

TECHNICAL SPECIFICATION DOCUMENT

FOR

FIRS TAX REMITTANCE

SEPTEMBER, 2018

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DOCUMENT VERSION TRACKING

VERSION	DATE	DESCRIPTION
1.0	September 2018	Document Creation
1.1	May 2019	Added PAYE upload file validation rules, WHT upload file template & PAYE upload file template as appendices
2.0	September 2019	Introduced sending of hashes in request headers as an extra means of authentication

AUTHENTICATION MODE

1. Each client would be issued an API key which must be passed with every call that is made to all APIs as a header with the name “**apikey**”.
2. Another header named “**mac**” should be passed as well and should contain the sha512 hash of the concatenation of your API key, the hyphen character, the transaction reference, the hyphen character and your secret key. The hash should be changed to upper case before sending as shown below.

```
UPPER(  
    SHA512(  
        CONCAT(  
            API KEY,  
            "-",  
            TRANSACTION REFERENCE,  
            "-",  
            SECRET KEY  
        )  
    )  
)
```

3. The same hash sent to us in 2 above would be sent to you as part of our response.

FUNCTIONALITIES

1. List of Tax Types

DESCRIPTION: This API enables you to fetch the list of available tax types excluding With-Holding Tax (WHT) and Pay As You Earn (PAYE).

HTTP METHOD: GET

END-POINT: <Domain Here>/api/v2/taxtypes

SAMPLE RESPONSE:

```
[  
  {  
    "code": "CGT",  
    "description": "Capital Gain Tax"  
  },  
]
```

```
{
  "code": "CIT",
  "description": "Company Income Tax"
}
]
```

2. List of Payment Methods

DESCRIPTION: This API enables you to fetch the list of available payment methods.

HTTP METHOD: GET

END-POINT: <Domain Here>/api/v2/paymentmethods

SAMPLE RESPONSE:

```
[
  {
    "code": "CAS",
    "description": "Cash"
  },
  {
    "code": "CAR",
    "description": "Card"
  }
]
```

3. List of Banks

DESCRIPTION: This API enables you to fetch the list of available banks.

HTTP METHOD: GET

END-POINT: <Domain Here>/api/v2/banks

SAMPLE RESPONSE:

```
[
  {
    "code": "ABP",
    "description": "Access Bank Nigeria Plc"
  },
  {
    "code": "DBP",
    "description": "Diamond Bank Plc"
  }
]
```

4. TIN Verification

DESCRIPTION: This API enables you to verify Tax Identification Number (TIN) to be sure it's valid before a user is allowed to proceed with a transaction.

HTTP METHOD: POST

END-POINT: <Domain Here>/api/v2/verifytin

REQUEST: The TIN should be sent using a posted field named “tin”.

FIELD NAME	DESCRIPTION
tin	The TIN to be verified. It can be an FIRS TIN or JTB TIN

SAMPLE RESPONSE:

```
{
  "response_code": "00",
  "response_msg": "OK",
}
```

```

"data": {
  "name": "ABC Limited",
  "tin": "XXXXXXXX-XXXX",
  "jtbtin": "XXXXXXXXXX",
  "address": "LAGOS",
  "taxofficeid": "IKJ",
  "taxofficename": "MSTO Ikeja",
  "taxpayertype": "C",
  "rcnumber": "RC000000",
  "email": "email@email.com",
  "phone": "08012345678"
},
"error_msgs": []
}

```

S/NO	JSON FIELD NAME	DESCRIPTION
1.	response_code	The response code of the call
2.	response_msg	The response message of the call
3.	name	The name of the TIN owner
4.	jtbtin	The JTB TIN of the TIN owner
5.	address	The address of the TIN owner
6.	taxofficeid	The tax office ID that the TIN owner is attached to
7.	taxofficename	The name of the tax office that the TIN owner is attached to
8.	taxpayertype	The tax payer type of the TIN owner
9.	rcnumber	The RC number of the TIN owner
10.	email	The email of the owner
11.	phone	The phone of the owner
12.	error_msgs	If there is anything wrong with the request, an array of error messages would be displayed here

5. Post other tax transactions

DESCRIPTION: This API enables you to post tax transactions other than WHT, PAYE, Interests and penalties.

