



## Payroll Benefits Contributions 1.0

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### Abstract

This document describes HR-XML's Payroll Benefit Contributions schema. The schema allows the capture of information used by third party administrators to manage employees benefit contributions.

### Status of this Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

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# 1 Overview

## 1.1 Objective

Create a Schema/DTD design to define payroll benefit contributions information that would be used by third party administrators to manage employees benefit contributions. This first design is only intended for US payroll-benefit contributions.

### 1.1.1 Domain Issues

The Internet has transformed the way payroll benefit contribution information can be managed by third party administrators and the people who participate in these programs. People are now able to view their payroll contributions and manage how those monies are disbursed through web interfaces. They are able to view balances and contact the third party administrators directly if any issues have occurred.

While the Internet has transformed the management of payroll benefit contributions dramatically, the current mechanisms of actually transferring payroll information from payroll vendors to third party administrators is still quite cumbersome. Some of the major areas of concern are listed below:

- Almost all third party administrators have their proprietary database formats. The payroll vendors must implement each type of file definition for each third party administrator they interface with. Maintenance can be a 'nightmare.'
- Integrating payroll management systems with Internet-based third party administrator services is made difficult by the wide variety of XML and non-XML data exchange formats in use today.
- SPARK (the Society of Pension Administrator and Record Keepers) has developed an ASCII file format that has been adopted by some of the major third party administrators. Instead of having payroll vendors converting to SPARK formats and then having to convert to XML formats a short time later, we are trying to reduce the amount of programming that will need to be done.

### 1.1.2 Relationship to Business Processes

Many companies have defined/deferred contributions as part of their benefits packages that they offer to employees. In order to process these contributions correctly, the employees' participation information must be used to interface with the payroll system and third party administrators. This document specifies the data elements that will be necessary to process benefit contributions within a payroll and to send information to the third party administrators.

### 1.1.3 Background of Payroll Benefit Contributions (Son of Spark)

The SPARK standard was forwarded to the payroll workgroup to define the benefit contributions information to be transmitted between a payroll vendor and a third party administrator. The first phase of this project was to convert the SPARK standard to XML. The payroll transmission was demonstrated during a conference using a demo XML format. This initial phase was called the Son of SPARK.

## 1.2 Design Requirements

Develop a Schema and documentation to allow the transfer of payroll benefits contributions information between employers and third-party administrators.

## 1.3 Scope

### 1.3.1 Within Scope

Define the payroll benefit contributions structure for use in the payroll schemas defined by the HR-XML Consortium. This will include two transactions:

- Payroll processing of benefit contributions
- Updating the benefit contributions election

### 1.3.2 Outside Scope

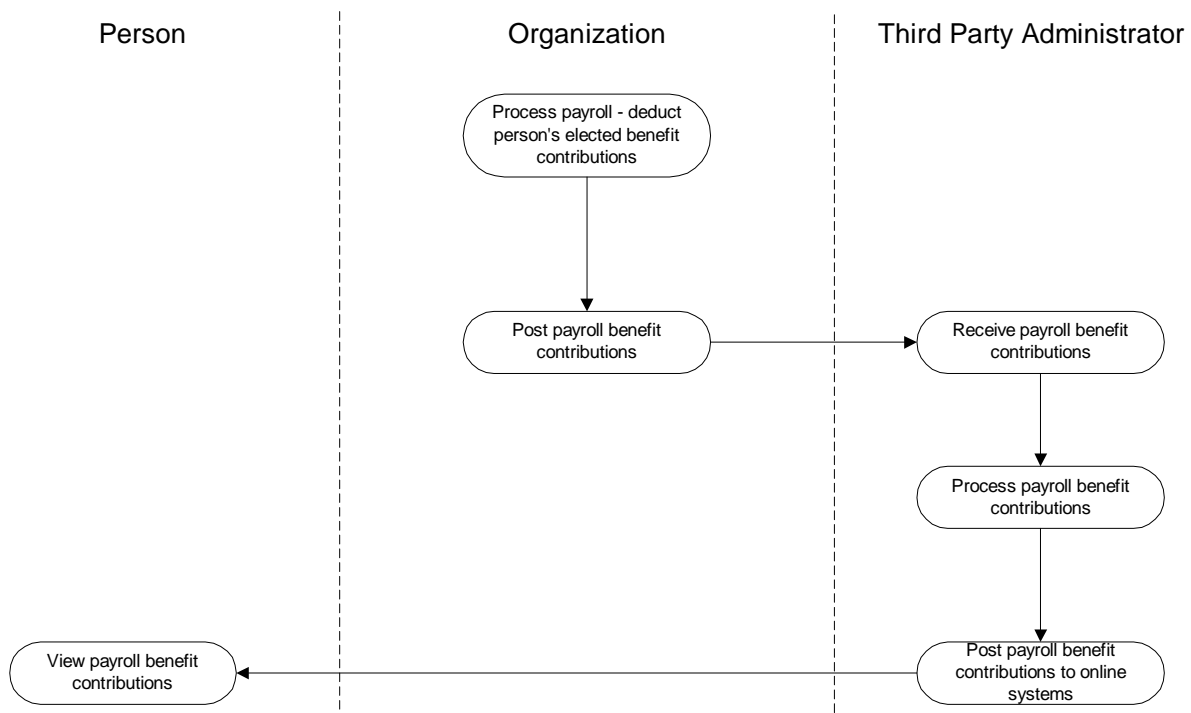
Standardized XML vocabularies with no direct references to any US terminology will allow international payroll vendors to easily adopt the standard for international use. However, this specification contains benefit information specific to the US. Attributes may need to be added or driven off a table that stores the types of plans available by country.

