

EAST AFR. PROT.
No. 16419

16419
7447 081

164

(Subject)

1908

Wireless Telegraphy in Italian Somaliland

1st April

Last previous Paper.

Seeks reports by Italian post authorities proposed for installation of wireless & land line bet. Keenya & Jambala. Consider wireless preferably to land. J. K. C.

(Minutes)

Mr. Johnson

10/4/08

Mr. Ellis

1. It is very provoking that they have omitted to enclose the charts referred to within & also the report by Captain Burke on the Jambala - Poremb installation. We should ask in copies of these.

We have ~~also~~ recently ^{received} ~~received~~ information ^{from} ~~from~~ that ^{we} ~~we~~ had better wait ^{to} ~~to~~ send a reply ^{to} ~~to~~ the ^{committee} ~~committee~~ ^{on} ~~on~~ the ^{subject} ~~subject~~ ^{of} ~~of~~ wireless telegraph in the Italian Somaliland.

2. ^{the} ~~the~~ ^{question} ~~question ^{of} ~~of~~ competition ^{with} ~~with~~ the ^{Telegraph} ~~Telegraph~~ ^{Co.} ~~Co.~~~~

In original table. (under 16419) 26 June 1908

16419

to in connection with the proposed
establishment of telegraphic communication
between British and German East
Africa and (no. 10375 and the
Committee's Report p. 115) and it is
desirable to know exactly what
legislation the Govt contemplates
(see end of telegram 13279)

telegraph Referring to your
telegram of 14 April to send home draft
under the ^{British} telegraphs as soon as
possible also send charts and Bardon's report
referred to in your despatch no. 161

3. It will be seen that this scheme
will cost £4200 instead of £200
as (wrongly) deciphered in 13279

I am rather sceptical as to the
remunerative character of this
expenditure. Can you say whether
you are likely to have any difficulty
in inducing the Treasury to sanction
this, having regard to the other
telegraph expenditures proposed on
1378

Before introducing
legislation
to telegraph

Considerable
difficulty
noted

X The Treasury
have
agreed
to
pay

1885/5

Governor's Office,

Nairobi,

April 10th 1908.

EAST AFRICA PROTECTORATE.

No. 181

(Incl. 2)

18413

My Lord,

With reference to the correspondence ending with Your Lordship's telegram of the 11th instant on the subject of a wireless telegraphic connection along the coast to connect the Italian system with ours and the main home line, I have the honour to submit two reports by the Postmaster General which appear to me to make out a good case for an installation at Mombasa which will meet the wishes of the Italian Government and at the same time give us telegraphic communication with the outlying Province of Jubaland, which has long been required for political and military reasons. The reason why Mombasa would be preferable to Lamu for working a wireless system of telegraphy with Italian Somaliland and the financial aspect of the question, are fully set forth by the Postmaster General.

2. I have consulted with the Inspector General, King's African Rifles, who fully concurs with Mr. Gosling's proposals. He would, of course, prefer to have Kisumu connected direct with Mombasa, than indirectly by a land line from Kisumu to Gumbo, but such a direct connection might cause confusion and would

H. M. PRINCIPAL SECRETARY OF STATE

FOR THE COLONIES

DOWNING STREET,

LONDON, E. C.

Master General
April 9th

do.
April 10th

12530

would not at present be financially defensible. Arrangements would have to be made with the Italian Government to ensure the prompt transmission of telegrams from Quimbo to Kismayu, and it will be necessary for us to retain the right of having our own operators at Quimbo when necessary. The Provincial Commissioner Jubaland, too, will have to be provided with a confidential code. With these precautions I do not see that any difficulty need arise in connection with the transmission of telegrams to and from Kismayu through Quimbo.