HTTP METHOD: POST

END-POINT: <Domain Here>/api/v2/log-othertax-transaction

REQUEST: JSON data should be sent as raw POST request with the following fields

```
{
  "transref": "ABCDE12345",
  "total_amount": "30000.00",
  "payerTIN": "XXXXXXXX-XXXX",
  "paymentDate": "2018-08-24",
  "payPeriodFrom": "2018-08-07",
  "payPeriodTo": "2018-08-16",
  "paymentMethod": "BTL",
  "taxType": "EDT",
  "taxOffice": "SO",
  "address": "SOKOTO",
  "bank": "FBN",
  "bankAccountNumber": "1234567890",
  "payerName": "ABC LIMITED",
  "payref": "FBN\SMK\BTL\2018-08-24\ABCDE12345"
}
```


S/NO	JSON FIELD NAME	DESCRIPTION
1.	transref	The transaction reference
2.	total_amount	Total amount in naira
3.	payerTIN	The TIN of the entity paying the tax
4.	paymentDate	The date payment was made
5.	payPeriodFrom	The start date of the period the tax payment covers
6.	payPeriodTo	The end date of the period the tax payment covers
7.	paymentMethod	The payment method that the payer used to effect payment. This should be any of the codes returned from the API in the section titled " <i>List of Payment Methods</i> ".
8.	taxType	The tax type code, which should be any of the ones returned from the API in the section titled " <i>List of Tax Type</i> ".
9.	taxOffice	The tax office code returned for the tax payer from the TIN validation service.
10.	address	The address of the tax payer as returned by the TIN validation service.
11.	bank	The bank where the account number specified in the <i>bankAccountNumber</i> field is domiciled.
12.	bankAccountNumber	The bank account number into which the funds received from the payer was credited to.
13.	payerName	The name of the tax payer as returned by the tax validation service.
14.	payref	The payment reference created using the format below <i>Bank Code / SMK / Payment Method Code / Payment Date in the format YYYY-MM-DD / The transaction reference specified in the transref field.</i> The payref must appear on the receipt generated for the user alongside other details

SAMPLE RESPONSE:

```
{
  "response_code": "00",
  "response_msg": "OK",
  "error_msgs": []
}
```

S/NO	JSON FIELD NAME	DESCRIPTION
1.	response_code	This is the response code
2.	response_msg	This is the description of the response code
3.	error_msgs	If there is anything wrong with the request, an array of error messages would be displayed here

6. Post WHT transaction

DESCRIPTION: This API enables you to post WHT transactions. This is a special tax payment that requires the upload of a CSV file (on the front-end exposed to the user) to be able to capture all the needed extra data. The data in the CSV file is passed to this API as an array in the “*schedule*” field.

HTTP METHOD: POST

END-POINT: <Domain Here/api/v2/log-wht-transaction

SAMPLE REQUEST: JSON data should be sent as raw POST request with the following fields

```
{
  "summary": {
    "bank": "FBN",
    "bankAccountNumber": "1234567890",
    "payPeriodFrom": "2018-07-01",
    "payPeriodTo": "2018-07-31",
    "payerAddress": "SOKOTO",
    "payerName": "ABC LIMITED",
    "payerTIN": "XXXXXXXX-XXXX",
    "paymentDate": "2018-08-02",
    "taxOffice": "SO",
    "totalTaxAmount": "11100000.00000",
    "paymentMethod": "BTL",
    "transactionRef": "ABCDE12346",
```

```

    "taxType": "",
    "payref": "FBN\SMK\BTL\2018-08-02\ABCDE12346"
  },
  "schedule": [{
    "beneficiaryName": "Eddie",
    "beneficiaryTIN": "XXXXXXXX-XXXX",
    "beneficiaryAddress": "Lagos",
    "contractAmount": "1000000",
    "contractDate": "5\2\2018",
    "contractType": "Type",
    "description": "Computers",
    "invoiceNumber": "12345",
    "rate": "10",
    "taxAmount": "100000",
    "taxAuthority": "FIRS"
  }, {
    "beneficiaryName": "Eddie2",
    "beneficiaryTIN": "XXXXXXXX-XXXX",
    "beneficiaryAddress": "Lagos",
    "contractAmount": "10000000",
    "contractDate": "5\2\2018",
    "contractType": "Type",
    "description": "Building",
    "invoiceNumber": "23456",
    "rate": "10",

