who do not obey flashing-light signals, marks these level-crossings with the international triangular sign with the figure of a locomotive—i.e., the sign which is also proposed for this purpose by Germany. This fact should suffice to demonstrate that the legal value assigned to flashing-light signals is not necessarily the decisive factor in determining whether use should be made of a triangle with a figure of a gate or a triangle with a figure of a locomotive.

IV. Questionnaire prepared by M. Pflug.

A. Signalling of Level-Crossings.

There can be no doubt that, under the international Convention relative to motor traffic, the triangular warning sign with the words “Guarded level-crossing” should be set up at the entrance to all level-crossings provided with gates and operated by a keeper in immediate proximity.
to the crossing itself. On the other hand, the only warning signal which can be legitimately
employed for level-crossings not provided with gates or other apparatus and not operated by a
keeper is a triangular "Uncarded level-crossing" sign. With a view to elucidating the methods
employed to signal other level-crossings, answers are requested to the following questions:

1. In your country, are there also level-crossings which:

(a) Are provided with gates operated from a distance without there being any
keeper in the immediate proximity of the crossing?

(b) Are provided with gates operated from a distance and a flashing light signal
at the crossing itself, but which have no keeper?

(c) Are not provided with gates but with a flashing light and a keeper at the crossing
itself?

(d) Have no gates or keeper but are equipped with a flashing light at the crossing
itself?

2. Which warning signs are employed in your country for level-crossings under the
international Convention relative to motor traffic:

In case 1 (a),
In case 1 (b),
In case 1 (c),
In case 1 (d)?

3. In your personal opinion, which warning signal is it appropriate to use:

In case 1 (a),
In case 1 (b),
In case 1 (c),
In case 1 (d)?

B. Exchange of Information regarding Experience of Flashing Lights.

For this purpose answers are requested to the following questions:

1. Are flashing lights used in your country at multiple-track crossings or merely at
single-track crossings?

2. Have the flashing lights proved technically satisfactory? Do they produce a sufficient
effect upon all road-users, even at crossings where the traffic is heavy?

3. Have gates in your country already been removed and replaced permanently by
flashing lights; if so, to what extent and with what results?

4. Have flashing lights already been assigned a legal significance in your country; and
if so, what? Are they merely used as a warning, or does the red light signify police prohibition
to cross the line after the change of light, or a police injunction to stop if possible on the
near side of the railway line?

5. If such is not the case, what legal significance should, in your opinion, be assigned
to the flashing light?

V. Letter, dated January 16th, 1932, from the Railway Section of the Federal Posts
and Railways Department to the Police Section of the Federal Justice and Police
Department at Berne.

Advance Signs for Guarded and Unguarded Level-Crossings.

The international Convention of April 24th, 1926, relative to motor traffic merely distinguishes
between guarded and unguardcd level crossings. The advance sign in the case of the former is to
be the figure of a gate and in the latter the figure of a locomotive. In other words, the gate and
the locomotive stand for "guarded" and "unguarded" respectively—not for "barred" and
"unbarred". The supposition that the gate sign indicates a level-crossing with a gate is not
therefore in accordance with the terms of the international Convention. It has no doubt arisen
owing to the fact that, hitherto, gates have generally been used to close guarded level-crossings.
According to the text of the international Convention, therefore, the light and sound signalling
of a level-crossing, provided such signalling is a valid means of guarding the line, must be denoted
on the advance sign by a gate. As under the Federal Council's Ordinance of May 7th, 1929,
light and sound signalling takes the place of gates and is a valid means of guarding the line,
Switzerland can claim to have complied fully with the terms of the international Convention
of 1926 by her use of the gate sign as the advance sign in such cases.

No objections or apprehensions with regard to this measure were expressed at the time of the
discussion of the draft of the Swiss level-crossing Ordinance, either by the railway management,
the public highway authorities or the various automobile associations; nor has it since then in practice proved a source of danger or even uncertainty of any kind. The flashing light sign with three red lights in the form of a triangle has been found, by both day and night and under the most unfavourable weather conditions to be more effective as regards visibility than any gate, however clearly indicated. On the other hand, gates are proving to an increasing degree unsuited to modern road traffic. In many circumstances, they are not sufficiently visible, as is shown by the numerous attempts which have been made to indicate their whereabouts (e.g., by special signs at the gates themselves) no less than by the frequent accidents caused by cars driving into closed gates. Further, the publication and discussion of the Swiss signalling regulations for level-crossings in the daily Press, in technical papers and elsewhere has not only given rise to no criticism but has commanded approval. The Federal Council's Ordinance on this subject is regarded by the technical experts on road traffic as entirely satisfactory in every respect.

The above considerations all point to the conclusion that there is no objection, from the standpoint of traffic safety, either in form or in fact, to the use of the gate sign as an advance sign in connection with light and sound signalling. On the contrary, its use is both correct and satisfactory in all cases where light and sound signalling is recognised as a means of guarding the line.

2. The question whether light and sound signals should be regarded as indicating the closing of the line—i.e., as a substitute for gates, and pro tanto as a means of guarding the line—was fully examined both in its legal aspects and from the standpoint of rail and road traffic. The conclusion was that the rigid legal interpretation of the expression "guarding" as implying personal guard of the level-crossing on the spot had long been superseded, and that barriers operated from a distance, or operated automatically by the train, must be regarded as coming under the term "guard". Consequently, the personal guarding of level-crossings by keepers on the spot is no longer the distinguishing feature, either in the legal or in the technical sense, of the guarding of a line.

The point is whether the railway authorities do or do not close the level-crossing before the passage of the train in some manner which meets road traffic requirements. It must be remembered that the personal guarding of a level-crossing by a man on the spot is not the same in the case of modern motor traffic as it used to be in the case of animal-drawn vehicles—to say nothing of the admittedly frequent cases where the keeper fails to close the barrier when it should be closed. Often the keeper's signals (shouts, red flag or red light) are not noticed or are misunderstood, or are noticed too late—a single red light, for example, is often confused with the rear light of a motor-car—and substantially the only remaining function of the keeper is the closing of the gate. Nor is the keeper ordinarily able, with the means of signalling at his disposal, to stop a train in emergency, owing to the shortness of the time in which he has to act and the speed at which the train is moving.

The principal condition governing the protection of a level-crossing adapted to the requirements of modern road traffic is, therefore, not the existence of a keeper or gate, but the regular closing of the line by the railway administration for the passage of every train by means which are in all circumstances effective for motor traffic, as opposed to an unguarded level-crossing, which the railway administration simply marks as such, leaving to the user of the road the responsibility of ascertaining that no train is coming. By the system of light and sound signalling brought into operation before the passage of the train and stopped immediately after the last vehicle of the train has passed over the level-crossing, the railway administration ensures that the crossing will be closed by means of a signal. The requisite condition for the guarding of the line is fulfilled if this signal—in Switzerland a light signal consisting of three flashing red lights—is regarded as at least equivalent to a gate. The light and sound signalling of a level-crossing must be considered to constitute the guarding of the line at the level-crossing if there is no inconsistency or lack of clearness in the marking of level-crossings and the meaning of signals.

3. As regards determining the value of flashing signal appliances, we should like to point out, first of all, that the classification of light and sound signals replacing barriers as a protection for the line, in the form prescribed in the Ordinance of the Federal Council dated May 7th, 1929, was adopted after a long period of experiment in signal working on different systems. This decision was the outcome of the successful results obtained in Sweden with flashing light signals and of the constantly growing number of accidents at level-crossing gates. While it seems impossible at any reasonable cost to ensure that gates will really be adequately visible to motor traffic, the "Signum" system of flashing signs which has been chosen has proved to be more effective than the use of gates. The light signal consisting of three flashing lights in the form of a triangle is visible, whatever the atmospheric conditions, at a much greater distance than a gate, and the red light is an internationally recognised stop sign. Apart from this advantage, the use of the flashing signal removes the element of danger which is unavoidable when the gate is being closed or opened. A large proportion of the accidents at crossing gates are due to this cause. It has often happened that a well-meaning gatekeeper, out of consideration for the road traffic, has been unable to close the gates until too late, and has thus shut a vehicle in between them or has at the last moment let one of them fall upon a vehicle. The closing of a crossing by flashing signals obviates the danger of collision from the actual closing by means of gates, because a vehicle travelling on the road can still, even when the lights have begun to flash, pass over the level-crossing without danger if it has
no time to brake. This is confirmed by the experiments hitherto made with flashing signals, and with them no accident has yet happened.

In theory, as in practice, light and sound signalling has proved superior to the employment of gates because it is more effective and obviates the dangers presented by gates. It is therefore wholly justifiable in that respect to allow such signalling to be used in place of gates and to admit it as a means of guarding the railway.

4. The use of light and sound signalling is subject in Switzerland to approval by the supervisory authority in each individual case; in other words, it must be ascertained in every case whether, in view of local conditions and traffic requirements, safety can be ensured better by light and sound signalling or by the use of gates. This procedure also ensures that the flashing signals installed will be of uniform types. At present we are not using flashing signals for double-or multiple-track level-crossings, although we see no fundamental objection to their use. This innovation must first come into current use for single-track level-crossings. Moreover, it is proposed gradually to abolish multiple-track level-crossings altogether; a further point is that, in these cases, flashing light appliances are fairly costly on account of the necessity of allowing for railway traffic not using the normal line. Even in the case of single-track level-crossings, the introduction of the flashing signal system is at present proceeding comparatively slowly. So far, in Switzerland, some twenty gates have been replaced by flashing light appliances. Light signals of this kind have also been installed on about ten crossings not previously guarded. The further replacement of gates is to be continued, and requests to that effect are constantly under consideration. The experiments so far carried out with flashing signals have produced very favourable results; there have been no accidents, no disorganisation and no complaints. Flashing signals are preferred to gates wherever they are installed. It is therefore anticipated that there will be a growing demand for their installation and the abolition of gates.

In conclusion, this question should be regarded as of decisive importance, from both the formal and the practical points of view, in the following respects:

(a) The figure of a gate or a locomotive on an advance sign means, respectively, according to the International Convention of 24th April, 1926, "guarded" and "unguarded". The use of an advance sign bearing a figure of a gate for level-crossings with light and sound signalling is therefore quite expedient and, from the formal point of view, correct, provided that that method of signalling is accepted—as is the case in Switzerland—as an effective substitute for gates and is regarded as a means of guarding the railway. The use on advance signs of the figure of a locomotive for level-crossings with light and sound signalling and the exclusive use of the advance sign with the figure of a gate for level-crossings with gates would thus entail a modification of the principle underlying advance signs—namely, that the figure of a gate implies the idea "guarded" and that of a locomotive "unguarded". But this modification of the meaning of the sign must be regarded as inconsistent with the terms of the International Convention.

