Proposal for Electronic Submission of Data from Pay & Account Offices (e-PPO)

Bank Interface

Electronic submission of PPO data from Pay & Account offices Central Pension Accounting Office and finally to CPPCs of Banks

NIC-Central Pension Accounting Office 01/10/2013 Revised: 28/01/2016

Current System at CPAO:

At present the Papers for Pension Payment are prepared at the PAO Office by using NIC-CGA developed software COMPACT. The software is developed under the Windows NT Server Environment with SQL Server as the Back-end. *The Data from the output of COMPACT is filled in the Pension Payment Booklets manually.*

These Pension Payment Booklets are received at the Central Pension Accounting Office, where the same data is fed again in to CPAO Software PARAS developed under the Linux Server Environment with Oracle Database Server as the Back-end. Thus there is duplicity of data entry efforts at both the ends, which also amounts to a large numbers of errors due to human intervention during keying in of data.

CPAO then issues a Special Seal Authority to the Bank, which along with 2 copies of the Pension Payment Booklet(PPO) is dispatched to Banks & Pensioners. There is a delay in the pension authorization due to movement of papers in PAO, CPAO and Banks.

Objectives to be achieved:

- Streamline the movement of Pension Payment Orders between PAO to CPAO and then to BANK.
- To eliminate errors in data by eliminating data entry at CPAO and Banks.
- Fast and efficient data processing at CPAO and Banks.
- To create an efficient but secured Paperless-processing Application.
- To Capture Photo of Pensioner, Spouse, Signature of Pensioner and spouse and biometric information.
- To create an efficient, secure, cost effective communication, integration between systems at CPAO, PAO and Banks.
- To utilize existing IT Infrastructure to provide a cost effective solution.
- To update database at bank end using e-PPO data and to have synchronized data at PAO, CPAO and Banks.

Issues Involved:

- To allot digital signature to all PAOs who are authorized to sign PPO booklet.
- To upgrade IT infrastructure at PAO level.
- Checking of authenticity of PPO Number received electronically.
- To avoid fake PPO number generation.
- To maintain directory of PAO authorized to sign PPO and update this directory on real time basis.
- To devise computer printable format of PPO in place of PPO booklet.
- Creation of central portal for providing web interface to PAOs, Banks and Pensioners.
- Banks to create sftp sites at CPPC level wherein CPAO will push the ePPOs.

 To maintain directory of CPAO officers authorized to sign SSA and update it on real time basis.

Proposed System:

In brief:

PAO will keep on processing the pensions as he is presently doing. He will key in the data in COMPACT s/w and will upload the photographs and signatures/thumb impressions of pensioner and family pensioner. Once he is satisfied with the entered data, he will take a printout of PPO booklet from COMPACT and once again will verify the data and once satisfied will finalize the data and will take the final printout of the PPO booklet. He will freeze the data by digitally signing it with his digital signatures. This signed data will be exported from COMPACT as text data and will be uploaded on the ePPO site of CPAO.

Since digitally signed data is now available with CPAO, it can take action on the PPO data. In case of any discrepancy CPAO can revert back the case/data to PAO, who will be then be allowed to make further changes to the data. If CPAO found the data to be correct then authorized person can freeze the data by putting in his/her digital signature. From here nobody will be allowed to change the data.

CPAO will generate the PPO as PDF file which will be digitally signed by the authorized signatory of CPAO. This PDF file will be send to CPPC of bank, which will further allow the paying branch to view it and print it for handing over to the pensioner as pensioner's copy. CPPC may also print it and keep it for record keeping. Once the system is stabilized the paper movement between PAO, CPAO and Banks will be eliminated.

Process Breakup/Description:

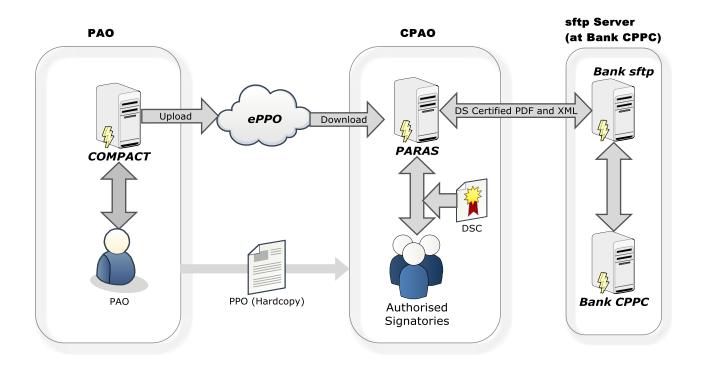
- 1. Case generation by PAO.
 - a. PAO to receive the paper documents from HOO as being done presently.
 - b. PAO will make the entry of the case in COMPACT.
 - c. PAO will scan and create the images of photographs and signatures/thumb impression of pensioner and family pensioner.
 - d. PAO will insert these images in COMPACT
 - e. PAO will take a draft copy of PPO for checking and verification.
 - f. Once he is satisfied, he will finalize the case and will take final printout of PPO booklet.
 - g. PAO will export the data from COMPACT as text file.
 - h. PAO will upload the file on the ePPO website of CPAO.
 - i. PAO will send the paper PPO booklet to CPAO as being done presently.
- 2. Scrutiny of data by CPAO.
 - a. Data from ePPO site of CPAO will be downloaded and inserted into tables of PARAS database.
 - b. CPAO will received the paper PPO booklet and will diarize it and mark it to the concerned section as being done presently.
 - c. When the concerned section will keyin the PPO no. for further processing, the downloaded data will be visible to the operator. Here