```

```

    "taxAmount": "1000000",

    "taxAuthority": "FIRS"

  }
}

```

S/NO	JSON FIELD NAME	DESCRIPTION
1.	summary	This is an object in the JSON data that contains a summary of the whole transaction. Fields 2 – 15 described below are to be fields in this object
2.	transactionRef	The transaction reference
3.	totalTaxAmount	Total amount in naira
4.	payerTIN	The TIN of the entity paying the tax
5.	paymentDate	The date payment was made
6.	payPeriodFrom	The start date of the period the tax payment covers
7.	payPeriodTo	The end date of the period the tax payment covers
8.	paymentMethod	The payment method that the payer used to effect payment. This should be any of the codes returned from the API in the section titled “ <i>List of Payment Methods</i> ”.
9.	taxType	The tax type code, which should be any of the ones returned from the API in the section titled “ <i>List of Tax Type</i> ”
10.	taxOffice	The tax office code returned for the tax payer from the TIN validation service.
11.	payerAddress	The address of the tax payer as returned by the TIN validation service.
12.	bank	The bank where the account number specified in the <i>bankAccountNumber</i> field is domiciled.
13.	bankAccountNumber	The bank account number into which the funds received from the payer was credited to.
14.	payerName	The name of the tax payer as returned by the tax validation service.
15.	payref	The payment reference created using the format below <i>Bank Code / SMK / Payment Method Code / Payment Date in the format YYYY-MM-DD / The transaction reference specified in the transref field</i>
16.	schedule	This is an object in the JSON data that contains an array of objects. The objects in the array should contain the fields described in items 17 to 27 below.
17.	beneficiaryName	Name of the WHT beneficiary
18.	beneficiaryTIN	TIN of the WHT beneficiary
19.	beneficiaryAddress	Address of the WHT beneficiary
20.	contractAmount	Total amount of the contract awarded to the beneficiary and for

		which WHT is being remitted
21.	contractDate	The date the contract was awarded.
22.	contractType	The type of the contract
23.	description	Description of the contract
24.	invoiceNumber	Invoice number of the contract payment
25.	rate	The rate that was used in calculating the WHT. (5% or 10%)
26.	taxAmount	The amount of the WHT being remitted.
27.	taxAuthority	The tax office code of the WHT beneficiary

SAMPLE RESPONSE:

```
{
  "response_code": "00",
  "response_msg": "OK",
  "error_msgs": []
}
```

S/NO	JSON FIELD NAME	DESCRIPTION
1.	response_code	This is the response code
2.	response_msg	This is the description of the response code
3.	error_msgs	If there is anything wrong with the request, an array of error messages would be displayed here

7. Post PAYE transaction

DESCRIPTION: This API enables you to post PAYE transactions. This is a special tax payment that requires the upload of a CSV file (on the front-end exposed to the user) to be able to capture all the needed extra data. The data in the CSV file is passed to this API as an array in the “*schedule*” field.