(b) The replacement of gates by light and sound signalling and the acceptance of such signalling as a regular means of guarding the line are justifiable both as regards form and for practical purposes. As regards form, because the railway administration closes the level-crossing before the passage of the train and opens it again immediately afterwards, the only difference being that the line is closed by signals instead of by gates. It is justifiable from the practical point of view, because, for modern road traffic, closing by signals is in itself better than actual closing by gates, and also because, with the signalling system, the dangers of collision and of vehicles being shut in between the two gates are abolished.

As the result of successful experiments carried out with light and sound signalling, we are convinced that this system of signalling will be widely adopted in the future to supersede gates; and we ask you to submit our view for international discussion, because we feel we ought to show that it seems unjustifiable not to regard the closing of crossings by signalling as being like the gate system, a means of guarding the line, since it is already proving superior to the barrier system.

In order to remove any misunderstanding, we venture to add, in conclusion, that Switzerland would, of course, have to accept any decision prescribing the use of advance signs with the figure of a locomotive for level-crossings with light and sound signalling; but we should have to reserve the right, as in the past, to admit light and sound signalling as an adequate substitute for gates and to regard it as a means of guarding the line within the meaning of the Federal Council's Ordinance of May 7th, 1929.

(Signed) Hunziker.
Annex 2.

EXAMINATION OF THE DESIRABILITY OF ADDITIONAL SIGNALS AT LEVEL-CROSSINGS

Note by the Secretariat.

[C.C.T./C.R.77.]
May 1st, 1933.

In accordance with the resolution adopted by the Advisory and Technical Committee for Communications and Transit at its seventeenth session, held in June 1932, the Secretary of the Permanent Committee for Transport by Rail attended the twelfth session of the International Association of the Railway Congress, which was held at Cairo in January 1933. Among other subjects, this Congress studied in detail, in the light of modern developments in motor traffic, the increasingly important problem of roads and rail-crossings and adopted certain conclusions the text of which is attached as an appendix.

The Congress examined, in particular, the question of the most effective methods of warning for protecting users of the road and also the railways against the dangers of level-crossings and, while reviewing the various forms and systems of signalling and other appliances used in most countries of the world, finally raised the question of the degree of protection afforded by gates, and their advantages and disadvantages. The Conference noted that in certain countries of America, "a gate is not considered adequate or satisfactory for fast road traffic", and that for that reason the gate is "replaced by a notice board or by a flashing sign or by a keeper on the site to stop the road traffic when a train is approaching", whereas in Europe "level-crossings are still generally guarded by gates, a method dating from a time when the road traffic was very different from what it is to-day", and that efforts are now being made to announce "the approach of trains to guarded level-crossings where there is heavy traffic on either railway or road, and the railway-line is not sufficiently visible from the road", and arrived at the following conclusion, which seems likely to modify very considerably the existing practice in Europe:

"The abolition of gates would mark definite progress as the stoppage of road traffic would be reduced to a minimum and the risk of accidents caused by closed gates across the road, quite apart from the passage of trains, would be eliminated."

The Congress, while classifying level-crossings according to their visibility and to the volume of the rail and motor traffic, recommended as a suitable means of warning for certain categories of level-crossings, and particularly for cases where railway and motor traffic is heavy and visibility insufficient, the use of automatic signalling apparatus—that is to say, of signalling apparatus, not only indicating the existence of the level-crossing itself, as in the case of fixed signs (St. Andrew's Cross and the two triangular signs provided for in the 1926 Convention), but also giving warning of the approach of trains.

Further, the Congress was informed that attempts were at present being made in a number of countries to find the best system of automatic signalling and that, in several of those countries, definite conclusions had, in fact, been reached. The solutions contemplated by the different countries, although varying little in their broad outlines, differed considerably in detail. That was not the least important of the considerations which led the Congress to approach all countries with the request that "they should adopt legal provisions and regulations based on uniform principles with regard to the protection of level-crossings and types of signs".

Such an appeal cannot be ignored by the competent organs of the League of Nations, which have always been anxious to ensure that the successful results of the unification of road signalling should not be jeopardised and that the future work of the Transit Organisation with a view to such unification should not be unnecessarily hindered by recent developments.

Such would certainly be the case if the respective countries were to adopt different principles either with regard to the systems of warning by additional signs at level-crossings or as regards the legal and administrative provisions governing the matter. Finally, the installation of automatic signs would entail considerable expense and, when carried out, subsequent changes with a view to obtaining a uniform international system might meet, in particular, with greater financial difficulties.

Consequently, the Secretariat of the Permanent Committee on Road Traffic has thought fit to communicate the above-mentioned information to the Committee, thus enabling it to take such steps as it may deem necessary with a view to a further study of the question.
Appendix.

Conclusions adopted at the Twelfth Session of the International Railway Congress Association (Cairo, January 1933) regarding the Protection of Railway Level-Crossings in view of the Modern Development of Road Traffic.

1. As, owing to the use of motor vehicles, road traffic which was formerly local has become fast, long-distance traffic and is becoming more and more international, the Congress invites all countries to adopt legal provisions and regulations based on uniform principles with regard to the protection of level-crossings and types of signs.

2. The most satisfactory solution as regards rail and road crossings—the construction of over- and under-bridges—can be carried out only in cases limited to crossings or roads carrying very heavy traffic and railway main lines. This solution cannot be contemplated as a more or less general rule in view of the exorbitant cost it would involve.

3. In the United States, the number of level-crossings guarded by gates is decreasing every year; in 1927, it was only 5,057 out of a total of 233,000 level-crossings. In some States, a gate is not considered adequate or satisfactory for fast road traffic and is replaced by a notice board or flashing sign or by a keeper on the site to stop the road traffic when a train is approaching.

   In Europe, on the other hand, level-crossings are still generally guarded by gates, a method dating from a time when the road traffic was very different from what it is to-day. Attempts are now being made to announce the approach of trains to guarded level-crossings where there is heavy traffic on either railway or road and the railway is not sufficiently visible from the road. The abolition of gates would mark definite progress, as the stoppage of road traffic would be reduced to a minimum and the risk of accidents caused by closed gates across the road, quite apart from the passage of trains, would be eliminated.

4. In the case of level-crossings where the road traffic is of average intensity, it should be borne in mind that an appropriate means of signalling gives a degree of protection not inferior to that afforded by gates, and has the advantage that it interferes less with road traffic and prevents the accidents so frequently caused by collisions with gates.

   If the signalling of level-crossings is required by law, it must be understood that the railway administration is not liable in respect of accidents occurring at level-crossings, just as the road administration is not responsible for accidents occurring at public cross-roads.

5. Fixed signs in the form of a St. Andrew's cross preceded by an advance warning sign on roads on which there is heavy motor traffic must be considered as affording sufficient protection, provided that visibility is satisfactory.

6. If visibility is insufficient in view of the speed of the trains, fixed signs may suffice where the rail traffic is small or the road traffic not heavy.

7. If, however, visibility is insufficient and both rail and road traffic are heavy, the use of automatic signalling is recommended. 

8. The gates should be retained at crossings with very heavy road and rail traffic when automatic signalling is not sufficient, and when keepers and the regulation of the road traffic appear necessary.

9. It is desirable that keepers should be assisted by having the trains announced to them from the adjacent signal boxes if near enough, or by a system of automatic signals.

10. To increase their visibility, signs and gates should be painted in alternate stripes of two colours to make them more conspicuous, and they should also, wherever possible, be fitted with cat's-eye reflectors.

11. As the organisation of protection on the above lines might be very costly, and the construction of over- and under-bridges would be even more so, and as, furthermore, fast road motor traffic does not select the shortest route, but prefers a good road even if longer, and as consequently road traffic is concentrated on a small number of level-crossings, an endeavour should be made to reduce as much as possible the number of road and rail crossings by abolishing level-crossings with little traffic, by diverting the traffic towards those which, having a heavier road traffic, are equipped with adequate signalling systems and warning devices or gates, and by building under- and over-bridges at places where the heaviest road traffic is concentrated. When schemes for building and rebuilding roads are being drawn up, these circumstances should be taken into account.

12. Consequently, and in accordance with American practice (State of New York), level-crossings might be classified in three groups:

   I. Unguarded level-crossings, without gates and without automatic means of signalling the approach of trains;

   II. Unguarded level-crossings, without gates but with automatic means of signalling the approach of trains;

   III. Guarded level-crossings with or without gates.
The first category comprises level-crossings where the visibility of the railway is good and where the number of trains per day does not exceed 100, and the number of trains multiplied by the number of the road vehicles is under 70,000, and also level-crossings with insufficient visibility, but with light rail and road traffic.

The second category comprises level-crossings where the railway is not sufficiently visible and where the other above-mentioned conditions are fulfilled.

The third category comprises the remaining level-crossings with heavier traffic. The most important of these are generally replaced by over- or under-bridges.

13. As the increased difficulties at level-crossings have been caused by the growth of the road traffic, the road authorities should bear the cost of constructing the over- and under-bridges as well as of the additional protection of the crossings required by the growth of the road traffic.

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Annex 3.

RECOMMENDATION ADOPTED BY THE EUROPEAN CONFERENCE ON ROAD TRAFFIC WITH REGARD TO LIGHT SIGNALLING.

NOTE BY THE SECRETARIAT. [C.C.T./C.R. 80.]
May 20th, 1933.

The Chairman of the Permanent Committee on Road Traffic has sent to the Secretariat the text of a statement made by Dr. Boström, of Stockholm, to the representatives of the automobile clubs of the Northern countries on colour-blindness and light signalling. These representatives, and those of other motorists' associations, have transmitted this text to M. Nordberg for submission to the Permanent Committee on Road Traffic when light signalling comes up for discussion before this Committee.

The Secretariat has the honour to communicate a summary of this statement herewith to the members of the Committee.

NATURE AND FREQUENCY OF COLOUR-BLINDNESS.

