

## The System of Concessions (leasing) and Cessions (selling) of Public Lands.

Only those lands officially recognized as vacant and thus incorporated in the public domain can be either leased or sold to private parties.

In the Congolese system, leasing is normally the stage preceding selling; leases are given for a definite period of time.

In principle, the territory leased can be sold, but only if it has been exploited in conformity with the agreement made.

If the beneficiary wishes to change the use to which the land is put during the lifetime of the concession or in the course of the thirty years following the cession, he must ask for an authorization to do so. Indeed, rents and prices vary according to the use made of the land: agricultural, industrial, commercial, or residential. Illicit changes in the manner of exploitation are punished by a civil fine.

Who may sell or lease public lands?

In the Congo, the government is not the only power which exercises the right of cession and concession. In certain parts of the country, it has delegated this right to two organizations: the Comité Spécial du Katanga (Special Committee for Katanga) and the Comité National du Kivu (National Committee for Kivu). The former administers the lands in the greater part of Katanga as well as a zone situated in the Southeast of Kasai; it will enjoy this right until 1999. The Comité National du Kivu will exercise the same attributions over 750,000 acres located in Kivu, until 2011.

For certain sections of land, a general preliminary inquiry establishes vacancy once for all. This applies to rural centers and to areas set aside for exploitation by the « colonat ». Vacancy can be leased directly. But whatever may be the formula adopted, the preliminary inquiry into the question of vacancy is always necessary.

This inquiry is subject to very strict rules fixed by the decree of May 31, 1934. It is decided upon by the district commissioner and conducted by a territorial official in the presence of all the natives who are interested parties, and it is afterwards subjected to a double check by the district commissioner and a magistrate. In connection with the inquiry, mention is made of the rights that the natives are willing to grant and of those that they expressly reserve for themselves. The results are communicated to the natives on two occasions and, after the second time, they are given two years during which they may formulate possible objections.

The formalities, guarantees, and supervision required make such inquiries very long drawn out and complex; however, when it is a question of lands not exceeding five acres in area, a simpler and briefer inquiry has been provided for by the decree of May 8, 1936.

If the procedure is long and complicated, it has the advantage of giving the future owner the assurance that he disposes of land definitely free from any native rights except such as the interested parties have reserved expressly for themselves.

Before 1934, this system of guarantees for both parties did not exist; consequently, the beneficiaries of property rights prior to 1934 are not necessarily protected from native claims. In order to protect themselves, they may however submit their land to the kind of inquiry provided for by the decree of 1934.



In the Congo the regime which guarantees the soundness of real estate transactions is inspired by the Torrens System. Thus, a change in the ownership of real estate cannot be brought about merely by an agreement between the parties concerned; in addition it requires the drawing up of a registration certificate. Such a certificate is delivered by the Conservateur des Titres Fonciers (Guardian of the Land Titles); there is such a Guardian in every province.

To make the system even sounder, various provisions are added to it. Briefly, they are as follows:

— First of all, the registration certificate cannot be drawn up except on the basis of an authentic instrument, and it cannot be delivered except after official measuring of the land by a qualified surveyor.

— Following this, the certificate is established in two copies, one of which remains in the custody of the Guardian, and may be consulted by the public. Such a proceeding assures publicity for the transaction and averts any danger of fraud due to alteration of the copy in the hands of the proprietor. Furthermore, except in case of duly established loss or destruction, a new certificate cannot in principle be delivered to the holder unless he surrenders the original document in his possession.

— The Civil Code stipulates that ownership and real estate rights exist only as they are described in the registration certificate, subject besides to easements and possible native rights; indeed, if at the time of the inquiry into the question of vacancy the natives reserved certain rights, these rights are stipulated in the certificate.

— Finally, the purchaser cannot retrocede his rights to the alienator unless they are still intact.

These provisions make the registration certificate a document that gives an absolute guarantee. It illustrates once more the determination of the Congolese legislator to see that real estate

However, neither the government nor these organizations are free from all restraint. Here again appear not only the legislator's solicitude to do everything in his power in order to avert any conceivable abuse in the matter of property concessions, but also his determination to establish strict supervision. Thus, the Colonial Charter itself, in its Article 15, lays down the fundamental rules governing concessions and concessions.