no editing of data will be allowed and in case of any discrepancy of data, the case should be revered back to the PAO.

- d. Section will be aided with automatic tools for making the validation, range and other checks.
- e. Once satisfied the, the signing authority will digitally sign the data.
- f. PPO as PDF file will be generated and this also will be digitally signed by the authorized signatory.
- 3. Sending ePPO to banks.
 - a. At a scheduled time, all the ePPO pdf files and data in XML format will be extracted from the database and placed in a folder assigned to each and every CPPC.
 - b. At a scheduled time, all the files from the ePPO folders will be pushed to sftp site of banks.
 - c. The status information about the pushed PPO files will be available on the ePPO website of CPAO.
- 4. Processing at CPPCs.
 - a. CPPC will received the ePPO in their sftp folders.
 - b. CPPC will import the ePPO files in their software systems for further processing.
 - c. CPPC will send back an acknowledgement to CPAO once case is received and processed.
 - d. CPPC to make this data available to paying branches for further processing and updating by paying branches.
 - e. Paying branch will take a print out of ePPO pdf file and will hand over to pensioner as pensioner copy.

Once implemented, there will be seamless transfer of PPO from PAO to CPAO to Banks as ePPO.

ePPO



Implementation Stages:

At present ePPO is being implemented in Two Stages

1. Stage 1(Started):

At present CPAO has initiated and implemented the procedure to send digitally signed SSA (PDF & XML) for Amendment Cases along with Scanned Amendment authorities Received from PAO's/Ministries/Departments.

2. Stage 2 (Not Yet Started):

In this stage NEW PPO will be sent once digitally signed NEW PPO's will be received from PAO's/Ministries/Departments. Once Started and implemented it will be informed to banks accordingly.

Annexure-I Format of ePPO (New PPO) (As exported from COMPACT)

S.No	Field Name	Width	Ту	pe Mandator	y(M) /Optional (O)
1.	Software Version (5 char Ver+ 8 char Rel no.)	13 Char	С	м	Codification Required. This will facilitate in tracking changes in
2.	PPO no.	12 Char	С	Μ	It must be 12 Digit.
3.	Date of PPO	8 Char	D	М	
4.	Class of Pension	1 Char	С	Μ	Codification Required
5.	Major Debit Head of Account	4 Char	С	Μ	
6.	Minor head	3 Char	Ν	М	
7.	Voted /charged	1 Char	Ν	Μ	Codification Required
8.	Debitable to	3 Char	С	Μ	GOI/State Govt. (3
9.	BSR Code of Paying Bank and Branch	7 Char	С	М	BSR Codification is to be used.
10.	SB a/c number	20 Char	С	Μ	
11.	Pensioner's name title (mr./ms./dr.)	5 Char	С	Μ	
12.	Pensioner's first name	30 Char	С	Μ	
13.	Pensioner's middle name	15 Char	С	0	
14.	Pensioner's last name	15 Char	С	0	
15.	Pensioner's gender	1 Char	С	Μ	M – Male , F - Female
16.	Pensioner's nationality	20 Char	С	Μ	
17.	Pensioner's Date of Birth #	8 Char	С	M EXCEPT FF ELSE	
18.	Pensioner's permanent address1	60 Char	С	Μ	
19.	Pensioner's permanent address2	60 Char	С	0	
20.	Pensioner's district	30 Char	С	Μ	
21.	Pensioner's state Code	3 Char	С	М	Codified Value
22.	Pensioner's PIN	6 Char	С	Μ	
23.	Pensioner's E-mail	100 Char	С	0	
24.	Pensioner's phone	12 Char	С	0	Pensioner's Phone No.
25.	Pensioner's Date of Joining #	8 Char	D	M(EXCEPT FF) ELSE	
26.	Pensioner's Date of Retirement #	8 Char	D	M(EXCEPT FF ELSE	
27.	Pensioner's Date of Death #	8 Char	D	M(FP), O(EXCEPT FP)	
28.	GS years #	2 Char	N	M EXCEPT FF, Ex- President, Ex-Vice	GROSS SERVICE NUMBER OF YEARS
29.	GS months #	2 Char	N	M EXCEPT FF, Ex- President, Ex-Vice	GROSS SERVICE NUMBER OF
30.	GS days #	2 Char	N	M EXCEPT FF, Ex- President, Ex-Vice	GROSS SERVICE NUMBER OF DAYS
31.	NETQS years #	2 Char	N	M EXCEPT FF, Ex-Presid Ex-Vice President, Ex-M	
32.	NETQS months #	2 Char	N	M EXCEPT FF, Ex-Presid Ex-Vice President, Ex-M	lent, NET
33.	NETQS days #	2 Char	N	M EXCEPT FF, Ex-Presid Ex-Vice President, Ex-M	lent, NET
34.	Pay Scale 6 th CPC #	100 Char	С	M EXCEPT FF, Ex-Presi Ex-Vice President,	dent, Codification
35.	Grade #	1 Char	С	M EXCEPT FF, Ex-Presid Ex-Vice President, Ex-M	lent, Codification