While persons having a normal sense of colour distinguish the following colours in the spectrum: red, orange, yellow, green, blue, indigo and violet, persons whose sense of colour is defective only distinguish, apart from shades going from black to white, two colours, and sometimes only one. This latter case is that of a person afflicted with total colour-blindness. The spectrum appears to him as a colourless band of more or less grey appearance. He only distinguishes the luminous strength of the colours. This form of colour-blindness is very rare. Persons usually known as colour-blind, the "red-green" blind, only distinguish two colours in the spectrum—usually yellow (corresponding for a person with normal sight to red, orange, yellow and green) and blue (corresponding for a person with normal sight to blue, indigo and violet), separated by a grey or whitish-grey zone (greenish-blue to the ordinary eye).

How do coloured lights appear to the colour-blind? In the first place, it is not true to say, as is usually done, that they are not able to tell red from green. Most of them distinguish these colours fairly well, at any rate at the short distances at which they are accustomed to look, and they see a red light as having a yellowish or orange colour, and a green light, which is often of a greenish-blue, as having a whitish colour. Such a difference is usually enough for them if conditions of observation are favourable. But it is very difficult for them to distinguish a so-called white light ("free passage") from a red or green light. White lights are in most cases yellowish, and appear to the colour-blind as being between red (which to them is yellow) and green (which to them is whitish). The difference is then too small for a person who is colour-blind. Conditions are still less favourable for such a person if the signals have a different luminous strength, or if they are placed at different distances. In this case, a false appreciation of colours may easily occur, since a person who is colour-blind endeavours to guide himself by his perception of the luminous strength of the signal. He then easily makes a mistake, and, even if he does not, and judges correctly, he does so after hesitation, with slowness and uncertainty. This is hardly surprising, as a person who is colour-blind (to red-green) sees the three colours which are most often utilised for road signalling as different shades of yellow. These three colours are situated on the same side of the so-called neutral zone of the spectrum (blue-green zone to the normal eye). If a red light and a green light are placed side by side, and if the strength of one of these lights is gradually diminished, a colour-blind person may easily say that both lights are identical.

About 3.25 per cent of men and less than 0.5 per cent of women suffer from colour-blindness in the true sense of the term. Apart from the colour-blind properly so called, there is a group of persons afflicted by partial colour-blindness. These persons have a weak sense of colour, and must be placed halfway between the colour-blind proper and persons with normal sight.
About 4 per cent of men suffer from partial colour-blindness. Their sense of colour must be regarded as normal, but as quantitatively diminished.

These persons sometimes react like the colour-blind and sometimes differently, but their characteristic is a slow and hesitating perception of colour. They are unable to apprehend properly a light suddenly appearing before them and disappearing equally suddenly. To perceive coloured lights correctly, persons having a weak sense of colour must see them from a wider optical angle than persons with ordinary sight. It is also interesting to note the effect on these persons of what is known as a reinforced contrast of colours. Thus, next to a yellow light, a red light appears of greenish colour, and next to a green light it appears pink. Similarly, a yellow light may be seen as red or green. Finally, it has been found that persons having a weak sense of colour easily become tired in perceiving colours, and that their judgment is very unfavourably influenced by physical fatigue, frequent loss of sleep, etc. It follows from the foregoing that persons with a weak sense of colour present as great dangers from the point of view of traffic as persons who are completely colour-blind.

What has been said above relates to inborn defects. There are also defects of the sense of colour which are acquired. The normal sense of colour may decline as time goes on. Acquired colour-blindness may be due to certain poisonings, particularly alcoholism and excessive use of tobacco, or from certain diseases of the optic nerve, of the brain, or of secondary cavities of the nose caused by contusions to the head—for example, concussion of the brain; or, again, it may be due to dazzle (lightning, short-circuits, etc.).

In the case of acquired colour-blindness, unlike inborn colour-blindness, the keenness of vision diminishes at the same time as the judgment of colours, and the acquired defectiveness of the sense of colour may have dangerous consequences when the keenness of vision falls as low as 0.3, 0.5.

It should, however, be noted that a defective sense of colour may remain even if the keenness of vision has returned to normal or almost to normal after convalescence.

Risks arising out of the issue of driving licences to persons with a defective sense of colour.

For drivers of motor vehicles having a weak sense of colour, the risk is far from being as great as in maritime services and railways. A motorist sees coloured signals from a much wider optical angle than engine-drivers, navigators or look-out men. In view of the enormous extension of motor traffic in the last few years, it is nevertheless evident that a motor-driver's power of recognising light signals of the colours most usually employed in road signalling becomes an important question from the point of view of the safety of traffic.

It should, however, be added that in none of the collisions which have taken place in recent years between motor vehicles and trains has it been possible to prove that the driver's colour-blindness was either the main or a contributory cause of the accident.

In this connection it should be remarked that, according to the observations of doctors, most persons who have a defective sense of colour are not aware of it themselves. This defect is only discovered after a special examination, and the person affected is always very astonished and vehemently protests when he is told that he is colour-blind.

Moreover, colour-blind drivers are rarely alone when they drive through the streets, and the actions of other drivers and road-users help them to interpret the signals. Lastly, road light-signals are comparatively recent, and it has therefore not yet been possible to gain an adequate idea of the risks which they offer for colour-blind drivers.

Measures to be considered.

If it was decided henceforward to issue driving licences only to persons having passed a medical examination certifying that they have a normal sense of colour, this would not prevent present holders of driving licences suffering from colour-blindness from constituting a danger to traffic.

On the other hand, it would be very difficult to oblige persons already holding a driving licence to undergo an examination. There is one category of motor-drivers, however, who should be made to undergo a compulsory examination—that of the drivers of public transport vehicles. Another solution would be to modify the system of light signalling so as to obviate the risks mentioned above.

In place of the system of signalling by means of different coloured lights, a more simple system might be considered. If a coloured light signified "Free passage", two lights of the same colour, side by side, like a lowered semaphore arm, might signify "Stop", and greater security would be ensured. These signals, known as "shape" signals, have been carefully studied by the Swedish Railway Administration. It was found that it was economically possible to establish such intermittent light signals with the Aga light. It is probable that electric "shape" signals would not be satisfactory, either from the economic point of view or from that of safety. An electric lamp is always fragile, and the current may be interrupted. The risks of a break-down increase with each new lamp.

What has just been said of electric "shape" signals also applies to the signals proposed by the American Engineering Council, which are a combination of "shape" signals and colour
signals. The signals tried at New Orleans are also a combination of "shape" signals and colour signals, and have shown themselves superior to those of the American Engineering Council.

The coloured signals employed at New Orleans differ both in shape and colour. The green signal is a lozenge, the yellow signal a rectangle and the red signal a circle. The correct and rapid understanding of these signals nevertheless requires good visibility and, particularly for a colour-blind person, a keen vision. Formerly, doctors had already drawn the attention of the authorities in Sweden to the fact that the choice of colours for light signals was unfavourable for the colour-blind, since the three colours, red, green and yellow, are all in the same category for persons blind to red and green, who form the majority among the colour-blind.

In those days, the difficulty consisted in the impossibility of obtaining a sufficiently strong blue or white light. At present, acetylene gas lights fulfil the requisite conditions. They emit a very intense white light, due to the heat of combustion (2,000 to 3,000 degrees). This light permits of the use of a blue filter up to a certain extent, without too greatly diminishing the luminous strength.

Experiments have been made by Dr. Boström, assisted by an engineer specialist, on behalf of the Swedish Railway Administration. They found that white Aga lights, if they were strong enough to be visible by day, became blinding by night, unless they were dimmed. Through dull and colourless glasses the light took on a yellowish shade. Experiments undertaken by the Aga Company gave the same results. Hence, this light could not be accepted, in view of the risks which it presented to persons suffering from colour-blindness.

Dr. Boström and the engineer having concluded their experiments, they decided in favour of an Aga light coloured with a blue filter and slightly dimmed. They also endeavoured to give this light the same range as the red light. The red light employed by the Aga Company for lighthouses was very strong and had a long range, but was of a slightly pink shade. By day, and particularly in misty weather, it even had a tendency towards yellow or orange. As it is unnecessary to have the same range for signals employed on roads as for those employed in the maritime services, it was possible to accept a glass giving a deeper red more similar to the red of the spectrum. The experiments made proved that the intensity of an acetylene-gas flame permitted of the use of such a glass.

In order to avoid all risk of confusion for the colour-blind, green has been replaced by a bluish-white light in new signals on level-crossings, in order to make it still easier to distinguish bluish-white lights from red lights. At level-crossings these lights are also differentiated by rhythm; the red lights have thirty flashes a minute and the bluish-white seventy-five.

The experiments made showed that, even without differentiation by rhythm, the colour-blind were able to distinguish the lights in question without any hesitation.

The Swedish Parliamentary Commission appointed to study the question of light signalling at level-crossings, and also the railway experts, recommended the adoption of the system proposed by Dr. Boström.

In a memorandum sent to the Swedish Government by all the administrations concerned in signalling, attention is drawn to the fact that it is not sufficient to obviate the risks due to colour-blindness by modifying the signals at level-crossings, but that, wherever light signals have been established for road and urban traffic, the colours employed for light signalling should be standardised in order to obviate risks of confusion due to colour-blindness.

The railway administration drew the Swedish Government's attention in 1929 to the advisability of replacing the red light at the rear of vehicles by another colour. Red signifies "stop" and it would be desirable for this light to be employed only in cases where a real danger exists. A diminution of respect for the red light diminishes safety of traffic. Cases of confusion may arise, for example, between a red lantern placed on a barrier or swing-bridge and the red rear-light of a motor vehicle, which does not signify a prohibition. This question has, indeed, been discussed at the International Railway Union, and the National Conference of Street and Highway Safety of the United States pronounced in favour of abolishing the red rear-light in 1926. In 1927, Swedish experts on motor traffic asked the Government to make representations to this effect to the contracting parties of the international Convention of 1926 on motor traffic, which stipulates that motor vehicles must show a red rear-light.

The memorandum addressed by Dr. Boström in 1929 to the Higher Medical Board of Sweden on the question of the colour sense contains the following recommendation with regard to motorists:

"Motor-drivers are never called upon to distinguish light signals at distances as great as those which have to be taken into account for flying or railway traffic. However, at trifling cost, something could be done to diminish the risks presented by the driving of motor vehicles by persons suffering to a greater or less extent from colour-blindness. For example, the replacement of the red rear-light by a bluish-white light might be considered, and greater use might be made of red signals capable of being distinguished even by the colour-blind, such as ruby-red and bluish-white signals adopted by the Swedish State Railways."
Lastly, Dr. Bostrom emphasises that, in view of the comparative frequency of persons having a defective sense of colour, the least satisfactory system for the signalling of urban traffic is the system of red, green and yellow. This system can, however, be used to great advantage in railway and maritime traffic, since all those who have to observe these signals and interpret them rapidly and correctly undergo a special examination of their sense of colour.