HTTP METHOD: POST

END-POINT: <Domain Here>/api/v2/log-payee-transaction

SAMPLE REQUEST: JSON data should be sent as raw POST request with the following fields

```

{
  "summary": {
    "bank": "FBN",
    "bankAccountNumber": "1234567890",
    "payPeriodFrom": "2018-07-01",
    "payPeriodTo": "2018-07-31",
    "payerAddress": "SOKOTO",
    "payerName": "ABC LIMITED",
    "payerTIN": "XXXXXXXX-XXXX",
    "paymentDate": "2018-08-02",
    "taxOffice": "SO",
    "totalTaxAmount": "11100000.00000",
    "paymentMethod": "BTL",
    "transactionRef": "ABCDE12346",
    "taxType": "",
    "payref": "FBN\\SMK\\BTL\\2018-08-02\\ABCDE12346"
  },
  "schedule": [{
    "sn": 1,
    "beneficiaryName": "Eddie",
    "beneficiaryTIN": "YYYYYYYY-YYYY",
    "beneficiaryDesignation": "Designation 1",
    "grossPay": "1200000",
    "cra": "120000",
    "pension": "120000",
  ]
}

```

```
"nhf": "120000",  
"nhis": "120000",  
"lifeAssurance": "120000",  
"gratuity": "120000",  
"allowance": "720000",  
"basicSalary": "480000",  
"payablePerAnnum": "40800",  
"minPayablePerAnnum": "12000",  
"statutoryPayablePerAnnum": "40800",  
"taxAmount": "3400",  
"taxAuthority": "FIRS",  
"staffNumber": "12",  
"rate": 0.11  
}, {  
  "sn": 2,  
  "beneficiaryName": "Eddie2",  
  "beneficiaryTIN": "ZZZZZZZZ-ZZZZ",  
  "beneficiaryDesignation": "Designation 2",  
  "grossPay": "4800000",  
  "cra": "500000",  
  "pension": "500000",  
  "nhf": "500000",  
  "nhis": "500000",  
  "lifeAssurance": "500000",  
  "gratuity": "500000",
```

```

    "allowance": "3000000",

    "basicSalary": "1800000",

    "payablePerAnnum": "266000",

    "minPayablePerAnnum": "48000",

    "statutoryPayablePerAnnum": "266000",

    "taxAmount": "22166.66667",

    "taxAuthority": "FIRS",

    "staffNumber": "13",

    "rate": 21

  }}
}

```

S/NO	JSON FIELD NAME	DESCRIPTION
1.	summary	This is an object in the JSON data that contains a summary of the whole transaction. Fields 2 – 15 described below are to be fields in this object
2.	transactionRef	The transaction reference
3.	totalTaxAmount	Total amount in naira
4.	payerTIN	The TIN of the entity paying the tax
5.	paymentDate	The date payment was made
6.	payPeriodFrom	The start date of the period the tax payment covers
7.	payPeriodTo	The end date of the period the tax payment covers
8.	paymentMethod	The payment method that the payer used to effect payment. This should be any of the codes returned from the API in the section titled “ <i>List of Payment Methods</i> ”.
9.	taxType	The tax type code, which should be any of the ones returned from the API in the section titled “ <i>List of Tax Type</i> ”
10.	taxOffice	The tax office code returned for the tax payer from the TIN validation service.
11.	payerAddress	The address of the tax payer as returned by the TIN validation service.
12.	bank	The bank where the account number specified in the <i>bankAccountNumber</i> field is domiciled.

13.	bankAccountNumber	The bank account number into which the funds received from the payer was credited to.
14.	payerName	The name of the tax payer as returned by the tax validation service.
15.	payref	The payment reference created using the format below <i>Bank Code / SMK / Payment Method Code / Payment Date in the format YYYY-MM-DD / The transaction reference specified in the transref field</i>
16.	schedule	This is an object in the JSON data that contains an array of objects. The objects in the array should contain the fields described in items 17 to 35 below.
17.	beneficiaryName	Name of the employee for which PAYE is being remitted
18.	beneficiaryTIN	TIN of the employee for which PAYE is being remitted
19.	beneficiaryDesignation	The designation of the employee
20.	grossPay	The annual gross pay of the employee
21.	cra	The annual CRA of the employee
22.	pension	The annual pension allowance of the employee
23.	nhf	The annual National Housing Fund allowance of the employee
24.	nhis	The annual National Health Insurance Scheme allowance of the employee
25.	lifeAssurance	The annual life assurance allowance of the employee
26.	gratuity	The annual gratuity allowance of the employee
27.	allowance	The total allowance being paid to the employee
28.	basicSalary	The basic salary of the employee
29.	payablePerAnnum	The annual PAYE tax payable by the employee
30.	minPayablePerAnnum	The minimum annual PAYE tax payable by the employee
31.	statutoryPayablePerAnnum	The statutory annual PAYE tax payable by the employee
32.	taxAmount	The monthly tax amount to be paid
33.	taxAuthority	The tax office code of the employee
34.	staffNumber	The staff number of the employee
35.	rate	The highest rate that was used in calculating the employee's tax amount