Thus, in the case of sales and leases involving more than 25 acres, the granting authorities must conform to general rules limiting their freedom of action. Such general rules apply, for example, to concessions of less than 1,250 acres saddled with certain costs. The same thing is true of concessions and concessions granted free of charge to establishments serving the public interest, or to scientific, philanthropic, and religious organizations when the transaction involves less than 25 acres of urban land or 500 acres of rural land. The rules apply also to certain free of charge concessions and concessions concerning at the most 12 ½ acres of urban lands or 250 acres of rural lands granted to physical persons who undertake to exploit them. Besides, free of charge concessions of rural lands amounting to less than 1,250 acres can be given to former officials.

Aside from these precise cases — dealt with by authorities whose power is regulated — any cession or concession of lands lies outside the jurisdiction of the executive power and is referred to the legislative power; no transaction can be consummated except by virtue of a decree issued after the Colonial Council has taken up the matter. All the more so if the cessions exceed 25,000 acres; the drafts of the decrees granting such extensive stretches of land must be submitted to Parliament and left with it thirty days for its consideration.

## Registered Lands.

Once a piece of public land for which a concession was granted has been developed, full property rights can be conceded to the beneficiary. However, this change, in order to be valid, must be registered.

law should always function in an atmosphere of security and respect for the rights of private parties. This security is assured especially by the publicity which is given to the measures actually taken or simply considered. This insistence on publicity is found even in various changes brought about by death : indeed, in the Congo the heir does not inherit ownership through the mere fact of the proprietor's death ; he must in addition be recognized as the owner by means of an order given by a magistrate.

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The determination to give maximum security to all appears as a predominant concern throughout the judicial process which, starting with lands considered a priori as of uncertain ownership, proceeds to recognize them as being either native lands or vacant lands and, after having integrated into the public domain lands recognized as vacant, transforms them into lands leased for a period of time or sold with full property rights.

At the outset, the inquiry into the question of vacancy sanctions the priority of native rights ; later, restrictions placed on the legal competency of the executive power guarantees private parties against the danger of monopoly and abuse stemming from large land concessions granted without adequate control. Finally, when the land reaches its ultimate judicial stage and passes with full property rights into the hands of private parties, a very extensive system of publicity and preservation of written documents assures the rights of everyone, those of the legitimate proprietor as well as those of other parties interested in one way or another in the land acquired.

## 2.

### The Waters.

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#### A.

#### Principles.

In the tropics — perhaps more than elsewhere — water plays a decisive rôle in the economic progress of the country and in the health of the populations. The legislator in the Congo considers it a predominant element in the material well-being of the community ; with the aim of guaranteeing the use of it to everybody, he has not hesitated to limit the rights of landowners. He has therefore laid down the principle that the waters of the waterways, the lakes, and the subsoil do not belong to anyone, and that the right to use them is common to all, subject to restrictions imposed by the laws, the regulations, and certain concessions to private parties.

In the same spirit of solicitude for the public welfare, the pollution of water is forbidden. The Civil Code states that no one may change the course of a body of water or defile it ; the territorial administrators have the right to determine the zones of protection around springs, lakes, and waterways that supply drinking water. Numerous measures, enacted by the authorities, have put these rules in force.



levee — to submerge his neighbor's land; moreover, he may set up on neighboring lands canalisations intended to bring or drain off water. It is obvious that such damage to private property cannot be justified except for serious reasons. Therefore these easements are always compensated by indemnities and must be the subject of authentic contracts; in the absence of agreement between the parties, they must be decided by law.

Other easements exist independently of any concession, such as the right that the law gives a landowner to drain off — across neighboring lands — water that is on his own property. There is also a natural easement that results from the mere existence of water on a piece of land: the owners of lands situated on a lower level are bound to get the water that flows down naturally from lands on a higher level and they cannot object to this.

Indeed, the entire system sanctions the exceptional importance that Congolese law gives to water, its free use, and its rôle in the economic life of the country.