Last pay drawn 6 th CPC #	6 Char	N	M EXCEPT FF, Ex-President, Ex-Vice President,	
NQS years #	2 Char	N	M EXCEPT FF, Ex-President, Ex-Vice President, Ex-MP	NON QUALIFYING
NQS months #	2 Char	N	M EXCEPT FF, Ex-President, Ex-Vice President, Ex-MP	NON QUALIFYING
NQS days #	2 Char	N	M EXCEPT FF, Ex-President, Ex-Vice President, Ex-MP	NON QUALIFYING
Rank last held #	30 Char	С	M EXCEPT MP,FF ELSE 'NA'	-
Ministry/Department from which retired #	50 Char	С	M EXCEPT MP,FF ELSE 'NA'	
Retirement office #	40 Char	С	M EXCEPT MP,FF ELSE 'NA'	Retirement Office
Average Emoluments for last 10 month #	8 Char	Ν	M(SP) ELSE ZERO	Except FF, Ex-MP, Ex-President /
Emoluments for Family Pension #	8 Char	N	M(SP) ELSE ZERO	Except FF, Ex-MP, Ex-President /
Ex Gratia payment (If Any) #	8 Char	Ν	O(FP) ELSE ZERO	
Emoluments of Retirement gratuity	8 Char	N	M(EXCEPT MP,FF) ELSE ZERO	Except FF, Ex-MP, Ex-President /
Amount of RG/DG Allowed, paid by	8 Char	N	M(EXCEPT MP,FF) ELSE ZERO	Except FF, Ex-MP, Ex-President /
Medical allowance (y/n)	1 Char	С	M	FF, Ex-MP (
Amount of Medical Allowance Allowed	5 Char	N	M IF FIELD 48 IS YES (Y) ELSE ZERO	=300 (6 th CPC)
Medical Allowance from (Date)	8 Char	D	M IF FIELD 48 IS YES (Y)	
Personal identification mark	750 Char	С	0	Should be Free Of Special
Pension Sanctioned per month #	6 Char	Ν	M(EXCEPT FP) ELSE ZERO	For Judges Two
Date of commencement	8 Char	D	М	
Commutation status (P/A/N)	1 Char	С	M	(P-Paid by PAO/A-Authorized to
Amount commuted	7 Char	Ν	M IF FIELD 54 IS P/A ELSE	
Pension after Commutation	6 Char	N	M IF FIELD 54 IS P/A ELSE	Pension After
Residual pension	6 Char	Ν	M IF FIELD 54 IS P/A ELSE	
Date Of start of reduced pension	8 Char	D	M IF FIELD 54 IS P ELSE	
Commuted value of pension	8 Char	Ν	M IF FIELD 54 IS P/A ELSE	
Date of Payment of Commuted Value of Pension	8 Char	D	M IF FIELD 54 IS P ELSE NULL(BLANK)	
Date of Restoration	8 Char	D	M IF FIELD 54 IS P ELSE	
Relief entitlement	1 Char	С	М	Relief Entitlement
Whether the Pensioner is in receipt of any other pension	1 Char	С	М	
If Yes, its particulars and source from which being drawn	200 Char	С	M IF FIELD 63 IS YES (Y) ELSE `NA'	
Family's Pensioner (FP) Details available or not (Y/N)	1 Char	С	М	Whether family pensioner details
(FP)Title (Mr./Ms./Dr.)	5 Char	С	M IF FIELD 65 IS YES (Y)	
(FP)First name	30 Char	С	M IF FIELD 65 IS YES (Y)	
(FP)Middle name	15 Char	С	0	
(FP)Last name	15 Char	С	0	
(FP)Relationship	1 Char	С	M IF FIELD 65 IS YES (Y) ELSE NULL(BLANK)	Relationship with It Should not be
(FP)Last nam	ne Ship	ne 15 Char Ship 1 Char	ne 15 Char C ship 1 Char C	ne 15 Char C O ship 1 Char C M IF FIELD 65 IS YES (Y) ELSE NULL(BLANK)