Annex 4.

TRIPTYCH SYSTEM.

SUMMARY OF REPLIES FROM GOVERNMENTS TO CIRCULAR LETTER No. 277, 1930.VIII, DATED OCTOBER 20TH, 1930.

February 14th, 1933.

In accordance with a resolution relating to the triptych system adopted by the Advisory and Technical Committee at its fifteenth session, the Secretary-General of the League forwarded to various Governments a Circular Letter (see Appendix) acquainting them with the resolution in question and asking them to be good enough to inform him whether they were prepared to apply the rules set out in the resolution.

The Governments of the following States have declared that they have already applied, or are prepared to apply, these or similar rules: Belgium, the United Kingdom, Bulgaria, Denmark, Estonia, Germany, Greece, Hungary, Latvia, Luxemburg, Norway, Poland, Roumania, Spain, Sweden, Switzerland and Yugoslavia.

The German Government, while stating that it accepts the proposed rules, points out that the system in force in Germany is in several respects more favourable; it also states that it does not at present propose to introduce the six-month limit.

The Belgian and Danish Governments state that in no case can there be any question of admitting motor vehicles for commercial purposes, such as transport against payment, sale, etc.

The Spanish Government points out that Spanish legislation permits a foreign national to utilise the triptych system whenever he re-enters Spanish territory, provided that his country grants reciprocal treatment to Spanish nationals. The Government considers that it should be expressly stated that, for a foreign national to claim temporary exemption, his motor-car must be registered in his country of origin.

The Hungarian Government permits persons domiciled in Hungary and at the same time having a regular domicile abroad to utilise the triptych system.

The Norwegian Government does not wish to limit the length of stay to six months.

Sweden permits the use of the triptych by all foreigners making only a temporary stay in the country for not more than a year, whether or not they have a residence in Sweden. Swedish nationals may also be granted exemption from Customs duty during three months in respect of a motor-car imported under the triptych system; the Customs authorities may prolong this period for special reasons, but not beyond a year.

Yugoslavia grants the benefit of the triptych system to any person who has not a permanent residence in the country. De facto residence not exceeding a year is deemed to be temporary residence; residence ceases to be temporary once a residence permit has been granted for an indefinite period.

The following Governments, while approving the principles which guided the Advisory and Technical Committee, propose certain amendments:

The Austrian Government suggests that, after the words "a person temporarily", shall be inserted the words: "—that is, not regularly or repeatedly—". The Federal Government considers that, in the absence of such a reservation, it would often be difficult, if not impossible, to determine whether there was or was not de facto domicile.

The Egyptian Government is not prepared to grant the benefit of the triptych to persons having a business domicile in Egypt, even if they only visit the country at long intervals. It considers that the activities in which they engage in the country are definitely commercial in character.

The Government of Finland desires, on the ground that the benefit of the triptych system is only intended for genuine tourists, and that the first paragraph of the rules drawn up by the Committee does not allow the granting of the triptych to persons on business, to reserve the right to exclude commercial travellers. Further, provided that all countries agree that persons on business are excluded from the benefits of the triptych system, the Finnish Government would prefer the elimination of the six-month limit of stay. This limit has actually been adopted in Finland with special reference to all classes of professional traders.
The French Government desires the introduction of certain amendments limiting the use of the triptych system to persons domiciled abroad who are owners of a motor-car and who come to France for pleasure and remain for not more than a year.

The same rules would apply in the Saar Territory.

The Government of the Irish Free State does not grant the benefit of the triptych to persons visiting the country on business and would not be prepared to authorise a stay of more than four months for persons temporarily domiciled in the country. It considers that a longer stay might arouse doubts as to the temporary nature of the residence.

The Lithuanian Government proposes an amendment whereby the category of persons deemed to have a business domicile in the country to which the car is brought would include any person practising a calling or profession, and, in particular, a State official or a member of a liberal profession.

The Portuguese Government asks that the period of stay shall be limited to four months.

The following countries do not accept the rules proposed by the Transit Committee:

The Union of South Africa does not accept them because local conditions render the introduction of the triptych system useless.

In Italy, the advantages of the triptych system are granted only to persons living abroad and coming to Italy for a limited stay as tourists, to the exclusion of proprietors and possessors of motor-cars having their legal, business or de facto domicile in Italy.

The Netherlands does not accept the rules because the Government considers the system proposed less liberal than that in force in the Netherlands.

Czechoslovakia does not accept them because the Government considers the system in force in Czechoslovakia more favourable both to the Customs authorities and to persons with two or more domiciles in different countries; only foreigners may benefit by the triptych system. Persons living outside Czechoslovak Customs territory are deemed to be foreigners if their intention so to reside in a permanent manner can be proved, or if such intention is clearly shown by special circumstances.

Appendix.

Triptych System.

[C.I.277.1930.VIII.]
October 20th, 1930.

At the request of the Chairman of the Advisory and Technical Committee for Communications and Transit, the Secretary-General has the honour to acquaint the Government with the terms of the following resolution, which was adopted by the Advisory and Technical Committee at its fifteenth session, held at Geneva from September 4th to 6th, 1930:

"The Advisory and Technical Committee, on the proposal of the Permanent Committee on Road Traffic, has framed the following rules concerning the triptych system, and decides to bring them to the notice of the Governments concerned and to ask the latter to say whether they are prepared to apply them:

The benefit of the triptych system may be withheld from owners or holders of vehicles who are legally domiciled in the country into which the vehicle has been temporarily taken or who possess a business or de facto domicile there.

The following are regarded as having a business domicile in the country into which the vehicle has been taken: persons actually employed continuously in a commercial or industrial business in that country as directors, assistant directors, managers, etc., but not persons who are merely members of boards of directors and whose services are required only at fairly long intervals.

A person temporarily residing in a country for a holiday or for the purposes of study, medical treatment, etc., is not regarded as having a de facto domicile, even if he owns or rents a house or flat.

The Committee considers that no other case of exclusion should be provided for, though, in its opinion, it might be possible to admit—as an exceptional measure, and more particularly in the case of countries which do not refuse the benefits of the triptych system to persons who have a business or de facto domicile in their territory—a rule whereby the period during which the car might remain in the country would be limited to six months (whether consecutive or not) each year or else during the period of validity of the triptych."

In conformity with the above resolution, the Secretary-General requests the Government to inform him, if possible before February 1st, 1931, whether it is prepared to apply the rules set out above to the triptych system.
Annex 5.

TRIPTYCH SYSTEM.

REPLY FROM THE FRENCH GOVERNMENT TO CIRCULAR LETTER NO. 277.1930.VIII, OF OCTOBER 20TH, 1930.

[C.C.T./C.R.81.]
May 27th, 1933.

In France, the triptych system is reserved exclusively for persons domiciled abroad, who are proprietors of their motor vehicles and enter this country for a holiday and whose stay is limited to a year.

The resolution adopted by the Transit Committee implicitly recognises that the possessor of a vehicle who is not the proprietor thereof has the right to benefit by the triptych system, as well as persons whose stay in this country is due to commercial interests (commercial representatives who exercise their activity in France intermittently, such as shareholders going to general assemblies or boards of directors, students, etc.). This resolution has too general a character to accord with the fundamental rule followed by France when granting tourist facilities.

In these circumstances, the French Government considers that the text of the resolution should be modified and proposes the following draft:

"The benefit of the triptych system may be withheld from proprietors or possessors of vehicles who possess in the country into which the vehicle has been temporarily taken a legal domicile, or a business or de facto domicile.

"The following are regarded as having a business domicile in the country into which the vehicle has been taken: persons actually employed continuously or intermittently in a commercial or industrial business in that country, as directors, assistant directors, managers or representatives, including persons who are members of boards of directors and whose services are required only at fairly long intervals.

"A person residing in a country for a holiday or for medical treatment is not regarded as having a de facto domicile providing that his stay does not exceed a year, even if he owns or rents a house or flat which he occupies entirely."

Annex 6.

TRIPTYCH SYSTEM.

[C.C.T./C.R.70.]
January 10th, 1933.


[Translation.]

"On October 20th, 1930, you were good enough to forward to the various Governments the text of a resolution adopted by the Advisory and Technical Committee on the subject of rules relating to the triptych system.

"This resolution contained a suggestion that the benefits of the system referred to might be granted to motorists visiting a country for professional or business reasons, provided that such persons shall not have a legal, business or de facto domicile in the country into which the vehicle is temporarily imported.

"This matter was further considered at the last general assembly of the International Touring Association, held at Copenhagen in May 1932. Its Secretariat was instructed to make renewed representations to the League of Nations in favour of the adoption of the resolution in question by the various Governments.

"We therefore venture to appeal to you to make once more an urgent recommendation to the various Governments, and particularly to that of France, for the inclusion in the triptych system of the provisions referred to above.

(Signed) Paul Duchâine."
RESOLUTION ADOPTED ON NOVEMBER 24TH, 1932, BY THE
PERMANENT INTERNATIONAL COMMISSION FOR FIRST AID ON
HIGHWAYS, REGARDING THE MARKING OF AMBULANCE
VEHICLES AND THE FACILITIES TO BE GRANTED TO THEM WHEN
CROSSING FRONTIERS.

[Annex 7.]

RESOLUTION.

The Permanent International Commission for First Aid on Roads,
Considering it desirable that ambulances should be similarly marked in all countries, and,
further, that their equipment and personnel should be able to cross frontiers rapidly and with the
minimum of formalities:

Requests the Permanent Committee on Road Traffic of the Communications and Transit
Organisation of the League of Nations to examine the possibility of an agreement between the
various countries relative to the marking of the above vehicles and also to Customs and police
formalities.

SUMMARY OF THE DISCUSSIONS.

On November 24th, 1932, under the chairmanship of Dr. Pierre Béhague, delegate of the
Conseil central du Tourisme international, a meeting of the Permanent International Commission
for First Aid on Highways was held in Paris, at which the following organisations were represented:
the International Red Cross Committee, the League of Red Cross Societies, the Belgian Red Cross,
the Conseil central du Tourisme international, the German Red Cross, the Polish Red Cross,
the British Red Cross, the Danish Red Cross, the Netherlands Touring Club, the Royal
Netherlands Automobile Club, the (English) Automobile Association, the French Red Cross.