3. As regards the financial aspect the Postmaster General estimates that the land line connecting Kismayu with Quimbo would cost £3,000 and the installation at Mombasa, including the services of an expert operator for a year £1,200; and that sufficient revenue should accrue to meet all charges for maintenance and depreciation. This to commence with; as traffic increases the connection should prove a paying concern, both Northwards to the Somali Coast and Southwards to Zanzibar, whilst the cost of the land line will be well repaid by the advantage of bringing Jubaland into telegraphic communication with Headquarters.

4. I agree with the Postmaster General that the installation at Mombasa should be of the Harport pattern; it will probably be worth the while of the Zanzibar Government to install a similar system at Pemba, to connect direct with the main line of the

would not at present be financially defensible. Arrangements would have to be made with the Italian Government to ensure the prompt transmission of telegrams from Guiso to Kismayu, and it will be necessary for us to retain the right of having our own operator at Guiso when necessary. The Provincial Commissioner, Jubaland, too, will have to be provided with a confidential code. With these precautions I do not see that any difficulty need arise in connection with the transmission of telegrams to and from Kismayu through Guiso.

3. As regards the financial aspect the Postmaster General estimates that the land line connecting Kismayu with Guiso would cost £3,000 and the installation at Mombasa, including the services of an expert operator for a year £1,200; and that sufficient revenue should accrue to meet all charges for maintenance and depreciation. This to compare with; as traffic increases the connection should prove a paying concern, both Northwards to the Somali Coast and Southwards to Zanzibar, whilst the cost of the land line will be well repaid by the advantage of bringing Jubaland into telegraphic communication with Head Quarters.

4. I agree with the Postmaster General that the installation at Mombasa should be of the Harsoni pattern; it will probably be worth the while of the British Government to instal a similar system at Zanzibar, to connect direct with Mombasa.

public would be by an alternative and cheap means of communication between the two ports the traffic between which is rapidly increasing.

B. If these proposals meet with Your Lordship's approval it will be necessary to arrange for the allocation of the necessary funds as our Budget for the year could not support the charge.

C. Captain Salkeld reports, under date the 7th ultimo, that all radio-telegraphic material has been landed at Quimbo by road or sea, except one large load which sank, all important material being saved. He is informed that the Station at Quimbo will be ready by August next. The Emperor Navigation Company has contracted to carry all material for the Lugh and Bardera Stations as far as Bardera.

I have the honour to be,
With the highest respect,

My Lord,

Your Lordship's most obedient,

Wahle servant,

Wahle

Registered No. 228708

Postmaster General's Office,

Mombasa, 73

8th April 1908.

Connection of Lamu and Italian Territory
by wireless telegraphy.

Sir,

I have gone very carefully into this matter and have been in communication with the Acting Provincial Commissioner of Jubaland, at Kismayu. I have also considered the report on the Zanzibar installation which you were good enough to obtain for me and have discussed questions affecting the configuration of the Coast Line with Captain Wilson of the Protectorate s.s. "Juba" who has an excellent knowledge of the Coast between Mombasa and Kismayu. I have further discussed the proposal with the present Inspector General of the King's African Rifles whose predecessor (General Manning) strongly advocated telegraph communication with Jubaland for military reasons. In the following paragraphs I am summarising the views of the authorities mentioned together with my own opinions.

SECURITY FOR TELEGRAPH COMMUNICATION
WITH JUBALAND.

I would first remark that the provision of a wireless installation to connect with the Italian

wireless

1908. Governor,

Nairobi.

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wireless service in Jubaland. I would remind you that the
account of the presumed wish of His Majesty's
Government to assist the Italian Administration and
for local reasons. I would remind you that the
establishment of telegraph communication with Jubaland
(Kismayu) has been strongly advocated from time to time
by local officials - this mainly on account of exigencies
of the military and political situation. It has not
hitherto been arranged owing to the difficulties
described below.