## 1.4 Business Use Case

The use case describes the payroll benefits transactions between an organization, employee, and third-party administrator. This is further defined in the activity diagrams below, where the swim lanes denote the transmission of information between business partners.

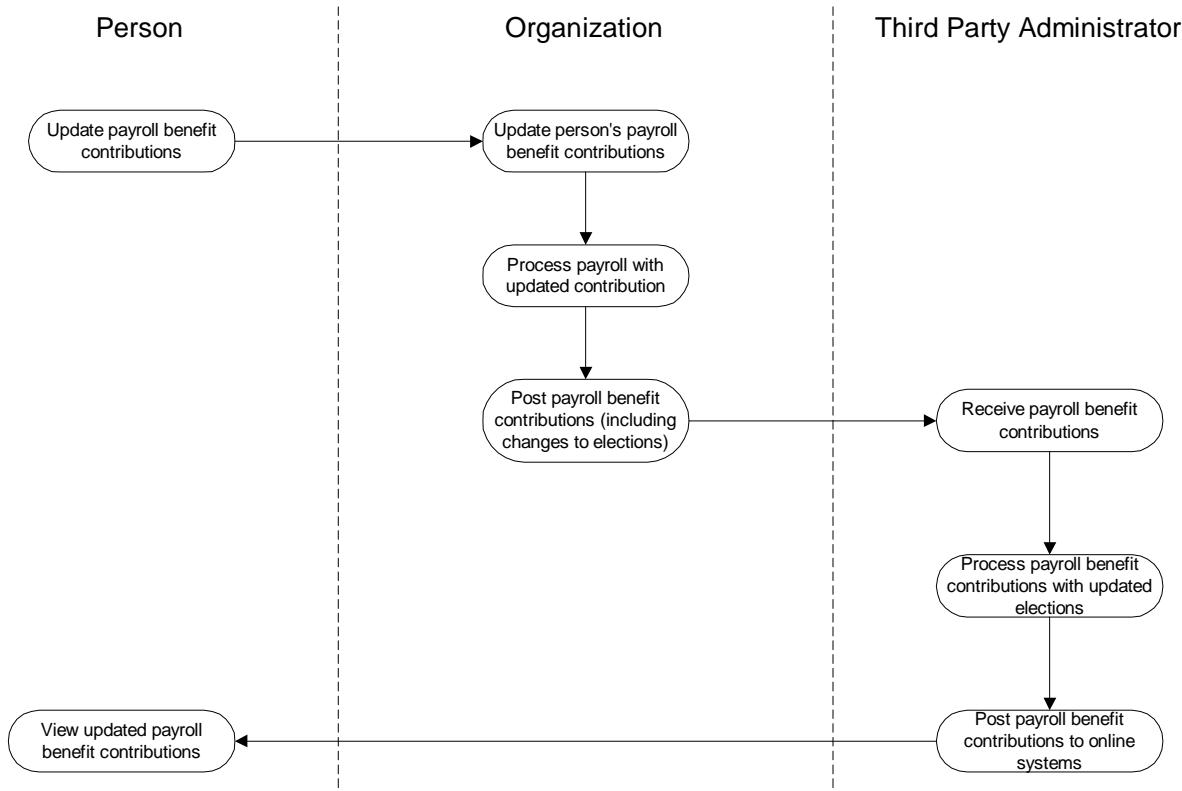
### 1.4.1 Payroll Processing Benefit Contributions

As the organization processes payroll, the benefit contributions are calculated and posted. This information is transmitted to the third-party administrator. The administrator posts the contributions to the online system, where the employee may review the contributions information.