72.	(FP)Nationality	20 Char	С	M IF FIELD 65 IS YES (Y)	
73.	FP dependency reason	100 Char	C	0	Dependency
74.	Permanent Address of Family Pensioner Address1	60 Char	C	M IF FIELD 65 IS YES (Y) ELSE 'NA'	
75.	Permanent Address of Family Pensioner Address2	60 Char	С	0	
76.	FP District	30 Char	С	M IF FIELD 65 IS YES (Y)	
77.	FP State Code	3 Char	С	M IF FIELD 65 IS YES (Y)	Codified value
78.	FP Pin	6 Char	С	M IF FIELD 65 IS YES (Y)	
79.	FP E-mail	100 Char	С	0	
80.	FP Phone	12 Char	С	0	Family Pensioner's
81.	Personal identification mark	750 Char	С	0	
82.	Rule under with F.P. is sanctioned		С	0	
83.	Enhanced Rate of F.P.	6 Char	N	0	
84.	Period from which F.P. is Paid	8 Char	D	0	
	at enhanced rate Date From.				
85.	Period from which F.P. is Paid	8 Char	D	0	
	at enhanced rate Date To				
86.	Normal Rate of F.P.	6 Char	Ν	0	
87.	Period from which F.P. is Paid at normal rate Date From	8 Char	D	0	
88.	Period from which F.P. is Paid at normal rate Date To	8 Char	D	0	
89.	Whether the F.P. is in receipt of other pension (Y/N)	1 Char	С	М	Y/N
90.	If Yes its particulars and Source from Being drawn	200 Char	С	M IF FIELD 89 IS YES (Y) ELSE `NA'	
91.	AQS years	2 Char	Ν	0	ADDITIONAL QUALIFICATION
92.	AQS months	2 Char	Ν	0	ADDITIONAL QUALIFICATION
93.	AQS days	2 Char	N	0	ADDITIONAL QUALIFICATION
94.	SW years	2 Char	Ν	0	SERVICE
95.	SW months	2 Char	N	0	SERVICE WEIGHTAGE
96.	SW days	2 Char	Ν	0	'SERVICE
97.	ARR Rate1	5 Char	Ν	0	ARREAR RATE1
98.	ARR Frm1	8 Char	D	0	ARREAR RATE
99.	ARR To1	8 Char	D	0	ARREAR RATE
100.	ARR Rate2	5 Char	Ν	0	ARREAR RATE2
101.	ARR Frm2	8 Char	D	0	ARREAR RATE
102.	ARR To2	8 Char	D	0	ARREAR RATE
103.	RED ARR Rate1	5 Char	Ν	0	
104.	RED ARR Frm1	8 Char	С	0	REDUCED ARREAR
105.	RED ARR To1	8 Char	С	0	REDUCED ARREAR
106.	RED ARR Rate2	5 Char	Ν	0	REDUCED ARREAR
107.	RED ARR Frm2	8 Char	D	0	REDUCED ARREAR
108.	RED ARR To2	8 Char	D	0	REDUCED ARREAR
109.	Provisional pension amount	6 Char	N	O (Zero or Value)	Provisional
110.	Provisional pension from date	8 Char	D	M IF FIELD 109 IS >Zero	Provisional
111.	Provisional pension upto date	8 Char	D	M IF FIELD 109 IS >Zero	Provisional
112.	AIS state cadre	3 Char	С	0	ALL INDIA
113.	AIS service code	3 Char	C	M IF FIELD 112 IS NOT BLA	

114.	AIS Year of Join	4 Char	С	M IF FIELD 112 IS NOT BLANK	ALL INDIA
115.	Payment through	2 Char	С	М	PC-Payment by Counter/ PP-
116.	Discontinued PPO No. Of Pensioner who has died	30 Char	C	M IF (FP WHEN NEW PPO IS FOR FAMILY MEMBER OR LEGAL HEIR OTHER	It must be 12 Digit for Post-90 Cases and may
117.	Exceptional PPO	1 Char	С	М	Y/N
118.	PPO exceptions	2 Char	С	M if 117 is Y	'01' for PAO to Bank Transfer, '02' for
119.	PPO exception remarks	500 Char	С	M if 117 is Y	Only when 117 is
120.	Exceptional FP case	1 Char	С	М	Y/N
121.	FP exception	2 Char	С	M if 120 is Y	'01' for on duty death '02' for ward of missing person '03' for physically
122.	FP exception remarks	500 Char	С	M if 120 is Y	Only when 120 is
123.	IDA pensioner	1 Char	С	Μ	Y/N
124.	IDA remarks	500 Char	С	M if 123 is Y	Only when 123 is
125.	Arrear remarks	500 Char	С	0	Only when Arrear/RED
126.	Grade Pay 6 th CPC #	6 Char	Ν	M EXCEPT FF, Ex-President, Ex-Vice President,	
127.	Additional Pension 6 th CPC	6 Char	Ν	M If age is more than or equal	If age is more
128.	Constant Attendance Allowance (Disability Pension) (6th CPC)	6 Char	Ν	M if Pensioner Is Disabled ELSE O	
129.	FP gender	1 Char	С	M IF FIELD 65 IS YES (Y)	M – Male , F –
130.	PAO Diary Number	16 Char	С	M	
131.	Finalization Date	8 Char	D	M	
132.	PAN Number - Pensioner	10 Char	С	0	
133.	UID (AADHAR No.) – Pensioner	12 Char	С	0	