In regard to the idea that water is property to be shared in common, the Civil Code stipulates furthermore that the owner of a piece of land has no private right over any water to be found there. However, in certain cases, exceptions of one kind or another are permitted; thus a proprietor who has on his land a spring capable of contributing only a trifling quantity of water to a stream may use it as he pleases.

As for the beds of a lake or a watercourse, they are always part of the public domain. Likewise in the public domain are the shores of lakes and of navigable or floatable watercourses, to a depth of thirty-three feet from the highest level reached by the waters at the time of their periodic rising.

Such are the principles that govern the juridical régime of the waters of the Colony.

## B.

### Concessions and Easements.

The authorities may grant to private parties the right to occupy the beds of lakes and watercourses, and also the right to utilize the waters. These concessions may be obtained for the purpose of producing motive power, or for agricultural or domestic use; they may even be used merely for pleasure. However, in order to prevent abuses, such concessions — according to circumstances — fall within the competency of either the provincial governor, the governor general, or the King. But when it is a question of using 25 cubic meters of water per second or of producing a motive force of at least 5,000 hp., intervention by the legislative power is required.

The granting of such concessions may give the grantee the benefit of certain easements that weigh heavily on neighboring lands. For example, the concessionaire has the right, not only to build a dam or a levee, but even — by means of this dam or

Therefore, any possibility of exploiting mines is dependent on a special act of concession. The only exception to this rule has been made in favor of the natives. Indeed, at the time of the arrival of the Europeans, the natives were exploiting little iron or copper lodes and, in order to protect their rights to these deposits, the authorities have permitted them — without any act of concession — to continue exploiting these mines under the same conditions as those prevailing at the time the decree of 1937, which organized the mining laws, was first enforced.

As it has done for the lands, the Colony has in some regions delegated its power of concession to certain organizations ; in this case, they are not only the Comité Spécial du Katanga and the Comité National du Kivu, but also the Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains (Upper Congo and Great African Lakes Railroad Company).

## B.

### How Mining Concessions are Granted.

In respect to this matter, there are two possible systems : either a regime of agreements, or a regime of public prospecting based on the issuance of a series of permits. Both reveal a marked concern to exercise strict control. An agreement concerning a mining concession can be established only by the legislative power and it must perforce be the subject of a decree.

In the case of public prospecting, a decree must determine the areas open to such prospecting. A succession of permits, each more precise than the one preceding, follow the progress of the work from the stage of research to that of exploitation ; these permits are subjected to a system of publicity and of registration with the Guardian of Land Titles.

## 3.

### The Mines.

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#### A.

#### Principles.

In the Congo, the cession or concession of land does not confer on the beneficiary any property right to the subsoil. As a matter of fact, according to Congolese law, mines constitute a kind of property distinct from land ownership ; furthermore, mines are automatically considered the property of the Colony.



sions. If the concession involves a maximum of 2,000 acres, it can be granted by the governor general; beyond that, by the legislative power. Moreover, these concessions are limited to thirty or fifty years according to the nature of the deposit, but they can be extended.

The exploitation permit is required not only by the bearer of the special permit, but also by those to whom areas for prospecting have been allocated under the regime of agreements. To obtain the exploitation permit, the applicant must make it cover a polygon inscribed either in the square where the special permit gives him exclusive prospecting rights, or in the area which was granted to him by virtue of an agreement. Furthermore, he must furnish proof of the mineralization of the land concerned and submit a plan of the concession applied for.

The **treating permit** is granted when the applicant asks, not for the right to extract, but only to treat ores obtained from mines already leased. It is delivered by the minister of the Belgian Congo and Ruanda-Urundi.

### C.

## Rights of the Colony.

The principle previously mentioned, according to which various privileges that are added to its right to grant concessions.

By virtue of these privileges, when the concession expires the Colony enters into all the rights of the holder of the exploitation permit, and thus comes into possession not only of the mines but also of all installations for extraction and mechanical preparation of the ores.

The permits are divided into four categories :

- The general prospecting permit
- The special prospecting permit
- The exploitation permit
- The treatment permit.