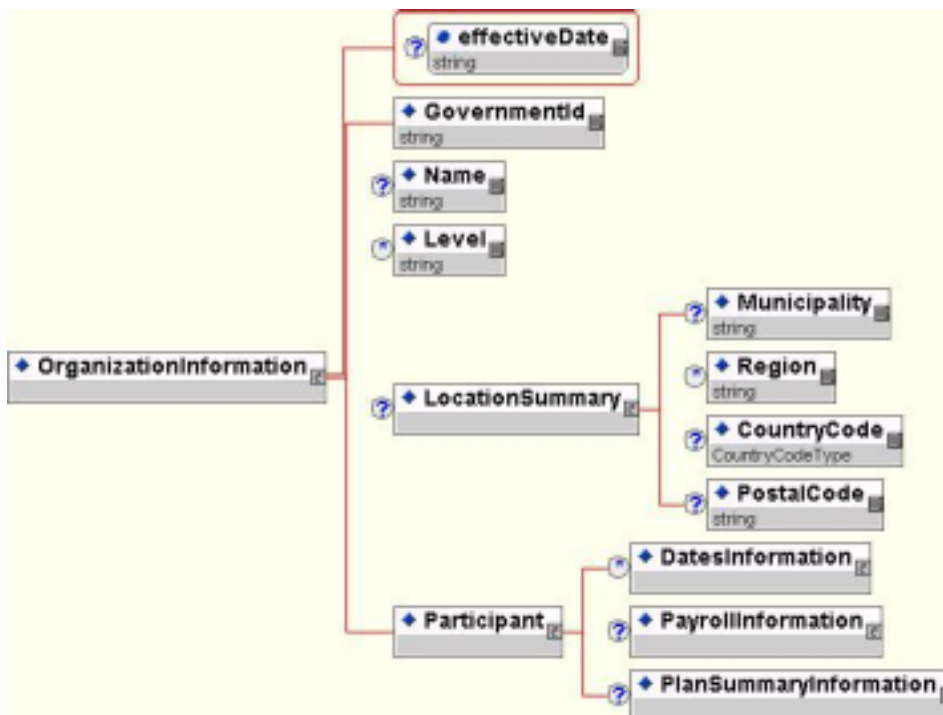
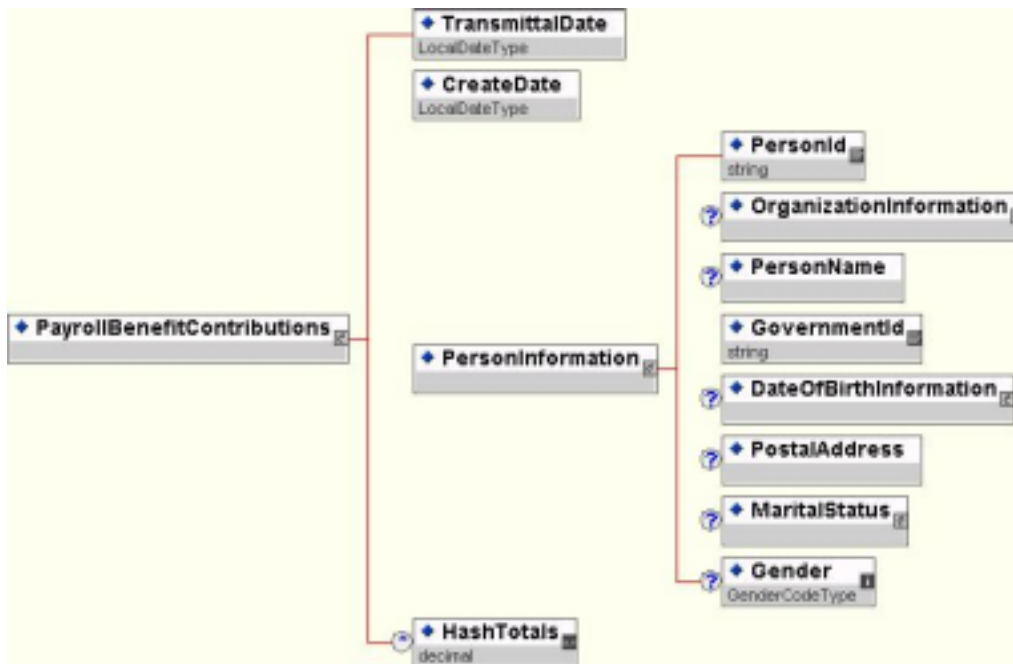