A representative of the Direction générale des Douanes françaises was also present, together
with a member of the Communications and Transit Section.

In April 1932, the Permanent International Commission for First Aid on Highways adopted
resolutions regarding the marking and definition of ambulance vehicles and the traffic facilities
to be granted to these vehicles, particularly when crossing frontiers (see Appendix). The Chairman
reminded the meeting that the Conseil central du Tourisme international had considered these
resolutions at its eighth general assembly in June 1932.

Definition of Ambulance Vehicles.—As regards the definition of ambulance vehicles, the
resolution passed by the Permanent International Commission for First Aid on Highways was
approved by the Central Council without amendment.

Marking of Ambulance Vehicles.—The President explained that the Conseil central du
Tourisme international had made the following observations on this subject:

"The specification of bells as an audible signal gave rise to a discussion during which
the following observations were made:

A bell is not a sufficiently loud signal for a motor vehicle which has to overtake other
vehicles; it will not be heard. A very loud signal is needed, such as a fire-brigade siren.

"In Belgium, all hospital vehicles have bells which are very clearly heard.

"A signal should be chosen which is known in the district where the vehicles travel—
the usual fire-brigade signal—as signals may differ from one country to another.

"The bell has been adopted as corresponding to the practice in France, Italy, Switzerland
and also in Germany, the idea being, for international purposes, to standardise the sound.
The essential point is the loudness of the sound, whether a bell or other sound instrument
is used."

The Conseil central adopted the resolution submitted, with the omission of the word "bell".
Paragraph (2) will thus read as follows:

"(2) A special audible signal, the tone of which will be scientifically studied and defined
and which will be exclusively reserved for ambulance vehicles."

Marking of Ambulance Vehicles.—On the subject of the marking of ambulance vehicles
(the definition of which is given in the resolution contained in the Appendix), the Permanent
International Commission for First Aid on Highways recommended that the Permanent Committee
on Road Traffic should settle this question by an agreement which could be speedily put into
effect.
Rapid Crossing of Frontiers by Ambulance Vehicles.—The representative of the Direction générale des Douanes françaises suggested that Customs authorities should give foreign motor ambulance vehicles temporary Customs exemption, either on the basis of a Customs document or without such a document. In the latter case, Red Cross societies would apply to the Customs authority of the country into which the vehicles were to be imported, stating that they wished to import temporarily a specified number of vehicles, with particulars of such vehicles, and undertaking to re-export them at the earliest possible moment. The French Customs authorities had already exempted the ambulances of the Belgian and Swiss Red Cross societies from the payment of a deposit—i.e., these vehicles enter France in virtue of a warranty without security (acquit sans caution), a Customs document drawn up on the basis of the particulars given by the driver of the vehicle. A certain amount of time, however, is needed to make up this document and its total abolition might be contemplated.

The representative of the French Customs Department thought that there might be two alternatives: either to issue a Customs document or to dispense with such a document in view of the general undertakings given by the Society using the ambulance vehicles.

During the discussion it was pointed out that some Red Cross Societies do not own their ambulances and could therefore not give an undertaking to the Customs. The Commission considered that in that case touring clubs should ask for exemption from the deposit of security.

The representative of the Belgian Red Cross mentioned that his own Society adopted the following practice: it gave the driver of the ambulance a certificate to the effect that he was driving a vehicle of such and such a number to convey a sick or wounded person. The representative added that, during the five years in which the arrangement had operated between France and Belgium, no ambulance had ever been stopped at the frontier.

The member of the Communications and Transit Section drew the Commission’s attention to the fact that, in addition to its Customs aspect, the question also concerned the frontier police. The Commission requested the Permanent Committee on Road Traffic to study both these aspects of the problem. It also expressed the hope that the question would be settled as speedily as possible—for example, by an arrangement similar to that adopted at the European Conference on Road Traffic with reference to the procedure in the case of undischarged or lost triptychs.

Appendix.

Resolutions adopted by the Permanent International Commission for First Aid on Highways (November 24th, 1932).

I. The Permanent International Commission for First Aid on Highways defines ambulance vehicles as follows:

"The following will be regarded as ambulances and assimilated to first-aid posts mentioned in Article 24, paragraph 4, of the Geneva Convention of July 27th, 1929, to the exclusion of all others:

"(a) Those which are attached to Red Cross (‘Crescent’, ‘Lion’ and ‘Sun’) societies and which are exclusively reserved for the gratuitous transport of the sick and injured or first-aid personnel and equipment;

"(b) Those attached to touring associations which have concluded an agreement with the national Red Cross (‘Crescent’, ‘Lion’ and ‘Sun’) Society authorising them, under the terms of Article 24, paragraph 4, above mentioned and in conformity with the conditions therein stipulated, to utilise the emblem of the Geneva Convention.

"These ambulance vehicles will have the right to make use of this emblem during such time as they are exclusively engaged in the free and public transport of the sick or injured, or in the conveyance of first-aid personnel and equipment intended for mobile units, first-aid stations or fixed hospital establishments, on condition that these are open to the public."

II. The Commission deems that ambulance vehicles so defined should be marked in the following manner, identical in all countries:

A. By day, the Red Cross on white ground (emblem of the Geneva Convention), at least 20 centimetres high, painted on each of the four sides of the vehicle, and, in addition, a Red Cross flag, 30 centimetres square, projecting above the top of the vehicle.

B. By night, at the front of the vehicle, the Red Cross on white ground must be brightly illuminated; at the rear of the vehicle, the Red Cross will be illuminated by the lamp of the police number-plate or otherwise rendered visible.

2. A special audible signal, the tone of which will be scientifically studied and defined and which will be exclusively reserved for ambulance vehicles.
Annex 8.

INSTRUMENTS ADOPTED AT THE EUROPEAN CONFERENCE ON ROAD TRAFFIC, HELD AT GENEVA FROM MARCH 16TH TO 30TH, 1931: SITUATION WITH REGARD TO SIGNATURES, RATIFICATIONS OR ACCESSION ON JUNE 1ST, 1933

[C.C.T./C.R.76.]

I. CONVENTION CONCERNING THE UNIFICATION OF ROAD SIGNALS.¹

<table>
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<tr>
<th>Ratifications or definitive accessions</th>
<th>Signatures or accessions not yet perfected by ratification</th>
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<tr>
<td>MONACO (January 19th, 1932a)</td>
<td>BELGIUM</td>
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<td>PORTUGAL (April 18th, 1932a)</td>
<td>Subject to subsequent accession for the colonies and territories under mandate.</td>
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<td>CZECHOSLOVAKIA</td>
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<td>FREE CITY OF DANTZIG (through the intermediary of Poland)</td>
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<td>YUGOSLAVIA</td>
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II. CONVENTION ON THE TAXATION OF FOREIGN MOTOR VEHICLES.²

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<tr>
<th>Ratifications or definitive accessions</th>
<th>Signatures or accessions not yet perfected by ratification</th>
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<tr>
<td>BELGIUM (November 9th, 1932)</td>
<td>CZECHOSLOVAKIA</td>
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<td>GREAT BRITAIN AND NORTHERN IRELAND</td>
<td>FREE CITY OF DANTZIG (through the intermediary of Poland)</td>
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<td>(April 20th, 1932)</td>
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<td>THE NETHERLANDS</td>
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<td>TURKEY</td>
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¹ This Convention shall enter into force six months after the deposit of the fifth ratification or accession (Article 11).
² This Convention shall enter into force six months after the deposit of the fifth accession or ratification (Article 14).
III. AGREEMENT BETWEEN CUSTOMS AUTHORITIES IN ORDER TO FACILITATE THE PROCEDURE IN THE CASE OF UNDISCHARGED OR LOST TRIPTYCHS.¹

Definitive signatures

Austria (August 4th, 1931)
Belgium (March 28th, 1931)
Great Britain and Northern Ireland (March 28th, 1931)
Bulgaria (February 27th, 1932)
Denmark (March 28th, 1931)
France (April 15th, 1931)
Germany (March 28th, 1931)
Greece (August 16th, 1931)
Hungary (August 14th, 1931)
Ireland Free State (May 6th, 1931)
Italy (May 27th, 1931)
Luxembourg (March 28th, 1931)
Norway (September 27th, 1932)
The Netherlands (June 11th, 1931)
Poland (September 9th, 1932)
Portugal (August 26th, 1931)
Spain (July 8th, 1931)
Sweden (February 12th, 1932)
Switzerland (March 28th, 1931)
Turkey (May 15th, 1932)

Yugoslavia

Signature ad referendum

Annex 9.

RESOLUTION OF THE SIXTH CONGRESS OF THE INTERNATIONAL CHAMBER OF COMMERCE CONCERNING HIGHWAY FINANCE.

[C.C.T./C.R.69.]
August 19th, 1931.

The Secretary of the Permanent Committee on Road Traffic has the honour to communicate to the members of the Committee a letter, dated July 22nd, 1931, from the Secretary-General of the International Chamber of Commerce:

[Translation.]

"I have the honour to forward for your information a resolution concerning Highway Finance, adopted by the Sixth Congress of the International Chamber of Commerce:

"The International Chamber of Commerce,

"Having considered the reports on methods of highway finance in twenty-three countries, sent in by national committees and organisation members;

"Having also considered the reports on the same subject presented at the sixth Road Congress:

"Thanks national committees and organisation members for the important work they have done that enabled the Committee to base its conclusions upon almost complete documentary information;

"Having had the benefit of the general report on methods of highway finance established on the basis of these documents,

"Adopts the following general conclusions:

"I. Road Administration.

"A. It is important to establish from the start a general plan of the road system, including existing roads and providing for their future development.

"B. A rational classification of roads is desirable, taking into account the origin, destination, nature and density of traffic.

"Where a developed road system already exists, a scientific traffic survey is the basis of this work.

¹ This Agreement entered into force on June 26th, 1931, on the ninetieth day after its signature on behalf of three Customs administrations (Article III). See Treaty Series of the League of Nations, Vol. CXIX, page 47.
"C. Tendency in favour of financial and administrative centralisation would seem to correspond to a necessity, at least as far as the main-road system is concerned.

D. Autonomous governmental organisations for the administration and management of roads provided with separate budgets are increasing in number, but their very principle is still discussed in certain countries.

II. Road Construction.

A. Before constructing or improving a road, it is necessary to make sure that its location and type are such as will attract sufficient traffic to justify the work. The first step is to get some sort of usable highway communication, thus making available at the earliest possible time a large mileage of roads, even though it be of a primitive character, in those countries which are at the outset of the work. This done, the road can then be improved to the economic degree necessary to meet traffic requirements.