The **general prospecting permit** authorizes prospecting throughout the region declared open, except in certain zones protected by law, such as, for example the native villages or fields. A permit of this type is valid for two years and is delivered by the Guardian of Land Titles. It may be granted to companies or to private individuals. The companies to which the permit is delivered must be commercial enterprises or profit-making concerns, and they must have been established under the laws of the Colony. When permits are granted to private individuals, the latter must have been registered in the Congo or Ruanda-Urundi; however, an exception is allowed in favor of those natives of either who, although not registered, are nevertheless in possession of a card of civic merit.

When the bearer of the general permit has found indications of mineral wealth, he can obtain a **special prospecting permit**. This gives him exclusive prospecting rights, but these rights are limited to a polygonal plot of land measuring  $1\frac{1}{4}$  miles on each side. This special permit is valid for two years and can be renewed three times under certain conditions.

At the time when the bearer of the special permit decides to begin extraction operations, he can obtain a third permit which is the **exploitation permit**. Here, as in the land regulations, the law has taken precautions to avoid the granting of excessive conces-

A similar regime is enforced in regard to lands managed by the three concessionary organizations previously mentioned: the Comité Spécial du Katanga, the Comité National du Kivu, and the Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains. However, there are certain differences. Thus, the sums due as mining royalties belong to these organizations; besides, the latter take over from the Colony the right to subscribe to the capital of the mining companies; finally, agents of these organizations exercise the functions of Guardians of Land Titles.

Furthermore, the Colony receives a share of the profits each year. This participation of the Colony in the profits derived from mining exploitation is calculated either on the basis of the capital invested or — in the case of a stock company — according to a sliding scale based on the ratio of the profits to the capital invested; this participation can amount to as much as 50 % of the profits which exceed 35 % of the capital.

In addition, the Colony has the right to subscribe as much as 20 % of the capital of mining companies, and it may claim at any time the right to cast half as many votes as the company with respect to each type of security.

For its part, the minister of the Belgian Congo and Ruanda-Urundi appoints one or two delegates who may exercise over mining companies all the rights of control and surveillance that normally appertain to directors and auditors.

Finally, the Colony may, in the general interest, limit, regulate, or centralize either production or sale; besides, the government of the Colony — or the Belgian government if the former waives its prerogative — has a right of option which gives it priority for the purchase, at the regular price, of all or part of the mining production.

The Colony enjoys analogous prerogatives — royalties, regularization of production, priority in regard to purchasing — in cases where a mere treatment permit is concerned.

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Such are the broad outlines of the mining regulations applied to lands granted directly by the Colony.



It would seem then, at first, that the Congolese forest, in view of this low degree of exploitation, is not in serious danger of being depleted and consequently is hardly in need of protective measures. Such is not the case. Indeed, on the one hand, the forests most exploited are those nearest the large centers, the waterways and the railroads. In such areas, signs of erosion are already visible and they are gradually becoming more alarming; besides, disturbances in atmospheric precipitation have been noticed. Furthermore, every year thousands of acres of perennial forests are razed and burned to make room for crops that are necessary but that exhaust the poor soil of the tropics.

A number of reasons — agricultural, economic, climatic — have made indispensable protective legislation which finds its expression in the decree of April 11, 1949 establishing the Congolese Forest regime.

This rather complex regime applies to the native forests, the government-owned forests, the forests leased by the authorities to private parties, and finally to the forest lands under the control of the Comité Spécial du Katanga and the Comité National du Kivu. This regime does not apply to forests that constitute private property or to lands afforested by private parties. But it should be noted that even privileged owners are forbidden in principle to do any deforesting within a certain radius of springs or on slopes having an inclination of more than twenty degrees.

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The forests administered by the Comité Spécial du Katanga and the Comité National du Kivu are subjected to special regulations; thus only certain provisions of the decree concerning forests apply to them, notably in regard to the protection of native rights.

#### 4.

### The Forests.

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#### A.

### Protection and Classification of Congolese Forests.

Half of the Belgian Congo is covered with different kinds of forest ranging from the dense tropical forests to the sparsely wooded savannas. Barely 1,5 % of this area is being exploited; this is explained by the fact that most of these forests are too far removed from the chief transportation facilities, and therefore their exploitation is not a paying proposition under existing conditions.



The government-owned forests granted as concessions to private parties follow the long-lease and the area regulations set forth in the ordinance of June 16, 1947.