Type Description: N = Numeric, C=Character, D= Date ## All dates must be in YYYYMMDD format

These fields have case specific value i.e. the value of these fields will be Mandatory in some pension categories/PPO's and will be non-mandatory in some pension categories/PPO's . Following is the description of abbreviations of categories falling under case specific:

- FF: Freedom Fighter (Pension Category).
- SP: Superannuation Pension (Pension Category).
- FP: Family Pension (Pension Category).
- MP: MPLOK, MPRAJ (PPO Types).
- VR: Voluntary Retirement.

Details of Family Member Eligible for family pension in the event of death of pensioner, to be provided separately in a file.

S.No	Field Name	Width	ר ו	Type Mandatory	(M) /Optional (O)
1.	Pension Payment Order	12 Char	С	0	Multiple
	Number of				Entries
2.	Name (Family Member)	50 Char	С	M IF FIELD 1 IS YI	
3.	Relation with Govt. Servant	20 Char	С	M IF FIELD 1 IS Y	ES Fields)

4.	Date of Birth (For Children)	8 Char	D	M IF FIELD 1 IS YES	To be provided
5.	Present Address	100 Char	С	M IF FIELD 1 IS YES	separately
6.	Reasons for dependency	250 Char	С	M IF FIELD 1 IS YES	
7.	PAO Diary Number	16 Char	С	M (SAME AS THAT PROVIDED IN NEW	
8.	Finalization Date	8 Char	D	M (SAME AS THAT	
••		0 chui		PROVI	

Type Description: N = Numeric, C=Character, D= Date

All dates must be in YYYYMMDD format

Data will be in ASCII format. The details of presenting data in text file are as under:-

- 1. Fields will be in the same order as described in the format above.
- 2. One record will be in one line only. This means that if there 100 records, then the text file will contain exactly 100 lines. One record will not be continued in more than one line in text file.
- 3. Date will be send in character format (YYYYMMDD). For example 01/10/2001 will be send as "20011001".

	e-PPO (Amendment/Revision) X	1
S.NO.	XML TAG	Description
1	<pre><ppo_no></ppo_no></pre>	PENSION PAYMENT ORDER NUMBBER
2	<pre><diary_no></diary_no></pre>	CPAO DIARY NUMBER OF REVISION
3	<amdt_code></amdt_code>	AMENDMENT CODE
4	<diary_type></diary_type>	DIARY TYPE
5	<ais_code></ais_code>	ALL INDIA SERVICE CODE
6	<paocode></paocode>	PAY AND ACCOUNT OFFICE CODE
7	<amendment_no></amendment_no>	AMENDMENT NUMBER
8	<pay_bsr_code></pay_bsr_code>	PAYING BRANCH BSR CODE
9	<pay_bsr_name></pay_bsr_name>	PAYING BRANCH BSR NAME
10	<acc_no></acc_no>	SAVING BANK ACCOUNT NUMBER
11	<letter_no></letter_no>	LETTER NUMBER
12	<letter_date></letter_date>	LETTER DATE
13	<pre><pens_name></pens_name></pre>	PENSIONER NAME
		NET QUALIFIYING SERVICE (YEAR-MONTH-
14	<net_qual_srvc></net_qual_srvc>	DAYS)
15	<basic_pen></basic_pen>	REVISED BASIC PENSION
16	<rev_basic_fr></rev_basic_fr>	REVISED BASIC FROM (DATE)
17	<rev_basic_to></rev_basic_to>	REVISED BASIC TO(DATE)
		REVISED BASIC PENSION ACCORDING TO OM
18	<rev_basic_pen_24sep></rev_basic_pen_24sep>	28 JAN 2013
10	DEL DAGIO DEL DAGED EDIA	REVISED BASIC PENSION FROM ACCORDING
19	<rev_basic_pen_24sep_frm></rev_basic_pen_24sep_frm>	TO OM 28 JAN 2013 (DATE)
20		REVISED BASIC PENSION TO ACCORDING TO
20	<pre><rev_basic_pen_24sep_to></rev_basic_pen_24sep_to></pre>	OM 28 JAN 2013 (DATE) REDUCED BASIC PENSION AFTER
21	<reduced_pens></reduced_pens>	COMMUTATION
		REDUCED BASIC PENSION FROM AFTER
22	<rev_red_fr></rev_red_fr>	COMMUTATION (DATE)
		REDUCED BASIC PENSION TO AFTER
23	<rev_reduced_pen_to></rev_reduced_pen_to>	COMMUTATION (DATE)
		REVISED REDUCED BASIC PENSION
24	<rev_reduced_pen_24sep></rev_reduced_pen_24sep>	ACCORDING TO OM 28 JAN 2013
		REVISED REDUCED BASIC PENSION FROM
25	<rev_reduced_pen_24sep_from></rev_reduced_pen_24sep_from>	ACCORDING TO OM 28 JAN 2013 (DATE)
_		REVISED REDUCED BASIC PENSION TO
26	<rev_reduced_pen_24sep_to></rev_reduced_pen_24sep_to>	ACCORDING TO OM 28 JAN 2013 (DATE)
		COMMUTATION / DIFFRENTIAL
27	<commuted_val></commuted_val>	
28	<gratuity_arrear></gratuity_arrear>	
29	<revised_fp_enh></revised_fp_enh>	REVISED FAMILY PENSION ENHANCED
23		