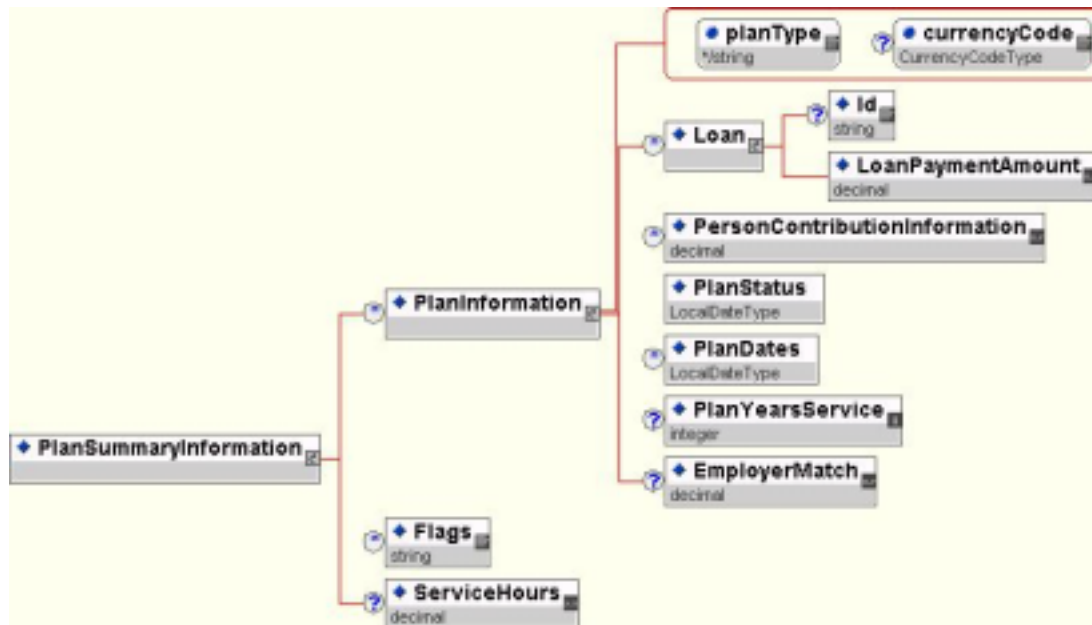
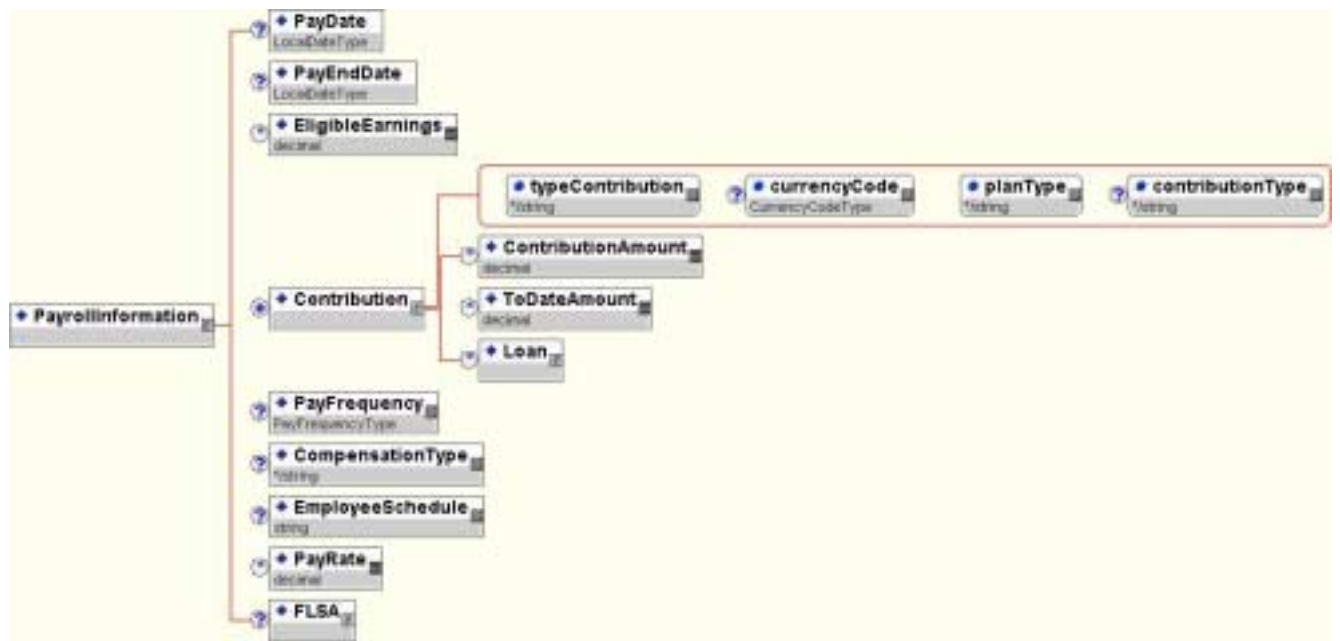
### 1.4.2 Updating Benefit Contributions Election

When a current participant changes their benefit contributions, the new contribution information is transmitted to the organization. The organization calculates and posts the payroll using the new benefit contributions. The third-party administrator posts the updated contributions to the online system, to be reviewed by the employee.