**LAND LINE OR CABLE PRACTICALLY
ECONOMICALLY IMPOSSIBLE.**

3. In existing circumstances it is impossible
to connect Kismayu with the ordinary telegraph system
of the Protectorate because, in the first place, the
country between Lasa and Kismayu, which a land line
would have to pass through, is not effectively occupied
and there would be neither security for the line nor
safety for the telegraph officers (linemen) employed
for its maintenance. In the second place the coast
along which the line would have to pass is deeply
indented by creeks and the country is one in which
any case, both the construction and subsequent
of a telegraph line would be difficult and expensive.
In the third place although the Government
exchanged with Kismayu would be very important
it is certain that for the present at least
not be a sufficient commercial telegraph line
remains in any way commensurate with the cost of
providing, guarding, and maintaining a land line.
The provision of a cable would be even less

financially than a land line. Its first cost would be much greater, although in the ordinary way the cost of maintenance might perhaps be less, the expense of repairing a single breakdown (involving the bringing of a Cable Ship from a distance) would probably exceed the total revenue for many years.

ACCEPTANCE OF ITALIAN PROPOSALS
RECOMMENDED.

4. It will be understood therefore that the granting of the Italian request for British co-operation in establishing wireless telegraphy with Jubaland will furnish a means of communication the need of which has been felt on the British side for several years past, and is in fact the only way by which telegraph communication can be economically provided. The acceptance is recommended by the Acting Provincial Commissioner in Jubaland for political reasons, and by the Inspector General of the King's African Rifles on military grounds. I also recommend it as financially sound in that it would yield a satisfactory revenue provided that the British installation is at Bombasa. The only difference of opinion I have with the authorities mentioned is that they would like to see a separate British installation at Kisumu (to work to another British installation at Lamu, or Bombasa) instead ^{of} making use of the Italian station which I understand is to be placed at Giumbo about 11 miles north of Kisumu. If the Italian installation is utilized it will be desirable to have a land line connecting the two places. I do not think the circumstances warrant the expense of

separate British installation; further I am inclined to think that the existence of two installations of wireless telegraphy (one Italian and the other British) within 11 miles of each other would cause inconvenience to both parties and that the receipt of long distance messages by a British ship sailing at Simons would be hampered by the relative stronger signals from the Italian station at Giumbo, near by. It might be possible to avoid this by "tuning" but strict secrecy (which is the chief reason advanced for a separate British installation) might not easily be obtainable, and in any case a British installation at Kiunga seems to be essentially a matter for future consideration.

PLANS UNSUITABLE.

5. But whilst I consider that the proposal to connect with the Italian wireless system should be adopted, I do not favour the suggestion to place the British installation at Lamu. I would prefer to see it at Mombasa. There are technical reasons for this which I am giving, together with other technical information, in a separate memorandum to facilitate reference to the authorities on wireless telegraphy in England. But the chief point in favour of Mombasa against Lamu is that whilst an installation at Mombasa would bring substantial financial advantages (even if it were not actually self-supporting from the outset) the Lamu would not be likely to yield a satisfactory revenue for a number of years. We have to face the fact that neither Italian or British Jubaland has a trade of a nature likely to cause the sending of any considerable number of telegrams, and that unless the Government

separate British Installation: further I am inclined to think that the existence of two installations of wireless telegraphy (one Italian and the other British) within 11 miles of each other would cause inconvenience to both parties and that the receipt of wireless messages by a British installation at Kiama would be hampered by the relatively stronger signals from the Italian station at Giunco, near by. It might be possible to avoid this by 'tuning' but strict secrecy which is the chief reason advanced for a separate British Installation might not easily be obtainable, and in any case a British Installation at Kiama seems to be essentially a matter for future consideration.

LONG-UNSUITABLE.