B. It is important to determine for several years in advance the programme of the work to be undertaken.

C. The total of road maintenance and vehicle operation cost is reduced when a worn and ancient road is replaced by a modern surface of a type justified by the character and volume of traffic.

III. Road Budget.

A. The crux of the problem is to apportion the cost of roads fairly between the three principal interests concerned—the general public, real-estate owners and road-users. Roads are public property and it is logical that their cost should be met in part out of general revenue in proportion to the general public benefits. Real-estate owners in localities opened up by the roads should also participate to a certain extent in road expenditures, because of the special advantages they derive therefrom. Contributions from users are justified for the same reason, and with increasing use should assume a progressively larger share of the road budget.

B. Special taxes on highway-users should be limited to such amounts as will not tend to deprive the public of the benefits of normal development of motor transportation. Such special taxes should be used exclusively for road purposes.

C. Bond issues based on reasonable general or real-estate taxes make it possible to gain several years in the construction of the road system of a new country. However, experience would seem to show that the bond method becomes more generally desirable when, with the development of traffic, it becomes practicable in increasing degree to base the loans on special taxes on road-users. In any case, all maintenance costs should be met from current revenues.

D. When a country has developed its road system to a high degree and has but little construction work to do, it should meet road-construction expenditures out of current revenue when the latter suffices, and have recourse to loans only in exceptional circumstances.

D. Experience has shown that a considerable portion—representing probably about half of the original cost—of properly constructed roads can continue to be used for a great many years, and this fact may be taken into consideration in determining the programme of amortisation.

The International Chamber urges the national committees and organisation members in countries desiring to develop their road system, and particularly in new countries, to take into account the results shown by the enquiries undertaken, and be guided by the above conclusions.

I should be very glad if you could bring this resolution to the notice of the members of the Permanent Committee on Road Traffic.
Annex 10.

PROGRAMME OF CLAIMS PUT FORWARD BY MOTOR-DRIVERS
(Communicated by the Secretary of the International Transport Workers' Federation)

[C.C.T./C.R.47.]
August 16th, 1929.

A. SOCIAL QUESTIONS.

I. Legal Questions regarding Conditions of Labour and Employment.

1. When legislation for the protection of workers is introduced and/or collective contracts concluded, it should be the object of all countries to ensure due consideration being given to the following minimum demands:
   - Eight-hour day or forty-eight-hour week;
   - The fixing of a maximum number of overtime hours per day and per week;
   - Payment for overtime;
   - Annual leave on full pay;
   - Suitable rest-periods during working hours;
   - Weekly day of rest;
   - The fixing of conditions of employment and dismissal;
   - Pay to continue during illness, absence from work owing to measures taken by the authorities, etc.;
   - Protection against weather.

   Further, the social legislation applicable to industrial workers should be similarly applicable to professional motor-drivers.

II. Social Insurance, Civil Liability, Protection of the Life and Health of the Professional Driver, Prevention of Accidents and Sickness.

2. Institution of satisfactory legal systems of insurance against professional invalidity and death, and of old-age pensions.

3. Legal obligation for all motor-owners to take out an insurance policy for both the driver and the vehicle.

4. Prohibition of motor-driven vehicles by combustion engines if not provided with self-starters.

B. ISSUE OF DRIVING LICENCES.

Apprenticeship, Motor-driving Schools, Examinations, Driving Licence, International Driving Certificate.

5. All candidates wishing to obtain a licence to drive a mechanically-propelled vehicle must submit themselves to medical inspection as a test of their physical qualifications. This inspection should mainly relate to sight, hearing, state of the heart and general condition. In the course of the general examination, it should be ascertained whether the candidate suffers from any disease or physical defect likely to make a motor vehicle driven by him a source of danger to the public.

6. Persons under 21 years of age may not in any circumstances be given a driving licence for a mechanically-propelled vehicle of any kind whatever.

7. Establishment of uniform regulations for the training and medical, theoretical and practical examination of candidates as drivers.

8. Public institutions (the State, provinces, communes or public welfare organisations) shall alone be authorised to establish and conduct motor-driving schools. All such schools must be under the supervision of the authorities. The boards entrusted with the supervision of schools shall include, in addition to representatives of the competent authorities, associations of motor-car owners and owner-drivers, representatives also of professional organisations of motor-car drivers.

9. Persons entrusted with practical instruction in driving schools must have followed for at least five years the occupation of motor-driving and must pass an examination as to their teaching capacities.

10. Persons not possessing the teaching qualifications mentioned in paragraph 9 and not officially authorised to give lessons in driving schools shall be forbidden, under pain of severe penalties, to teach driving.

11. All candidates wishing to obtain a driving licence must pass a theoretical and practical examination. They must produce a certificate confirming that they have successfully passed through a motor-driving school.

12. Representatives of professional drivers' organisations should be admitted as examiners at the practical and theoretical tests to be passed by candidates.

13. After having successfully passed the practical and theoretical tests, candidates shall be entitled to a driving licence. Licences, of different types for amateur and professional drivers, shall be issued for the following categories: (a) motor-cycles, (b) light cars, (c) all other motor vehicles.
14. At the seat of all authorities entitled to issue, on the recommendation of the examining board, driving licences, or to withdraw such licences, a commission shall be formed, which shall include also representatives of the professional drivers' trade union, and shall have the sole right to decide whether the withdrawal of a licence is warranted.

15. Issue in all countries of international driving certificates valid for all countries which have acceded to the International Convention on Motor Traffic.

C. OTHER QUESTIONS OF PROFESSIONAL INTEREST.

16. Exemption of the professional driver from joint responsibility arising from the laws regarding compulsory insurance and liability in case of accident.

17. Formation in all countries, at the seat of the central administration, of advisory committees on which professional drivers' organisations shall be suitably represented.

18. Governments to draw up statistics of traffic accidents and their probable causes, classified as motor accidents, tramway accidents and other traffic accidents (horse-drawn vehicles and bicycles).

D. CLAIMS REGARDING THE INTERNATIONAL CONVENTION OF OCTOBER 11TH, 1909, ON MOTOR TRAFFIC.

The International Convention of October 11th, 1909, on Motor Traffic should be supplemented as follows:

19. Professional motor-car drivers making a stay abroad in the exercise of their occupation shall continue to enjoy all the rights secured them by their contract of employment and by the legislation of their own country.

20. Establishment of uniform regulations regarding apprenticeship; minimum uniform stipulations respecting the practical, theoretical and medical test for driver-candidates.

21. Issue in all countries of international driving certificates for professional drivers valid for all countries which have acceded to the International Convention on Motor Traffic.


23. Adoption in all continental countries of uniform regulations stipulating the right-hand rule of the road.

24. Institution of international rules on the right of way at bifurcations and cross-roads.

25. Improvement of roads in all countries by modern paving.

26. Compulsory enforcement of the provisions regarding the placing of road signs and pictorial signs (without written directions, so that chauffeurs of all countries may be aware of the danger) at level-crossings and dangerous points on the roads.

27. Fitting of motor vehicles with mechanical signalling devices which can be illuminated at night.

28. If the brake of a trailer cannot be worked from the driver's seat of the motor vehicle, the trailer should carry a brakesman, irrespective of the total weight. The driver of the motor vehicle and the brakesman on the trailer must be able to communicate with one another.

29. Drivers' seats on motor lorries and on trailers should be padded, fitted with springs and protected against wind and weather.

30. The reliable working of all motor vehicles should be verified every year, as often as their age and degree of wear require it, by an officially authorised technical institution or by qualified technical officials

Annex 11.

CLAIMS PUT FORWARD BY MOTOR-DRIVERS.

C.C.T. 480]
April 20th, 1931.

LETTER FROM THE DIRECTOR OF THE INTERNATIONAL LABOUR OFFICE.


In your letter of January 3rd, 1931, you were good enough to transmit to me a copy of the programme of claims put forward by motor-drivers (Annex 10) received by you from the International Transport Workers' Federation. You added that this programme had been submitted to the Advisory and Technical Committee for Communications and Transit which, at its fifteenth session, decided to postpone consideration of it and to request the Secretariat of the Committee to obtain the views of the International Labour Office on the matter.
As soon as I received this communication, I requested my services to examine the motor-drivers' claims. In point of fact, the programme put forward covers the whole of the claims of those workers. It includes questions exclusively within the province of the International Labour Organisation, others which are partly within its province, and others again, which appear to be outside it. I have had lists of the first two groups of questions drawn up; these lists must not, of course, be regarded as final, but should, I think, make it possible to determine to some extent the organisations competent to deal with these questions.

Of the questions included in the programme of the International Transport Workers' Federation, the majority are of interest to the International Labour Office and appear to me to fall either wholly or partly within its competence. I should like to analyse those questions by examining the grounds on which our competence rests and whether international labour conventions or recommendations applicable to them are already in existence, and also whether it would be possible for the Labour Office to investigate them. From the point of view of the International Labour Organisation, these questions can, I think, be divided into five groups.

The first group consists of questions connected more or less directly with the professional drivers' labour contract or conditions of employment. These are questions 1, 14 and 17. As regards the first question, this certainly falls wholly within the province of the International Labour Organisation. It is a matter of labour law in the strict sense of the term (individual labour contracts or collective agreements). There is at present no international labour convention or recommendation dealing with this matter. It is probable, however, that we shall shortly examine the problems of collective agreements, at all events from the general standpoint, if not from the special point of view of drivers. This general study should, however, furnish much useful information to professional drivers.

As regards question 14 (establishment of a commission to decide questions relating to driving licences, this commission to include representatives of professional drivers' trade unions), the International Labour Office is at least partly competent to deal with this question, as it relates to the co-operation of workers with employers in professional questions (paritory committees, conciliation and arbitration, works' councils). No international labour convention or recommendation has as yet been adopted in connection, but we are going to publish very shortly studies on conciliation and arbitration. In this case also, these studies will deal with general problems and not with questions of special interest to drivers.

The same reply can be given to question 17, which deals with the formation of an advisory committee on which professional drivers' organisations would be represented.