## 2 Schema/DTD Design





## 2.2 Schema/DTD Elements Explained

### 2.2.1 PayrollBenefitContributions

Component Name	ContentModel Data type Occurrence: Sequence   Choice   All (minOccurs/maxOccurs) Attributes	Definition
/ PayrollBenefitContributions	TransmittalDate - LocalDateType - S (1/1) CreateDate - LocalDateType - S (1/1) PersonInformation - [complexType] - S (1/1) HashTotals - xsd:decimal - S (0/*)	The root element for the schema. This is the starting point for the Payroll Benefit Contributions schema/dtd design.
/ PayrollBenefitContributions/ TransmittalDate	- LocalDateType - S (1/1)	Date of transmission to the plan administrator.
/ PayrollBenefitContributions/ CreateDate	- LocalDateType - S (1/1)	The date the XML file was created by the payroll system transmitting the information.
/ PayrollBenefitContributions/ PersonInformation	PersonId - xsd:string - S (1/1) OrganizationInformation - [complexType] - S (0/1) PersonName - PersonNameType - S (0/1) GovernmentId - xsd:string - S (1/1) DateOfBirthInformation - [complexType] - S (0/1) PostalAddress - PostalAddressType - S (0/1) MaritalStatus - [complexType] - S (0/1) Gender - GenderCodeType - S (0/1)	Contains the information about the person such as name, government id's, and date of birth.
/ PayrollBenefitContributions/ PersonInformation/ PersonId	- xsd:string - S (1/1)	Contains the person's identifier as it relates to the person within the organization.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation	GovernmentId - xsd:string - S (1/1) Name - xsd:string - S (0/1) Level - xsd:string - S (0/*) LocationSummary - [complexType] - S (0/1) Participant - [complexType] - S (1/1) effectiveDate xsd:string	Contains the organization information as it relates to the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ effectiveDate	- xsd:string -	The effective date for the organization information. This will help keep track if there are any organizational changes and when they occurred (including transfers).
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/	xsd:extension base: xsd:string	An identification number issued by a government to identify a person. For example the CPF in Brazil. or the Social Security Number



		in the United States..
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ GovernmentId/ <b>countryCode</b>	- CountryCodeType -	Specifies the country issuing the government id. The countryCode value specified is valid only in accordance with ISO 3166. See ISO 3166. For authorities not bound by a country, this attribute would be blank, e.g. the United Nations.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ GovernmentId/ <b>jurisdiction</b>	- xsd:string -	Specifies the geographical area of the issuing authority, such as state, county, region, municipality. If the issuing authority was the Department of Motor Vehicles in North Carolina, the countryCode would be US and the jurisdiction NC.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ GovernmentId/ <b>issuingAuthority</b>	- xsd:string -	Specifies the issuing authority of the GovernmentId, e.g. United Nations, Department of Motor Vehicles, Social Security Service. If the issuing authority was United Nations, the countryCode and jurisdiction would be blank.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ GovernmentId/ <b>document</b>	- xsd:string -	Specifies the document tied to the GovernmentId, e.g. drivers license, passport, SSN.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ <b>Name</b>	- xsd:string - S (0/1)	The organization name.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ <b>Level</b>	- xsd:string - S (0/*)	Describes which level of the organization the person is located in.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ <b>LocationSummary</b>	Municipality - xsd:string - S (0/1) Region - xsd:string - S (0/*) CountryCode - CountryCodeType - S (0/1) PostalCode - xsd:string - S (0/1)	Information on where organization is located. This information may include a municipality, region, country and postal code.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ LocationSummary/ <b>Municipality</b>	- xsd:string - S (0/1)	Represents the city, town, village, or hamlet.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ LocationSummary/ <b>Region</b>	- xsd:string - S (0/*)	Represents the State, Province, and/or County. Military addresses should be stored in multiple regions (hierarchy region from highest to most specific).
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ LocationSummary/ <b>CountryCode</b>	- CountryCodeType - S (0/1)	Contains the ISO 3166-1 two-character country code.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ LocationSummary/ <b>PostalCode</b>	- xsd:string - S (0/1)	A postal code. Determines how mail is sorted and delivered.

PostalCode		
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ <b>Participant</b>	DatesInformation - xsd:string - S (0/*) PayrollInformation - [complexType] - S (0/1) PlanSummaryInformation - [complexType] - S (0/1)	Contains all the information related to the person (employee) and the information gathered for that employee.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ <b>DatesInformation</b>	StartDate - LocalDateType - S (0/1) EndDate - LocalDateType - S (0/1) dateType	Contains the begin and end dates for various events in a person's employment history. All dates are as per ISO 8601 (YYYY-MM-DD)
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ DatesInformation/ dateType	xsd:restriction base: xsd:string (enumeration)	Describes the employment status related to the date
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ DatesInformation/ <b>StartDate</b>	- LocalDateType - S (0/1)	Contains the begin date for the event.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ DatesInformation/ <b>EndDate</b>	- LocalDateType - S (0/1)	Contains the end date for the event.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ <b>PayrollInformation</b>	PayDate - LocalDateType - S (0/1) PayEndDate - LocalDateType - S (0/1) EligibleEarnings - xsd:decimal - S (0/*) Contribution - xsd:string - S (1/*) PayFrequency - PayFrequencyType - S (0/1) CompensationType - xsd:string - S (0/1) EmployeeSchedule - xsd:string - S (0/1) PayRate - xsd:decimal - S (0/*) FLSA - [complexType] - S (0/1)	Contains the payroll information as it relates to the person. This will include the contributions, payrates, earnings, paydates, etc.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>PayDate</b>	- LocalDateType - S (0/1)	The pay (check) date that this entry relates to for the person. As per ISO standard 8601
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>PayEndDate</b>	- LocalDateType - S (0/1)	The pay period end date for the contribution information.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PavrollInformation/	xsd:extension base: xsd:decimal	All the eligible earnings for this payroll contribution.