Annexure-II Format of ePPO (Revision)

11 | N | C - C P A O

30 -	<rev enh="" fp="" fr=""></rev>		
		AMOUNT FROM (DATE)	
		REVISED FAMILY PENSION ENHANCED	
31 <	<rev_fp_enh_to></rev_fp_enh_to>	AMOUNT TO (DATE)	
		REVISED FAMILY PENSION ENHANCED	
32 <	<rev_enhan_rate_24sep></rev_enhan_rate_24sep>	AMOUNT ACCORDING TO OM 28 JAN 2013	
		REVISED FAMILY PENSION ENHANCED	
		AMOUNT FROM ACCORDING TO OM 28 JAN	
33 -	<rev_enhan_rate_24sep_frm></rev_enhan_rate_24sep_frm>	2013 (DATE) REVISED FAMILY PENSION ENHANCED	
		AMOUNT TO ACCORDING TO OM 28 JAN 2013	
34	<rev 24sep="" enhan="" rate="" to=""></rev>	(DATE)	
	<pre><ppo class=""></ppo></pre>	PPO CLASS (PENSION CATEGORY)	
	<pre><date print=""></date></pre>	DATE WHEN SSA PRINTED ON	
		PAY AND ACCOUNT OFFICE NAME (REVISION	
37	<pao_name></pao_name>	AUTHORITY ISSUING OFFICE)	
38 <	<pao_add1></pao_add1>		
39 <	<pao_add2></pao_add2>		
40 <	<pao_city></pao_city>	PAY AND ACCOUNT OFFICE ADDRESS	
41 <	<pao_pin></pao_pin>		
42 <	<revised_fp_nor></revised_fp_nor>	REVISED FAMILY PENSION NORMAL AMOUNT	
		REVISED FAMILY PENSION NORMALAMOUNT	
43 <	<rev_fp_nor_fr></rev_fp_nor_fr>	FROM (DATE)	
		REVISED FAMILY PENSION NORMAL AMOUNT	
44 <	<rev_fp_nor_to></rev_fp_nor_to>	TO (DATE)	
		REVISED FAMILY PENSION NORMAL AMOUNT	
45 <	<rev_nor_rate_24sep></rev_nor_rate_24sep>	ACCORDING TO OM 28 JAN 2013	
		REVISED FAMILY PENSION NORMAL AMOUNT	
46	<rev 24sep="" frm="" nor="" rate=""></rev>	FROM ACCORDING TO OM 28 JAN 2013 (DATE)	
		REVISED FAMILY PENSION NORMAL AMOUNT	
47	<rev 24sep="" nor="" rate="" to=""></rev>	TO ACCORDING TO OM 28 JAN 2013 (DATE)	
	<pre><pens add1=""></pens></pre>		
	<pre><pens add2=""></pens></pre>		
	<pre><pen cd="" st=""></pen></pre>	PENSIONER ADDRESS	
	<pre><pen dist=""></pen></pre>		
	<pre><pens add="" pin=""></pens></pre>		
		REMARKS	
	<relf_ent></relf_ent>	RELIEF ENTITLEMENT FLAG (Y/N)	
	<bank_desc></bank_desc>	PAYING BANK NAME	
	 <cppc_code></cppc_code>	CPPC BSR CODE	
	 <lnk_add1></lnk_add1>		
	<lnk_add2></lnk_add2>		
59	<lnk_add3></lnk_add3>	CPPC BANK ADDRESS	
	 <lnk_pin></lnk_pin>		
	 <ssa_no></ssa_no>	CPAO REVISION SPECIAL SEAL AUTHORITY	