The second group of questions relates either directly or indirectly to the problem of social insurance. There are questions 5, 6, 7 and 19. There is no doubt that, at all events as regards question 2, the International Labour Office is fully competent to deal with the matter, and is also competent to a large extent as regards questions 5, 6 and 19. The position of professional motor-drivers differs in some respects according to whether they are in the employ of undertakings or of private persons. In the first case, they invariably benefit by existing social insurance laws. In the second case, they are usually assimilated to domestic servants, who, in many countries, are excluded from the benefit of social insurance laws, and in particular from sickness insurance or accident insurance. I therefore consider that motor-drivers belonging to the first category at least are covered by the two International Labour Conventions adopted in 1925 and 1927, the former dealing with workmen's compensation for accidents and the latter with sickness insurance. The former covers all paid workers of undertakings and therefore does not apply to motor-drivers in the service of private persons, since it was not possible in the existing state of national law to extend the Convention to domestic servants. However, the second Convention applies, not only to workers in the service of industrial and commercial undertakings, but also to domestic servants and consequently covers motor-drivers, even if they are in the service of private persons. The International Labour Office has not so far examined the special situation of motor-drivers from the point of view of social insurance. These investigations would be somewhat lengthy and complicated, since they would have to cover, not only the situation of motor-drivers under existing social insurance laws and the special examination of the problem of accident insurance and the responsibility of the driver in the case of accident, but also the possible conflict of national law, as regards drivers on routes situated partly in foreign countries.

The third group of questions relates to industrial hygiene. These are questions 8, 9, 21 and 29. The International Labour Organisation is undoubtedly competent to deal with them. All that concerns the medical examination of industrial workers is within its province, and this consequently applies to the medical inspection of candidates prior to the issue of the driving licence. At the present time, there is no international labour convention and no recommendation governing these four questions. The problem of medical examination is, however, now being raised in many countries, and has been and is still being discussed by medical associations both professional and scientific. We will merely mention the discussions which have recently taken place in France and Belgium. Moreover, there are countries in which medical examination is already required by law. The International Labour Office is at present collecting information on the matter. A brief summary has already been given in the article "Transport" which is being prepared for the "Encyclopaedia of Industrial Hygiene", and the Labour Office is collecting further particulars with a view to more detailed investigations which we may possibly be asked to undertake.

The fourth group refers to the prevention of accidents: these are questions 4, 18, 28 and 30. As regards question 4, this appears to lie entirely within our province, as the sole object is to make it possible for the driver to use the self-starting apparatus. This is not a question of public safety or of road safety, but of safety for the driver, that is to say, for a paid worker. I should
also like to make certain reservations with regard to the technical wording of this question. It seems to me that the precautions to be taken should apply in particular to cases in which the self-starter fails to act.

As regards questions 18, 28 and 30, they appear to concern chiefly paid drivers and are consequently of interest to us. Except in the matter of labour accidents, these questions are not at present regulated by any international labour convention. Questions 28 and 30 deal with actual conditions of safety for the direct protection of paid drivers.

Finally, the last group of questions deals with the professional training of motor-drivers. These are questions 8, 9, 10 and 20. As you are aware, professional training forms part of the programme laid down for us in Part XIII of the Peace Treaty. There is as yet no international labour convention governing these questions. The professional training of motor-drivers has not been specially examined by us, but it is to a large extent covered by the general survey which we have begun of the methods employed in vocational training. If necessary, we could easily collect information and make a special study of the question.

In short, of the questions mentioned in the Federation's programme, a certain number appear to fall solely within our province: these are questions 1, 2, 4 and 19. There are others with which we are competent to deal at any rate in part; these are questions 3, 5, 6, 7, 8, 9, 10, 14, 15, 16, 17, 18, 20, 22, 23, 24, 26, 27, 28, 29 and 30. In the case of the first group, I do not think the Advisory and Technical Committee for Communications and Transit is called upon to take any action whatsoever. If it should think fit to deal with the second group, the International Labour Office should, I think, be asked to give its opinion and probably to co-operate with the Committee.

These are the initial observations which seem to me to be called for by the programme of motor-drivers' claims. Needless to say, I shall be happy to furnish any additional explanations you may desire and in particular to examine, in conjunction with yourself, the conditions of any co-operation which might be arranged in this matter between the Communications and Transit Organisation and the International Labour Office.

(Signed) Albert Thomas.

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Annex 12.

PROGRAMME OF CLAIMS A PUT FORWARD BY MOTOR-DRIVERS.

RESOLUTION ADOPTED BY THE ADVISORY AND TECHNICAL COMMITTEE FOR COMMUNICATIONS AND TRANSIT AT ITS SIXTEENTH SESSION.

[C.C.T./C.R.67.]
June 20th, 1931.

The Advisory and Technical Committee,

Having noted the letter of the Director of the International Labour Office, dated February 21st, 1931, replying to the request made to him in conformity with the decision adopted by the Committee at its last session:

Considers:

(a) That questions 1, 2, 3, 19 should be studied exclusively by the International Labour Office;

(b) That questions 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 20, 28, 29 and 30 should be studied jointly by the International Labour Office and the Communications and Transit Organisation;

(c) That questions 8, 9, 10, 14, 15, 16, 17, 18, 20, 28, 29 and 30 should be studied exclusively by the Communications and Transit Organisation.

The Advisory and Technical Committee requests the Permanent Committee on Road Traffic to take the necessary action on the present resolution as far as the Communications and Transit Organisation is concerned.

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1 Insurance of the driver
2 Insurance of the vehicle.

REGULATIONS FOR PEDESTRIANS.

[C.C.T./C.R.60.]
April 30th, 1930.

The Secretary of the Committee has the honour to communicate to Members of the Committee the following information concerning the regulation of pedestrian traffic, which he has received from certain Members of the Committee.

Germany.

LETTER FROM DR. PFLUG TO THE SECRETARY OF THE PERMANENT COMMITTEE ON ROAD TRAFFIC.

Berlin, March 13th, 1930.

[Translation.]

All police regulations concerning traffic are more or less for the protection of pedestrians. In the enclosed decree1 issued by the Berlin police, I have marked various important regulations which concern pedestrian traffic, but I take it that you are only interested in special provisions whereby pedestrians may cross at points where the traffic is very heavy. Generally speaking, these crossing-points for pedestrians are at street corners, and, in Berlin, this is regulated by light signals where the traffic is very dense, and by hand signals on the part of police officers if the traffic is merely heavy. Facilities however must also be provided for pedestrians to cross the road at other points. For instance, at about the middle of the Leipzigerstrasse, between the Leipzigerplatz and the Wilhelmstrasse, there is a large departmental store. In order that pedestrians may cross more easily from this store to the opposite side of the road, a special footway has been created by setting up notice-boards marking this crossing on both sides of the road; you will find an illustration of this on the last page of the small leaflet which is bound up with the enclosed police decrees.1 On each side of the road, there are two such notice-boards, which define the space within which pedestrians may circulate. In the middle of the street where there is a footway, a lamp has been set up which shows the same light signals as traffic regulation lamps at cross-roads (green, yellow, red, yellow, green, yellow).

Austria.

LETTER FROM M. GRÜNEBAUM TO THE SECRETARY OF THE PERMANENT COMMITTEE ON ROAD TRAFFIC.

Vienna, April 5th, 1930.

[Translation.]

Vienna is, as far as I know, the only place in Austria where special measures have been adopted for ensuring the safety of pedestrians, as traffic is not heavy in other Austrian towns. The measures adopted at Vienna are few, being chiefly confined to safety lines showing where pedestrians can cross the street: these lines consist of white bands painted on the road, or of rows of metal nails which are usually fixed in the asphalt. At certain particularly difficult crossings, signs indicating the direction to be followed, or even chains shutting off prohibited crossings are put up to show pedestrians where to cross in safety.

These measures have only been adopted at crossings where traffic police are stationed. When the police stop the cross traffic, vehicles pull up before the line indicating the safety passage for pedestrians. There are no special provisions in Austria for warning drivers of vehicles that they are approaching a crossing for pedestrians.

France.

I. LETTER FROM M. WALCKENAER TO MR. FRANKLIN.

Paris, January 29th, 1930.

[Translation.]

The crossing-places for pedestrians at first consisted of white lines pointed across the street; but this system was abandoned because the paint became obliterated. At present, these crossing-places are marked by lines of metal knobs similar in shape to big nail-heads or drops of tallow and arranged in two rows. These knobs are made of rustless steel. They have to be solidly fixed in the roadway, which is easily done when the latter is made of wooden paving-blocks. The width of the crossing-places is usually three metres, but this is not an absolute rule.

1 These regulations are not annexed to the present document but may be consulted in the archives of the Secretariat of the League of Nations.
At the present time, there are several hundreds of these crossing-places for pedestrians in Paris, but active steps are being taken to increase them, and they will eventually number several thousands. Hitherto, as these crossing-places are comparatively few in number and often at a great distance apart, the police have not made their use by the public compulsory; but it has been found that the public appreciates their advantages and has become accustomed of its own accord to choose the passages marked by lines of knobs when crossing the roadway. When the crossing-places thus marked are sufficiently numerous, the Prefecture of Police intends to oblige pedestrians to cross at these places only.

The green lights are a different matter. They are signals addressed to the drivers of vehicles recommending caution. In most cases, they warn drivers that they are approaching a point to be circumvented. Supposing, for example, that a road used for two-way traffic widens at a certain point and an “island” for pedestrians is placed at the beginning of the widened part, so as to separate and regulate the two streams of traffic; in this case, a pillar of about 120 or 130 centimetres in height is placed at each end of the “island”, carrying a spherical lantern with a green light. At certain cross-roads, where gyratory movement has to be enforced, a turning-post with a green light is placed in the centre of the cross-roads on the roadway itself; this post is built low and very strong, so that, if a clumsy or careless driver runs into it, no damage will be done.

II. LETTER FROM M. WALCKENAER TO MR. FRANKLIN.

[Translation.]

I have the honour to inform you that, in Paris, no special signal is employed to warn drivers that they are approaching a crossing-place for pedestrians marked by two lines of nail-heads. The metal of which the nail-heads are made (rustless steel) is sufficiently polished and bright for the crossing-place to be clearly visible at a sufficient distance. This is the case, not only during the daytime, but also at night, owing to the brilliant illumination of public thoroughfares.

It is true that certain “islands” in the middle of the road are provided with globes with green lights, mounted on posts rather more than a metre in height; but these green lights are intended to warn drivers of the presence of the “islands”, which constitutes an obstacle to be circumvented. In practice, it often happens that there is a crossing-place for pedestrians at the same place as the “island”; but many of these crossings are at places where there is no “island” or green light.

ITALY.

LETTER FROM M. MELLINI TO THE SECRETARY OF THE PERMANENT COMMITTEE ON ROAD TRAFFIC.