6. But whilst I consider that the proposal to connect with the Italian wireless system should be adopted, I do not favour the suggestion to place the British Installation at Lismore. I would prefer to see it at Bombasa. There are technical reasons for this which I am giving, together with other technical information, in a separate memorandum to facilitate reference to the authorities on wireless telegraphy in England. But the chief point in favour of Bombasa as against Lismore is that whilst an installation at Bombasa would bring substantial financial advantages (even if it were not actually self supporting from the outset) Lismore would not be likely to yield a satisfactory revenue for a number of years. We have to face the fact that neither Italian or British Jubaland has a trade of a nature likely to cause the sending of any considerable number of telegrams, and that unless the Government

prepared to erect a wireless installation under conditions in which the receipts will not even pay the working expenses the idea of erecting it at Lum may be abandoned.

FINANCIAL ADVANTAGES OF MOMBASA.

6. In addition to the technical advantages of Mombasa as a site for the wireless installation there is the very important point that if we had wireless station at Mombasa we could provide for a regular telegraph traffic of wireless messages to Zanzibar and Pemba where similar installations have already been erected. The cable traffic between Zanzibar and Mombasa has practically doubled during the past three years and is now worth about £.1200 per annum to the Cable Company. The rates are very high the cable charge being approximately 5d per word in addition to the land rate or "terminal". This rate is excessive and for purpose of comparison I mention that the charge for this short distance of 160 miles between Mombasa to Zanzibar is one half of that from London to New York.

PROBABLE EXPENDITURE AND REVENUE.

7. From the report of Captain Barde on the Zanzibar/Pemba Installation it would appear that the minimum cost of erecting a single wireless set at Mombasa would be £.1200 including the services of the contractor's expert employee for one year. The actual cost would probably be more since greater power would doubtless be required to transmit signals over the distance of 300 miles from Mombasa to Kisumu than is essential for the 62 miles between Zanzibar and Pemba. The line from Giumbo to Kisumu has also to be considered.

6.
 Taking the first cost at £3000 and the working and maintenance per annum and allowing 10% per annum for interest and depreciation the revenue required to make the installation economically satisfactory would be:-

(a)	To meet working expenses	£.150
(b)	Interest and depreciation 10% on £.3000	£.300
		<u>£.450</u>

I think that we can safely rely upon a sufficient revenue from wireless messages exchanged with British and Italian Jubaland and Zanzibar and Pemba to meet these charges.

THE COMPETITION WITH CABLE COMPANY.

8. In connection with these proposals it has been suggested to me that the Cable Company (the Eastern Telegraph Company) might consider that it had a moral claim to be free from the competition of a Government wireless installation, and I think I should say at once that I do not share that view. In the first place wireless telegraphy is bound to affect the cable receipts sooner or later, and in this respect the Cable Companies are in the same position as any other person or Association whose business suffers from new inventions. In the second place the cable traffic between Zanzibar and Bombay which alone would be affected, is relatively only a small proportion of the Cable Company's local business. The gross cable receipts for messages to and from Zanzibar are now approximately £.1400 per annum. Of this the Zanzibar traffic (£.1200) is about one half of which

it is unlikely that more than half (or 2.7%) would be lost to the Company as a result of wireless competition. Further the number of cablegrams to and from East Africa is increasing so rapidly that even if the whole of the Zanzibar traffic were lost to the Cable Company, the result of wireless competition, its gross receipts from all classes of cablegrams would probably be greater for the first twelve months after the provision of the wireless installation than for the year previous, i.e., the amount which would be lost to the Company is less than its normal annual increment of revenue.

CONCLUSION.

9. In conclusion I wish to say that I am of opinion that by establishing a wireless station at Mombasa we should meet the wishes of the Italian Government, and at the same time obtain an adequate revenue both for our own installation and for that of the Zanzibar Administration, whose system is now working at a loss. Even assuming that the anticipated revenue were not realised owing to competitive reductions in the cable rates this latter would confer a substantial advantage to the Commercial Community. After perusing Captain Barde's report on the Zanzibar installation I consider that the wireless station at Mombasa could be easily worked and maintained by our present staff if a contractor's expert employee were lent for one year as in the case of Zanzibar.