		NUMBER
62	<line1_lb_add></line1_lb_add>	LINE ONE OF CPPC BANK ADDRESS
63	<additional_pension></additional_pension>	ADDITIONAL PENSION AMOUNT
64	<pen_dob></pen_dob>	PENSIONER DATE OF BIRTH
65	<new_pay_scale></new_pay_scale>	PAY SCALE ACCORDING TO 6TH CPC
66	<constant_attendance_allowance></constant_attendance_allowance>	CONSTANT ATTEDANDENT ALLOWANCE AMOUNT
67	<fp_name></fp_name>	FAMILY PENSIONER NAME
68	<fp_dob></fp_dob>	FAMILY PENSIONER DATE OF BIRTH
69	<last_pay_drawn></last_pay_drawn>	LAST PAY DRAWN BY PENSIONER
70	<grade_pay></grade_pay>	GRADE PAY ACCORDING TO 6TH CPC
71	<pre_revised_pay_scale></pre_revised_pay_scale>	PRE 6TH CPC PAY SCALE
72	<pao_diary></pao_diary>	DIARY NUMBER OF PAY AND ACCOUNT OFFICE (REVISION AUTHORITY ISSUING OFFICE)
73	<med_alwnce></med_alwnce>	MEDICAL ALLOWANCE FLAG (Y/N)
74	<amt_med_alwnce></amt_med_alwnce>	MEDICAL ALLOWANCE AMOUNT
75	<med_alwnc_from></med_alwnc_from>	MEDICAL ALLOWANCE TO BE PAID FROM (DATE)
76	<pay_commision></pay_commision>	PAY COMMISSION DESCRIPTION i.e. PREVIOUS, 6TH CPC, 6-CPC(OM 24/SEP/2012)

Annexure-III Format of Acknowledgment (XML)

1. <u>File Name (Nomenclature)</u> : ACK-<SAME as of ePPO (Revision) Data file>.xml

The Name of file should be same as what file name was received from CPAO but with a prefix 'ACK-'

E.g. <u>ACK-1724046-20150601.xml</u>

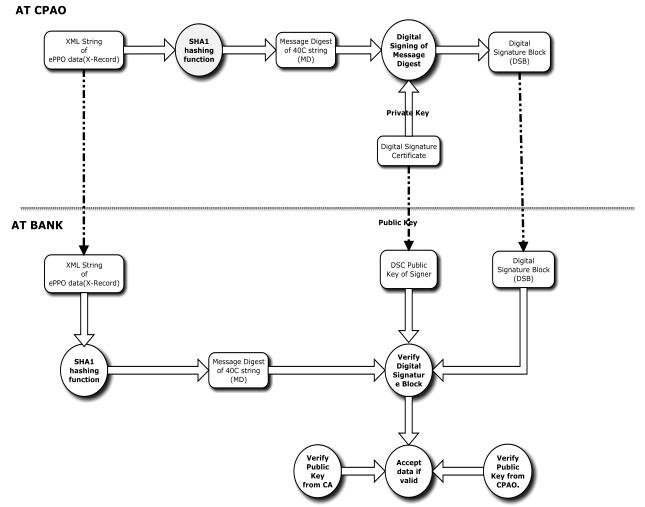
2. File Structure :

2.1. TAG Description :

- 2.1.1. <PPO_NO>: PPO Number of Case Processed.
- **2.1.2. <DIARY_NO>:** Diary Number Associated with PPO number (Already provided by CPAO in ePPO (Revision) Data file).
- **2.1.3. <SSA_NO>:** SSA Number Associated with PPO number (Already provided by CPAO in ePPO (Revision) Data file).
- **2.1.4. <PROCESSED_DATE>:** Date when case was processed by BANK (CPPC).
- 2.1.5. <PROCESSING_STATUS>: This Tag will only have either of two Value
 - **2.1.5.1. ACCEPTED:** in case of successful processing.
 - **2.1.5.2. REJECTED:** in case of discrepancy or error.
- **2.1.6. <PROCESSING_REMARKS>:** This is mandatory in case when processing status is 'REJECTED' and description should be given about the error/discrepancy.

<u>Note</u>: The acknowledgment file should be generated individually for all cases received and processed i.e. a file will contain record for only one PPO case, <u>if acknowledgment</u> <u>is not received within 3 days it will be treated as accepted</u>

Annexure-IV Digital Signing Logic



Digital Signing of ePPO - Signing and Verification Logic

Logic to Validate Digitally Signed Revision (SSA) XML File of CPAO Structure of Digitally Signed XML

<ssa></ssa>
<rowset></rowset>
<revision num="1"></revision>
SSA DATA
<signature_node></signature_node>
<serial no=""></serial>
—
Serial No of Digital Certificate
<signed_by></signed_by>
Name of The Person who Signed it
<valid_till></valid_till>
Validatity of Digital Signature
<version></version>
Software Version and Release Date
<msg_digest></msg_digest>
Digitally Signed HASH

How to read Digitally Signed XML

- Step 1: Read <ROWSET> </ROWSET>
- Step 2: Calculate SHA1 Hash of <ROWSET> </ROWSET>
- **Step 3:** Use the Public Key Available at CPAO.NIC.IN in BANK LOGIN, Match the serial No <Serial_no> </Serial_no> with the Keys Available. Please Note These Keys can be installed in your X509 Store.
- Step 4: Read Value <Msg_Digest> </Msg_Digest>
- Step 5: Match the Calculated HASH of Step 2 + Public Key with Data from Step 4