As for native and government-owned forests, they are entrusted directly to the government services. They are divided into two categories : classified forests and protected forests.

The classified forests include the government-owned reservations and certain wooded zones on which improvements are being made by natives ; they comprise also pieces of land which are being protected in the public interest — against erosion, for example.

All the other forests are considered « protected forests ».

The objective aimed at in classifying certain forests is not only to assure the protection of rare species of trees and the maintenance of the value of the forest-capital, but also to secure the improvement and the perennality of this forest-capital. In the classified forests, agricultural operations, aside from those connected with forestry, are forbidden in principle, and the natives may not exercise any of their traditional rights there other than those stipulated in the classification ordinance. Such forests cannot be alienated, unless they have first been declassified by the governor general.

On the other hand, in regard to forests that are merely protected, the only measures applied are those inspired — in the interest of the populations — by the conservation of the soil and the preservation of its fertility. In these forests, whether native or government-owned, the traditional rights of the natives are respected and the latter may grow crops, except in cases where crop raising is forbidden in order to protect the forest itself ; moreover, certain exploitation privileges are granted by law to the natives.

## B.

### Exploitation of the Forests.

The exploitation of the forests can be done directly by cutting down trees, or indirectly by the purchase of wood already cut.

#### Direct Exploitation.

In the classified and in the native forests, exploitation takes place either following a public adjudication, or under government control when it is a question of supplying wood to government services or of improving a given forest.

In all the other forests subject to the forest regime, exploitation can take place only if a permit to cut wood has been granted.

This is a yearly permit and covers a maximum of 2,500 acres. But the area to which it applies within the limits set by this maximum depends on two factors. The first of these factors is the efficiency of the means of production that the holder of the permit disposes of. This makes it possible to favor the permit-holders who are properly equipped and to eliminate the forest pirates who work sporadically without adequate equipment. The second factor is a new idea introduced by the legislator : the idea of « possibility », viz., of the quantity of wood that can be taken annually from a forest without lessening its ability to go on producing income or endangering its « wood-capital », which

should be preserved intact. In the Congo, the government has been preparing a general inventory which will permit this « possibility » to be determined in the case of every forest area ; in regard to forests not covered by this inventory, or in cases where a premature exhaustion of forests is to be feared, the governor general may determine a provisional « possibility ». Thus, by taking into account this « possibility » whenever wood-cutting permits are granted, the authorities can assure the safety of the Congolese forest wealth.

This permit system is general and obligatory, although there are variations in the manner of applying it where the exploitation of mines and steamboat services is concerned. There are however, two exceptions.

First of all, in the protected forests — whether they are native or government-owned — those natives who do not need to pay a personal tax may freely and without a permit gather deadwood and cut firewood, either for their personal use or for sale ; they are also allowed to cut any amount of wood they need either for their personal use or to practice some native trade. The second exception is limited to the protected government-owned forests, but this exception applies to both natives and non-natives ; in these forests anyone may freely gather deadwood and cut firewood intended for domestic use.

In all cases, exploitation is itself subject to strict rules which aim at protecting the « forest-capital » and the economic life of the region. Thus, it is forbidden in principle to chop down trees that are too young or to cut trees down to the level of the ground. The forest must be exploited by successive sections, each having a predetermined area. Moreover, it is forbidden to abandon on the spot where they were cut any trees or even logs having a market value ; if this rule is infringed, authorization to exploit a new section will be refused.

## Indirect Exploitation.

Although the natives not subject to the personal tax may freely cut firewood, even for sale, no sale can take place unless the buyer is in possession of a purchasing licence at the time of the transaction. Both the natives subject to the personal tax, and the non-natives who wish to buy firewood or charcoal for industrial or commercial purposes must have previously obtained an authorization to do so from the provincial governor. Such authorizations, which are annual and in each case limited to forests enclosed within the boundaries of one single territory, are followed up by the issuance of a purchasing licence.

On the other hand, if firewood bought from the natives is intended solely for domestic use, the transaction takes place freely and is not subject to any formalities.