[Translation.]

The regulation of crossings for pedestrians in streets with dense traffic has just been begun in the large towns of Italy, and particularly in Rome and Milan.

In Rome, at the more congested cross-roads, such as the corner of the Via Nazionale and the Via Quattro Fontane, luminous signs have been installed of three colours (red, yellow and green), which have the ordinary international meanings. When the sign regarding the direction of traffic in the street which the pedestrian is crossing is red, he may cross over the part of the road enclosed between two lines of small white paving-stones. Even so, he must cross to the opposite pavement quickly, since the yellow colour which follows allows vehicles in the arrested stream of traffic wishing to turn to the right, to move forward.

At Milan, a similar system is being tried. Instead of small white paving-stones, old tram lines with the groundplates uppermost have been sunk in the cement of the roadway (Corso Vittorio Emanuele-Largo Santa Baliba). We are only at the beginning of these experiments, however, and some time will have to elapse before the final decision is taken.

I enclose the regulations at present in force as regards the circulation of pedestrians on roads in general (Code of Road Regulations) (see Appendix I), in the towns of Rome and Milan (see Appendices II and III), although I am afraid they will not be of much use to Mr. Franklin.

APPENDIX I.

ARTICLE 56 OF ROAD REGULATIONS : EXTRACTS FROM ROAD REGULATIONS FOR PEDESTRIANS (ROYAL DECREE OF DECEMBER 2ND, 1928, M.3179).

[Translation.]

Pedestrians should keep to the pavements and to places allotted to them. When these places do not exist or are insufficient, pedestrians should walk on the side of the street in order to hinder vehicular traffic as little as possible.
Pedestrians should keep to the left except where regulations to the contrary are in force: an exception to this rule is made when a tramway line runs along one side of the street. Pedestrians may not walk or stand about in that part of the street reserved for the circulation of vehicular traffic, except in cases of necessity. It is also prohibited for pedestrians to cross streets, squares or open places diagonally; they should choose the shortest crossing and use every care. Infringements of the provisions in the first part of the first and second paragraphs of this article are subject to a fine of from 10 to 100 lire.

Appendix II.

TOWN POLICE REGULATIONS FOR THE CITY OF ROME: REGULATIONS PRESCRIBED BY THE GOVERNOR OF ROME, JULY 31ST, 1929.

[Translation.]

In order to lessen the difficulties of circulation, minimise the possibility of accidents and further ensure their personal safety, pedestrians should observe the following regulations:

(a) Compulsory Rules:
1. From 10 a.m. to 9 p.m. pedestrians should walk in one direction only on the pavements, keeping to the left in the following streets: Via del Tritone, Corso Umberto Ier.
2. It is prohibited to stand about on the pavements in the streets and during the hours mentioned above.
3. Pedestrians may not stand about at street-corners or in places where vehicles pass. When crossing a street, a free passage should be left for vehicles, and pedestrians should step aside promptly when a driver calls to them or warns them by sound signals.
4. When hearing the special sound-signal used by fire-engines, pedestrians should leave the roadway immediately and should refrain from crossing during the passage of these vehicles.
5. Pedestrians should immediately obey all signals made or orders given by the traffic police.

(b) Rules which Pedestrians are advised to follow:
6. It is desirable that pedestrians should keep to the left, even in streets where this is not compulsory, and they should keep to the edge of the street, using the pavement where it exists.
7. In very busy streets, pedestrians are advised not to stand about on the pavements in such a way as to hinder the circulation of traffic, even where such action is not actually prohibited.
8. In streets where traffic is heavy, pedestrians are advised to cross only in places where traffic police are stationed.
9. It is desirable that pedestrians should not cross streets diagonally, but at right angles. They should also avoid crossing open squares in the middle and should follow the marked footways, where they exist, or keep beside the houses.
10. It is desirable that pedestrians should conform to the signals of the traffic police. Penalties for not complying with the regulations in this decree are not applicable to infringements of the rules, given under (b).

Appendix III.

TOWN POLICE REGULATIONS FOR THE CITY OF MILAN.

[Translation.]

Article 33.—Pedestrians should normally circulate on the pavements and the local authorities may prescribe that, in certain streets, the circulation should be on the right-hand side. Covered walks and arcades are considered as equivalent to pavements in this respect. Pedestrians may not stand about in that part of the street reserved for vehicles, nor should they cross where it is forbidden to do so by notices, and they should not cause any hindrance to traffic.

At cross-roads, where circulation is controlled by a policeman, pedestrians should obey his signals. At the cross-roads of the Piazza del Duomo—Via Orefici, Via Torino—Piazza del Duomo, Via Mercanti, Via Mengoni—Corso Vittorio Emanuele, Corso Venezia, Via Monte Napoleone, Via Durini, pedestrians may only cross when traffic is stopped and in conformity with the signals made by the police.

Article 72.—Since the coming into force of Article 7 of the Royal Decree of December 31st, 1923, No. 3043, and of Articles 32, 33, 34 and 35 of the present regulations, the term "right hand" should be submitted for "left hand" and vice versa.
I. Letter from M. Sirks, Chief Commissioner of the Rotterdam Police to M. Schönfeld.

Rotterdam, March 12th/13th, 1930.

[Translation.]

I have the honour to communicate the following information concerning the safety of pedestrians:

At crossings of thoroughfares where traffic is dense, a police officer is usually stationed to direct the traffic. The alignment of the houses is produced across the road by "stop lines", and a notice-board is put up instructing drivers of vehicles to stop behind these lines when the officer gives the signal. Thus a "safety zone" for pedestrians of the width of the pavement has been established across the road. When the traffic coming from different directions is stopped, the pedestrians can cross in safety.

At other points, such as the Stieltjesplein and Hofplein at Rotterdam, where the police are so busy controlling the traffic that they cannot give their immediate attention to pedestrians, boards with arrows have been put up requesting pedestrians to cross at those points. At the Stieltjesplein, where "roundabout" traffic has been introduced, dotted lines have been drawn across the street near the boards marking passage where pedestrians can cross in safety. Other users of the road must pay attention to these crossings.

A new traffic lamp is now being installed at the Oldenbarneveltstraat-Coolsingel corner, and is being so constructed as to be of service to pedestrians also. Vehicular traffic is regulated by means of signals with lamps from the road, while beacons are being put up at the edge of the pavement showing in what direction the pedestrian can safely cross at any given time.

It is estimated that this apparatus will be working in three or four weeks.

II. Letter from M. Besseling, Chief Commissioner of Police of The Hague to M. Schönfeld.

The Hague, March 18th, 1930.

[Translation.]

I have the honour to inform you that the measures adopted in this city for the regulation of traffic at points where pedestrians cross the street may be divided into two groups.

The first group comprises the measures taken to enable pedestrians to cross at cross-roads, and the second group those relating to other points on the road where pedestrians cross.

With regard to the first, it should be noted that pedestrians can usually cross when a police officer has stopped vehicular traffic behind a "stop line" on one or more of the approach roads. At two points where the pedestrian traffic is heavy, a special bell is also used. This is not a signal to vehicular traffic to stop, but serves exclusively as an indication to pedestrians that vehicular traffic has been stopped in all directions and that they can cross in safety.

As regards the second group, there are no special signals either for pedestrians or for drivers of vehicles in connection with pedestrians. Wherever necessary and possible, "islands" have also been constructed in the middle of the thoroughfare, which can be used by pedestrians as places of refuge when crossing the road.

III. Letter to M. Schönfeld from M. Versteeg, Chief Commissioner of the Amsterdam Police.

Amsterdam, March 15th, 1930.

[Translation.]

I have the honour to send you the following information:

At cross-roads, where the traffic is regulated by a police officer, the following measures have been adopted to assist pedestrians to cross in safety:

1. An order to stop given by the officer, whether with a signalling apparatus ("stop board") or otherwise, applies equally to vehicles desiring to turn to the right:

2. "Stop lines" are marked—as a rule prolonging the alignment of the houses—in such a way as to provide a sufficiently broad lane for pedestrians. This "lane" is thus only marked by a "stop line" on one side, and the desirability of making a second line parallel to the "stop line" already marked at such crossings in the interests of still greater visibility is being seriously considered.

The "stop lines" are marked with orange-yellow paint on the road or by metal plates about 10 × 10 centimetres made of stainless-steel studs.

3. Trams must also stop before the "stop lines".
Moreover, police officers in general, and traffic police in particular, have been specially instructed to look after pedestrians and if necessary to assist them when crossing the road.

It has also been arranged with a local organisation for the blind that blind people led by half-blind or nearly-blind people who wish to cross at a point where the traffic is heavy shall, for this purpose, draw attention to themselves by waving a small green and white flag.

Further, at certain places which are not cross-roads, but where large numbers of pedestrians are in the habit of crossing—such as the bridge in front of the Leidscheplein, police officers are stationed during the hours of heavy traffic, to stop vehicular traffic from time to time, so as to enable pedestrians to cross. These points are not indicated to drivers by "stop lines" or in any other way.

Wherever necessary and possible, "islands" are provided for the use of pedestrians.

It has not yet been found necessary to construct subways under, or bridges over, thoroughfares. Finally, for your further information, I am sending you some copies of a "folder", thousands of copies of which were distributed among the public by the police, when the system of "stop boards" was introduced.

IV. LETTER TO M. SCHÖNFELD FROM M. SCHUITEMAKER, CHIEF COMMISSIONER OF THE UTRECHT POLICE.

Utrecht, March 20th, 1930.

[Translation.]

I have the honour to communicate the following information:

In this town, it is one of the duties of the traffic police to enable pedestrians to cross in safety, and, for this purpose, vehicular traffic is stopped in certain directions or in all directions, as need may arise, near places where traffic police are stationed. "Stop lines" have been drawn in most of these places, prolonging the alignment of the houses. "Islands" have also, where possible, been constructed in the middle of broad streets converging upon heavily-trafficked cross-roads near traffic police, who are naturally posted at such places.

Apart from the fact that police officers assist old and infirm people and children to cross heavily-trafficked roads, no measures are taken other than those mentioned above.

Nevertheless, the placing of railings along the pavements near certain heavily-trafficked cross-roads, such as are already in use in Berlin, Hamburg, Munich, Dortmund and many other German towns, to oblige pedestrians to cross at particular points, is being considered. These places would be indicated by boards of the colour and shape of the signals prescribed by the Central Traffic Regulation Committee and so displayed as to serve at the same time as an indication to drivers of motor-cars, etc.