.Net (C#) Code Sample to Demonstrate how to Validate a Digitally Signed XML

//.NET C# Button Click Event Code to verify Signed XML Document
 private void SignVerify_Click(object sender, EventArgs e)
 {
 try
 try
 try
 try
 }
 }
}

{ //Load Signed XML Document XmIDocument origSignedXmI = new XmIDocument();//Change Environment.GetEnvironmentVariable("TEMP") + @"\Signed.xml" with Correct Local Path origSignedXml.Load(Environment.GetEnvironmentVariable("TEMP") + @"\" + PPODairyNo + "Signed.xml"); //Extract Only Data Part From Signed XML Document XmlDocument final = new XmlDocument(); XmlNode recnod = final.ImportNode(origSignedXml.DocumentElement.SelectSingleNode("/SSA/ROWSET"), true); final.LoadXml(recnod.OuterXml.ToString()); final.Save(Environment.GetEnvironmentVariable("TEMP") + @"p2.xml"); //Read Only Message Digest From Signed XML Document XmlDocument oo = new XmlDocument(); //Change Environment.GetEnvironmentVariable("TEMP") + @"\Signed.xml" with Correct Local Path oo.Load(Environment.GetEnvironmentVariable("TEMP") + @"\Signed.xml"); XmINode recnod1 = oo.DocumentElement.SelectSingleNode("/SSA/Signature_Node/Msg_Digest"); //Local Path Of Certifiacte's Public Key string CerPath = $@"d:\pub1.cer";$ //Verify Data Part, Calls Verify() Method With Required Parameters if (Verify(GetSHA1Hash(Environment.GetEnvironmentVariable("TEMP") + @"p2.xml"), Convert.FromBase64String(recnod1.InnerText.ToString()), CerPath)) MessageBox.Show("Verified !!"); else MessageBox.Show("Not Verified !!"); } catch (Exception ex) MessageBox.Show("Some Error, Contact System Admin!! " + ex.Message.ToString()); } } //Function to verify XML Data static bool Verify(string text, byte[] signature, string certPath) **{** //Load Public Certificate X509Certificate2 cert = new X509Certificate2(certPath);

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```
RSACryptoServiceProvider csp =
(RSACryptoServiceProvider)cert.PublicKey.Key;
       // Hash the data
       SHA1Managed sha1 = new SHA1Managed();
       UnicodeEncoding encoding = new UnicodeEncoding();
       byte[] data = encoding.GetBytes(text);
       byte[] hash = sha1.ComputeHash(data);
       // Verify the signature with the hash
       return csp.VerifyHash(hash, CryptoConfig.MapNameToOID("SHA1"),
signature);
     }
//Function to get SHA1
      public static string GetSHA1Hash(string pathName)
     {
       string strResult = "";
       string strHashData = "";
       byte[] arrbytHashValue;
       System.IO.FileStream oFileStream = null;
       System.Security.Cryptography.SHA1CryptoServiceProvider oSHA1Hasher =
new System.Security.Cryptography.SHA1CryptoServiceProvider();
       try
       {
          oFileStream = GetFileStream(pathName);
          arrbytHashValue = oSHA1Hasher.ComputeHash(oFileStream);
          oFileStream.Close();
          strHashData = System.BitConverter.ToString(arrbytHashValue);
          strHashData = strHashData.Replace("-", "");
          strResult = strHashData;
       }
       catch (System.Exception ex)
          System.Windows.Forms.MessageBox.Show(ex.Message, "Error!",
System.Windows.Forms.MessageBoxButtons.OK,
System.Windows.Forms.MessageBoxIcon.Error,
System.Windows.Forms.MessageBoxDefaultButton.Button1);
       }
       return (strResult);
```

Annexure-IV

File Name Conventions

XML files

C<SSA NUMBER>-DATE ON WHICH FILE IS GENERATED (YYYYMMDD).XML

Eg.

C1811388-20151007.XML

PDF files

C<SSA NUMBER>-DATE ON WHICH FILE IS GENERATED (YYYYMMDD).PDF

Eg.

C1811388-20151007.PDF

PAO AUTHORITY SCAN (PDF)

P<SSA NUMBER>-DATE ON WHICH FILE IS GENERATED (YYYYMMDD).PDF

Eg.

P1811388-20151007.PDF

Annexure-V

Infrastructure Requirement

CPAO

- Digital signatures are required for all signatories.
- One .Net server is required as .Net technology will be used to digital sign the documents and data.
- Software modules are required to be prepared for digital signing the documents.

Banks

- SFTP server is required at bank end, where files will be copy by the CPAO.
- Banks to provide the user name and password for CPAO, to access the sftp server.
- Banks to prepare software for importing the XML data from CPAO, directly into their CPPC system.