## The Fiscal System.

The issuance of the permit to cut wood is subject to the payment of a tax fixed by law. However, there are cases when the permit, while remaining obligatory, is delivered free of charge ; this is the case in the protected government-owned forests, in favor of both non-natives and natives paying the personal tax, when they wish to cut or gather the wood they need for building their dwellings or making their furniture.

The holders of permits for cutting wood must furthermore pay, every three months, certain proportional dues that vary not only with the quantity of wood chopped and the types of trees involved in the operation, but also according to the distance of the forests from important centers and low-cost transportation facilities. Here too, special provisions apply to those who exploit mines and steamboat services.



CHAPTER VI  
THE GOVERNMENT  
TECHNICAL SERVICES

As in the case of the permit for cutting wood, the granting of a purchasing licence is subject to the payment of a tax and proportional dues. But in this case, 10% of the proceeds of these dues are turned over to the funds of the native districts. This is considered as an income deriving from the exploitation of forests to which the natives have rights.

Finally, one last tax completes this system: the reforestation tax. Whatever may be the nature of the document authorizing the exploitation of the forests, this tax is always applicable; it may go as high as 20% of the total amount of the proportional dues. The sum collected through this tax is earmarked for a general program of reforestation that the government is carrying out all over the country.

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**1.**  
**Technical Equipment.**

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In the Belgian Congo, the government services have made a direct contribution to the transformation of the country, either by taking a hand in its exploitation, or by creating the conditions needed to enable private initiative to prosper. Consequently, the government has not confined itself — as happens in more developed countries — to the task of co-ordinating, controlling, and supervising, but it has, in fact, played an active part.



Moreover, this service controls navigation, maintains waterways in proper condition, and takes care of dredging and beacoming rivers. For these purposes it has at its disposal a flotilla of some three hundred units including dredgers, signal boats, tugboats, flatboats, etc. Among its most striking achievements mention must be made of the intensive dredging which has increased the anchorage depth from 12 to 30 feet in the maritime reach of the Congo River, and also of the installation of luminous beacoming which makes navigation by night possible on the river and on several of its affluents.

The functions of the Public Works Service also include civil aeronautics. It is in charge of the equipment and maintenance of airports, the control of air traffic and its safety in certain respects. Besides, it concerns itself with aeronautical inspection, the registration of aircraft and the issuance of certificates and licences.

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The giant strides that progress has made in the Congo during the last twenty years, the appearance of urban centers and their rapid growth, and the new concentrations of these agglomerations all brought up problems; the development of these agglomerations had to be facilitated by providing adequately for it. Thus urbanization became a pressing problem; it was officially introduced into the Congo by a decree issued in 1949 — and amended in 1957 — which undertakes to bring about local and regional improvements and puts forward a general plan for the entire country.

The preparation of these plans is taken care of by the urbanization services existing in each province and also within the central government. Before being adopted, they are submitted to inquiries conducted among the public and furthermore are subject to revision every 15 years. They meet the requirements of the present situation and also provide for future needs.

This direct intervention of the government has made itself felt in the sanitary organization of the Colony and in its educational system, the industrial policy, agricultural development, basic equipment of rural communities, and social aid to the natives; in short, in the most varied aspects of Congolese life. It has acquired its full meaning in the carrying out of the Ten Year Plan. In fact, in many cases the government has created the economic substructure on which private undertakings have been grafted and have prospered. This is not a form of government enterprise, but a fruitful collaboration between government and private enterprise. (1)

In the special field of the technical equipment, the role of the government has been even greater, whether in connection with road-building, development of cities, navigability of water-courses, telecommunication networks, or research put at the service of the community. It is well worth while examining briefly the activities of these government technical services.

## A.

### Public Works and Urbanization.

The Public Works Service is one of the oldest and most important; the part it has played in the development of the country must be emphasized.

It opened a vast road network at a time private enterprise was still non-existent in the Congo. It put up dwellings, government buildings, and hospitals, drained marshes, built airports, etc. Even today when it is customary to have recourse to private industry, the Public Works Service continues to engage in certain activities in matters where private enterprise is either non-existent or not interested.