I have the honour to be

Sir,

Your obedient servant,

(Sd.) J. G. ...
 1907 THE GENERAL

is attached to 161 of *SL 14* 1902.

Memorandum ... ring Mr. Gosling's despatch
No. 13/08 Secretariat Minute Paper 409/08) re
Wireless telegraphy in and from Jubaland.

The Italian Government has decided to establish wireless telegraphy between certain stations in Southern Somaliland (or Jubaland), and Italian Colony also known as the Benadir Coast, situated on the East Coast of Africa to the North of the Juba River, and it is proposed that in order to afford a connection between the Colony and the outer world a wireless telegraph station should be provided at some place in British East Africa having *Connection* either by cable or land line, with the International Telegraph system.

2. The Italian wireless station from which this connection is desired, and which is being equipped with special power for long distance working is situated at Quimbo on the left (or North) bank of the Juba river some two miles from its mouth and about 11 miles to the north of the British East Africa port of Kisumu.

3. The British territory to the South of the Juba river, as far as Lamu, is not effectively occupied. The coast line is generally low and sandy with low wooded ridges inland. A range of hills extends for 60 miles to the north of Lamu with a maximum height of 700 feet. There is no *actual* land any considerable *extension* extent interlocking between Jubaland and the *annexed* British *territory* on. Two *charts* showing details

Despatch No. 116 of 24th 10 1902

Memorandum accompanying Mr. Gohl's despatch
No. 13/08 (Secretariat Memo Paper 409/08) re
Wireless Telegraphy in and from Jubaland.

The Italian Government has decided to establish wireless telegraphy between certain stations in Southern Somaliland (or Jubaland), and Italian Colony also known as the Benadir Coast, situated on the East Coast of Africa to the North of the Juba river, and it is proposed that in order to afford a connection between the Colony and the outer world a wireless telegraph station should be provided at some place in British East Africa having ~~connection~~ either by cable or land line, with the International Telegraph system.

2. The Italian wireless station from which this connection is desired, and which is being equipped with special power for long distances working is situated at Quimbo on the left (or North) bank of the Juba river some two miles from its mouth and about 11 miles to the north of the British East African port of Kisumu.

3. The British territory to the South of the Juba river, so far as known, is not effectively occupied. The coast line is generally low and sandy with low wooded ridges inland. A range of hills extends for 50 miles to the north of Lamu with a maximum height of about 700 feet. There is no other land of any considerable extent intervening between Quimbo and the proposed British installation. For ~~the~~ further details

of the coast of East Africa from Zanzibar to the Juba River are enclosed.

4. The Italian Authorities have suggested that the British Installation should be at Lamu but are wrong in assuming that Lamu is the landing place of the International Cable. Lamu which is some 150 miles from Guinbo is admittedly connected by telegraph with the International system, but the connection is made by means of a land line extending from Mombasa (where the cable is landed) along the coast to Lamu. This land line passes through a very difficult country and during recent years has been frequently interrupted. It has lately been partly re-constructed but is even now not working satisfactorily. From the point of view of securing continuity of communication with the cable the British wireless station would be better located at Mombasa.

5. A second reason against the placing of the British Installation at Lamu is the configuration of the coast. It will be seen from the accompanying charts that a direct line from Lamu to Guinbo is entirely overland owing to the projection of the coast between the two places. Further this direct line from Lamu to Kismayu passes over the range of wooded hills already mentioned which is about 50 miles long and a maximum height of about 700 feet. This seems of importance having regard to the known difficulties of working wireless telegraphy overland and particularly over wooded hills. I understand that an installation in the West Indies failed as a result of a similar range of hills being situated between the stations.