<b>EligibleEarnings</b>		
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ EligibleEarnings/ periodType	xsd:restriction base: xsd:string (enumeration)	Describes the earnings that are being defined for this contribution
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ EligibleEarnings/ currencyCode	- CurrencyCodeType -	Defines the currency code being used for the earnings. Based on ISO standard.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ EligibleEarnings/ planType	xsd:restriction base: xsd:string (enumeration)	Describes the plan type being contributed to. ***US only defined plans
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>Contribution</b>	ContributionAmount - xsd:decimal - S (0/*) ToDateAmount - xsd:decimal - S (0/*) Loan - [complexType] - S (0/*) typeContribution - required currencyCode CurrencyCodeType planType - required contributionType	Contains all the contribution information as it relates to the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ typeContribution	xsd:restriction base: xsd:string (enumeration)	Describes the type of contribution.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ currencyCode	- CurrencyCodeType -	Defines the currency code being used for the contribution/loan. Based on ISO standard.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ planType	xsd:restriction base: xsd:string (enumeration)	Describes the plan type being contributed to. ***US only defined plans
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ contributionType	xsd:restriction base: xsd:string (enumeration)	Describes whether Pretax, posttax or loan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/	xsd:extension base: xsd:decimal	Contains the amount of the contribution.

<b>ContributionAmount</b>		
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ ContributionAmount/ <b>planId</b>	- xsd:string -	Plan identification code used by the plan administrator.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ <b>ToDateAmount</b>	xsd:extension base: xsd:decimal	Contains the year to date amount for the contributions.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ ToDateAmount/ <b>toDateType</b>	xsd:restriction base: xsd:string (enumeration)	Describes the To Date amount.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ <b>Loan</b>	Id - xsd:string - S (0/1) LoanPaymentAmount - xsd:decimal - S (1/1)	Gives the loan information such as ID and amount.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ Loan/ <b>Id</b>	- xsd:string - S (0/1)	Identifies the loan
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ Loan/ <b>LoanPaymentAmount</b>	xsd:extension base: xsd:decimal	The goal amount for the loan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ Contribution/ Loan/ LoanPaymentAmount/ <b>toDateType</b>	xsd:restriction base: xsd:string (enumeration)	Describes the Loan Payment amount.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>PayFrequency</b>	xsd:restriction base: PayFrequencyType (enumeration)	Describes the pay frequency for this person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>CompensationType</b>	xsd:restriction base: xsd:string (enumeration)	Describes the compensation basis for the employee.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>EmployeeSchedule</b>	- xsd:string - S (0/1)	Describes the employment status of the person. This may be full time, part time, part time with benefits, contract, or any other applicable schedule.

/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>PayRate</b>	xsd:extension base: xsd:decimal	States the pay rate for the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ PayRate/ payRateType	xsd:restriction base: xsd:string (enumeration)	Describes base pay rate for the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ PayRate/ currencyCode	- CurrencyCodeType -	Defines the currency code being used for the pay rate. Based on ISO standard.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ <b>FLSA</b>	Exempt - xsd:string - C (1/1) NonExempt - xsd:string - C (1/1)	Contains the Fair Labor Standards Act status. ** US only.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ FLSA/ <b>Exempt</b>	- xsd:string - C (1/1)	Defines that the person is exempt under FLSA rules.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PayrollInformation/ FLSA/ <b>NonExempt</b>	- xsd:string - C (1/1)	Describes that the person is non-exempt under FLSA rules.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ <b>PlanSummaryInformation</b>	PlanInformation - xsd:string - S (0/*) Flags - xsd:string - S (0/*) ServiceHours - xsd:decimal - S (0/1)	Contains the summary of the plan information as it relates to the person. Includes elements containing indicators (such as HCE) for the person and beneficiary information.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ <b>PlanInformation</b>	Loan - [complexType] - S (0/*) PersonContributionInformation - xsd:decimal - S (0/*) PlanStatus - LocalDateType - S (1/1) PlanDates - LocalDateType - S (0/*) PlanYearsService - xsd:integer - S (0/1) EmployerMatch - xsd:decimal - S (0/1) planType - required currencyCode CurrencyCodeType	Describes the plan(s) that the person is a part of.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/	xsd:restriction base: xsd:string (enumeration)	Describes the plan type being contributed to. ***US only defined plans