(1) For details concerning the government's rôle in the equipment and development of the country, see a series of examples in Parts 4 and 5.

telegraphic service was put into operation in 1955 after having functioned on an experimental basis during the war years; it makes possible the transmission of photos by radio between the Congo, Europe, and America. (1)

On the international level, the Congo has joined the Universal Postal Union; it has subscribed to the terms of the African International Telecommunication Union. Besides, it has signed the Chicago Convention of December 7, 1944 concerning air navigation and the international organization of civil aeronautics.

From the time the Congo Free State was born, the basis of a postal service was laid down. Today, in addition to the regular boat, railroad, and air services, the network of postal deliveries aggregates some 19,000 miles and is serviced by motor vehicles, whaleboats, canoes, and cyclist couriers; the most distant points, the most secluded villages in the savannas and forests are thus speedily linked with the rest of the world. Every year over sixty million letters, printed matter items and parcels are handled by the Congolese postal service, as well as checks and money orders to the value of 25 million francs.

To this postal system created in 1885, telegraph was soon added. Indeed, since 1894, a telegraph line has been in operation between Boma and Matadi, and in 1898 was extended to Leopoldville. Later, wireless telegraphy was introduced into the Congo soon after it had been developed; as early as 1912, about ten wireless stations had been already established.

Today the telecommunication service operates throughout the Colony. Leopoldville is the pivot of a network that reaches every territory of the country by means of relaying zones and sectors; a system of relays between these zones and sectors and Leopoldville makes communication possible between various points in the Congo, and establishes a connection between various points and other African countries as well as other continents. This network now has 180 radio stations at its disposal. To these should be added 100 private stations, some of which supplement the government service.

In addition, there are about 40 telephone networks that are connected with each other and with foreign countries by radio-telephony.

For the transmission of news, the Belgian Congo communicates with about 15 countries by « telex ». Finally, a photo-

## B.

### Mail Service and Telecommunications.

(1) The telecommunication service is also entrusted with the maintenance of government broadcasting stations. See Part 5, Chapter VI: « Cultural Life ».



contribute chiefly to the working out of a geological map of the Belgian Congo.

Within the Ministry of the Belgian Colony and Ruanda-Urundi, an advisory commission on colonial geology and a geological commission have been set up by royal decree. The former supervises chiefly the activities and organization of the geological service of the central government, while the latter publishes the geological map of the Belgian Congo and Ruanda-Urundi.

## B.

### Geodesy and Cartography.

The first attempts to measure and delineate Congolese territory were made by 19th century explorers; at that time, the work was based on astronomical skeleton maps and on route surveys. The international mission entrusted with the task of delimiting the frontiers introduced the triangulation methods. The skeleton maps they drew have remained to this day the basis of the cartography of the Congo. As early as 1920 the Comité Spécial du Katanga contributed its share to the work undertaken by preparing the necessary surveys for the general topographical map of its domain. Thus, even before World War II, the maps made by the government services and the Comité Spécial du Katanga totaled 25 square degrees based on triangulation.

But the war brought new techniques that simplified the methods previously used and gave much more rapid results. These modern methods are now applied on a large scale by the Institut Géographique du Congo Belge (Geographical Institute of the Belgian Congo). This Institute was created in 1949 in the form of a government bureau recognized as a juristic person. It is entrusted with all official work in the fields of cartography and geodesy, and collaborates furthermore with the technical services of the granting authorities — the Comité Spécial du Katanga and

## 2.

### Study and Research.

#### A.

### Geology and Hydrology.

The exceptional wealth of the Congolese subsoil has given the geological service of the government a scientific rôle of first-rate importance. Its chief function is to make surveys in the domain of theoretical or applied geology, and to carry out all work relating to these surveys.

Co-operating with the official Bureau of Mines and with the geological bureau of the Comité Spécial du Katanga, the government's geological service takes an active part in the exploitation of the subsoil, sometimes by helping prospectors, sometimes by undertaking new prospecting work. Furthermore, it participates in preliminary studies of all government projects concerning the soil and the subsoil, and makes soundings and analyses with a view to studying soils and locating drinking water.

This service has set up an information center where the public has access to all the material gathered through research and through work still in progress. It publishes, at Leopoldville, a bulletin and reports relating to its scientific studies; the latter