6. A third reason against the adoption of a site for the British installation is clear from Capt. Bado's report on the wireless telegraph between Zanzibar and Pemba that such interruptions as are likely to occur on the coast are rather of a mechanical than of an electrical nature. Thus Capt. Bado states that they had to cast a new part of the coil engine, and that defects of clockwork and of a spring had to be made good; further that the insulators supplied had to be replaced etc. etc. It therefore seems desirable that the British installation should be located somewhere where there are resources for meeting such faults or deficiencies, and at Lamu there is particularly nothing of this nature. Moreover Lamu is, in a transport sense, rather cut off from the outer world, depending as it does on the visits of steamers which do not call with sufficient frequency to afford a weekly mail service.

7. As compared with Lamu, Mombasa is double the distance from Guinbo, viz. 300 miles, but a direct line from Mombasa to Guinbo passes for most of the way over the sea and where it touches the land it crosses only a low coast line. Further Mombasa has considerable resources for the making of repairs. From Mombasa, too, communication with the wireless installations at Zanzibar and Pemba should be more easily obtainable than from Lamu, and it is desirable to link up the different wireless systems on the coast of East Africa.

8. In connection with the foregoing a question arises regarding the possibility of communication

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between stations employing different systems of wireless telegraphy. I understand that even where this is possible it is sometimes prohibited by the engagements required by the different Wireless Telegraph Companies. The point is of importance in that the Italians will probably use the Marconi system whilst the Zanzibar installation is by the Long-wirehead System. Captain Bardo suggests that the system employed at Zanzibar (or Lamu) be similar to that at Zanzibar in order to facilitate communication, but since it would appear that the difficulty of communication from either Lamu or Zanzibar to Gambia will probably be greater than between Zanzibar and Zanzibar it seems desirable to adopt the Marconi system in order that the longer and more difficult service should have the most favorable conditions. There is, however, a further consideration bearing upon this point in that the Zanzibar and Pemba installations are already working and it would presumably be difficult to alter them, whilst in East Africa we can obtain an installation adapted to the requirements and the Italian Government would probably be willing to adjust their system to ours in order to provide for the connection with the cable which they particularly desire. The question is essentially one for experts.

9. There are convenient situations at both Zanzibar and Lamu, having an elevation of about 100 feet above the sea level, upon which wireless installations could be erected. At Zanzibar the available site is the highest on the island and there is no high ground immediately intervening in the direction of either

Guinbo or Cambar. At Lam there is high land near by and coming directly between the most convenient site for the installation and both Cambar and Guinbo.

10. In addition to lines showing the direction and distance between Guinbo and Lam and Zambesi respectively I have endorsed upon the accompanying Chart lines of direction from Mombasa to Kiunguini Island, and thence to Guinbo. Kiunguini Island is approximately 110 miles from Guinbo and 190 from Mombasa. There is a small port, Kiunga, on the mainland, opposite the island, where there is a Customs Station of the Protectorate. There is no European settlement at the place and such trade as exists is carried on entirely by native crafts. The Customs Master takes Indian and understands the Customs duties are less than £.100 per annum. Considered as a possible intermediate station in the event of direct communication between Mombasa and Guinbo being found impracticable, it has the advantage of standing out from the coast so that its signals to both Mombasa and Guinbo would pass almost entirely over-land. It is not altogether out of touch with civilisation and its native trade might perhaps yield a small telegraph revenue.

General Post Office,

Mombasa

10th April 1908.

POSTMASTER GENERAL

Gor SAT
16419

Sent?

DRAFT telegram

Sadar
Nairobi

MINUTE.

(Gor
1029)

Mr. Webb 16/5

Mr. Ellis

11/10/16/5/1

Mr. Justice

Mr. Agnew

Mr. ...

Mr. ...

Mr. ...

Mr. ...

Mr. ... of Elgin

17/5/16/5/1

Invited
16 May
... ..

Referring to your telegram
agony, northward

14 April previous to
hereditary rice handler
introducing legislation for
genital

telegraphs and have
as soon as possible

... ..

Draft ordinance

... ..

and also charts

and Barros report
patentary

referred to in
... ..

enclosures in your ...

(Gor
16419)

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Crewe