<b>planType</b>		
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>currencyCode</b>	- CurrencyCodeType -	
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>Loan</b>	Id - xsd:string - S (0/1) LoanPaymentAmount - xsd:decimal - S (1/1)	Gives the loan information such as ID and amount.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ Loan/ <b>Id</b>	- xsd:string - S (0/1)	Identifies the loan
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ Loan/ <b>LoanPaymentAmount</b>	xsd:extension base: xsd:decimal	The goal amount for the loan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ Loan/ LoanPaymentAmount/ <b>toDateType</b>	xsd:restriction base: xsd:string (enumeration)	Describes the Loan Payment amount.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>PersonContributionInformation</b>	xsd:extension base: xsd:decimal	Describes the contribution or loan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ PersonContributionInformation/ <b>contributionPctAmt</b>	xsd:restriction base: xsd:string (enumeration)	Specifies whether the contribution is a percent or flat amount.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ PersonContributionInformation/ <b>contributionType</b>	xsd:restriction base: xsd:string (enumeration)	

/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ PersonContributionInformation/ <b>goalOrPeriod</b>	xsd:restriction base: xsd:string (enumeration)	Describes whether the contribution applies to a period or goal.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>PlanStatus</b>	xsd:extension base: LocalDateType	Contains the effective date and type for the plan status for the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ PlanStatus/ <b>planStatusType</b>	xsd:restriction base: xsd:string (enumeration)	
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>PlanDates</b>	xsd:extension base: LocalDateType	Contains various date information related to the person's eligibility within the plan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ PlanDates/ <b>planDateType</b>	xsd:restriction base: xsd:string (enumeration)	
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>PlanYearsService</b>	- xsd:integer - S (0/1)	Contains the number of years the person has been involved in the plan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ PlanInformation/ <b>EmployerMatch</b>	- xsd:decimal - S (0/1)	Contains the employer match percentage for this person's plan.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ <b>Flags</b>	xsd:extension base: xsd:string	Describes a variety of categories for the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/	xsd:restriction base: xsd:string (enumeration)	

PlanSummaryInformation/ Flags/ <b>flagType</b>		
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ <b>ServiceHours</b>	xsd:extension base: xsd:decimal	Contains the number of service hours for the person.
/ PayrollBenefitContributions/ PersonInformation/ OrganizationInformation/ Participant/ PlanSummaryInformation/ ServiceHours/ <b>periodType</b>	xsd:restriction base: xsd:string (enumeration)	
/ PayrollBenefitContributions/ PersonInformation/ <b>PersonName</b>	- <b>PersonNameType</b> - S (0/1)	Identifies a person. See PersonName-1.1 Recommendation.
/ PayrollBenefitContributions/ PersonInformation/ <b>GovernmentId</b>	xsd:extension base: xsd:string	An identification number issued by a government to identify a person. For example the CPF in Brazil, or the Social Security Number in the United States..
/ PayrollBenefitContributions/ PersonInformation/ GovernmentId/ <b>countryCode</b>	- <b>CountryCodeType</b> -	Specifies the country issuing the government id. The countryCode value specified is valid only in accordance with ISO 3166. See ISO 3166. For authorities not bound by a country, this attribute would be blank, e.g. the United Nations.
/ PayrollBenefitContributions/ PersonInformation/ GovernmentId/ <b>jurisdiction</b>	- <b>xsd:string</b> -	Specifies the geographical area of the issuing authority, such as state, county, region, municipality. If the issuing authority was the Department of Motor Vehicles in North Carolina, the countryCode would be US and the jurisdiction NC.
/ PayrollBenefitContributions/ PersonInformation/ GovernmentId/ <b>issuingAuthority</b>	- <b>xsd:string</b> -	Specifies the issuing authority of the GovernmentId, e.g. United Nations, Department of Motor Vehicles, Social Security Service. If the issuing authority was United Nations, the countryCode and jurisdiction would be blank.
/ PayrollBenefitContributions/ PersonInformation/ GovernmentId/ <b>document</b>	- <b>xsd:string</b> -	Specifies the document tied to the GovernmentId, e.g. drivers license, passport, SSN.
/ PayrollBenefitContributions/ PersonInformation/ <b>DateOfBirthInformation</b>	DateOfBirth - <b>LocalDateType</b> - S (1/1) PriorIncorrectDateOfBirth - <b>LocalDateType</b> - S (0/1)	Contains information regarding the person's date of birth.
/ PayrollBenefitContributions/ PersonInformation/ DateOfBirthInformation/ <b>DateOfBirth</b>	- <b>LocalDateType</b> - S (1/1)	The date of birth for the person.
/ PayrollBenefitContributions/ PersonInformation/ DateOfBirthInformation/ <b>PriorIncorrectDateOfBirth</b>	- <b>LocalDateType</b> - S (0/1)	A date of birth that was incorrectly entered for a person.
/ PayrollBenefitContributions/ PersonInformation/ <b>PostalAddress</b>	- <b>PostalAddressType</b> - S (0/1)	A mailing address. Describes a postal address used for delivery of mail. The address may