SAMPLE RESPONSE:

```
{
  "response_code": "00",
  "response_msg": "OK",
  "error_msgs": []
}
```

S/NO	JSON FIELD NAME	DESCRIPTION
1.	response_code	This is the response code
2.	response_msg	This is the description of the response code
3.	error_msgs	If there is anything wrong with the request, an array of error messages would be displayed here

APPENDIX 1: PAYE UPLOAD FILE VALIDATION RULES

1. **CRA Means (Consolidated Relief Allowance)** is the amount to be deducted from the gross income before the computation of the Personal income tax.
The Consolidated Relief Allowance and other allowances (e.g PENSION, NHF, NHIS, LIFE ASSURANCE, GRATUITY, Dividends from quoted companies) are added up in order to get the total relief deductible from the gross income to arrive at the Net Taxable income.
2. **TAX PAYABLE PER ANNUM (SEE Tax Table below):** This is calculated using the tax table in order to establish the annual PAYE of the employee. The Net taxable Income is subject to tax in a graduated tax rate as stated in the tax table e.g;

Annual income (NGN)	PIT Rate (%)
First 300,000	7
Next 300,000	11
Next 500,000	15
Next 500,000	19
Next 1,600,000	21
Over 3,200,000	24
TOTAL TAX PAYABLE PER ANNUM	

The Annual Tax computed from the Tax Table above is to be divided by Twelve (12) Months in order to get the "Tax Payable per Month".

The MINIMUM TAX PAYABLE PER ANNUM@1% GROSS INCOME is for employees that have an annual income of ≤ ₦300,000.00 such people are not entitled to the CRA and other tax relieves they are to be assessed based on Minimum Tax. Based on the foregoing 1% of their gross income is taken as their Annual Tax Payable (ATP). Their Monthly Tax payable is obtained by dividing their ATP by 12 to get actual tax payable every month.

However, where there is no tax payable after or tax payable is less 1% of the gross income after the granting of the various allowance(s)/relief to a taxable person the Minimum tax will also apply.

3. The tax rates are not inserted in the template because the template only captures the summary of the PAYE computations. The rates are found in the Tax Table where the actual computation is carried out.

4. The actual tax payable per month is contained in “Column Q” of the template. This can be calculated by dividing the Annual Tax Payable by twelve (12) or the Minimum Tax Computed by twelve 12 whichever one is higher.

APPENDIX 2: WHT UPLOAD FILE TEMPLATE

The upload file for WHT should have the following as column headers of the CSV file as per FIRS standard.

- Beneficiary TIN
- Beneficiary Name
- Beneficiary Address
- Invoice No
- Contract Date
- Contract Description
- Contract Amount
- Contract Type
- WHT Rate
- WHT Amount
- Tax Authority

APPENDIX 3: PAYE UPLOAD FILE TEMPLATE

The upload file for PAYE should have the following as column headers of the CSV file as per FIRS standard.

- NAME
- TIN
- DESIGNATION
- GROSS INCOME
- CRA[N200000+20%GROSS INCOME]
- PENSION
- NHF
- NHIS
- LIFE ASSURANCE
- GRATUITY
- TOTAL RELIEF
- CHARGEABLE INCOME
- TAX PAYABLE PER ANNUM (SEE TAX TABLE)
- MINIMUM TAX PAYABLE PER ANNUM@1% GROSS INCOME
- STATUTORY TAX PAYABLE PER ANNUM
- TAX PAYABLE PER MONTH(No Commas)
- TAX AUTHORITY