<b>PostalAddress</b>		include the country code, postal code, a region, municipality, delivery address, and the recipient. See PostalAddress 1.1 Recommendation for further information.
/ PayrollBenefitContributions/ PersonInformation/ <b>MaritalStatus</b>	MaritalStatusCode - <b>xsd:string</b> - S (1/1) StartDate - <b>LocalDateType</b> - S (1/1)	Contains the marital status of the person such as the code and start date.
/ PayrollBenefitContributions/ PersonInformation/ MaritalStatus/ <b>MaritalStatusCode</b>	<b>xsd:restriction base:</b> <b>xsd:string (enumeration)</b>	Contains a text value of the marital status of the person.
/ PayrollBenefitContributions/ PersonInformation/ MaritalStatus/ <b>StartDate</b>	- <b>LocalDateType</b> - S (1/1)	Contains the begin date for the event.
/ PayrollBenefitContributions/ PersonInformation/ <b>Gender</b>	- <b>GenderCodeType</b> - S (0/1)	Describes the sex of the person.
/ PayrollBenefitContributions/ <b>HashTotals</b>	<b>xsd:extension base:</b> <b>xsd:decimal</b>	Contains the hash totals for each plan id that is contained in the XML file.
/ PayrollBenefitContributions/ HashTotals/ <b>totalPlanId</b>	- <b>xsd:string</b> -	Contains the plan id for the total.

## 2.2.2 PersonName 1.2

<b>Component Name</b>	<b>ContentModel</b> Data type Occurrence: <u>Sequence</u>   <u>Choice</u>   <u>All</u> (minOccurs/maxOccurs) Attributes	<b>Definition</b>
/ <b>PersonName</b>	- <b>PersonNameType</b> - (1/1)	The name of a person.
/ PersonName/ <b>FormattedName</b>	<b>xsd:restriction base:</b> <b>xsd:string</b>	Contains, in one string, a fully formatted name with all of its pieces in their proper place. This includes all of the necessary punctuation. This de-normalized form of the name cannot be easily parsed. The use of multiple occurrences are officially deprecated in this release and will be removed in a future version.
/ PersonName/ FormattedName/ <b>type</b>	<b>xsd:restriction base:</b> <b>xsd:string (enumeration)</b>	Do not use. This attribute will be deprecated in v1.1 and completely removed in a future version. Defines the purpose of the formatted name.
/ PersonName/ <b>LegalName</b>	- <b>xsd:string</b> - S (0/1)	Legal name used for legal documentation or other legal purposes. Contains, in one string, a fully formatted name with all of its pieces in their proper place. This includes all of the necessary punctuation.
/ PersonName/ <b>GivenName</b>	- <b>xsd:string</b> - S (0/*)	Contains the given or chosen name. Also known as a person's first name. If multiple givenNames are used, the order is implied.
/ PersonName/ <b>PreferredGivenName</b>	- <b>xsd:string</b> - S (0/1)	Contains the chosen name by which the person prefers to be addressed. Note: This name may be a name other than a given name, such as a nickname.
/ PersonName/ <b>MiddleName</b>	- <b>xsd:string</b> - S (0/1)	Contains a person's middle name or initial.

/ PersonName/ <b>FamilyName</b>	xsd:restriction base: xsd:string	Contains the non-chosen or inherited name. Also known as a person's last name in the Western context. The order is implied by the order of appearance of the FamilyName elements in the XML document.
/ PersonName/ FamilyName/ <b>primary</b>	xsd:restriction base: xsd:string (enumeration)	Defines the order when multiple family names are used.
/ PersonName/ FamilyName/ <b>prefix</b>	- xsd:string -	Defines the context for the PersonName prefix, such as family name prefix or aristocratic prefix.
/ PersonName/ <b>Affix</b>	xsd:restriction base: xsd:string	Contains the remaining parts of the PersonName as defined by the type attribute.
/ PersonName/ Affix/ <b>type</b>	xsd:restriction base: xsd:string (enumeration)	Defines the context for the affix.

### 2.2.3 PostalAddress 1.2

Component Name	ContentModel Data type Occurrence: Sequence   Choice   All (minOccurs/maxOccurs) Attributes	Definition
/ <b>PostalAddress</b>	- PostalAddressType - (1/1)	Describes a postal address used for delivery of mail.
/ PostalAddress/ <b>type</b>	xsd:restriction base: xsd:string (enumeration)	Defines if the postal address is a street address, military, or post office box.
/ PostalAddress/ <b>CountryCode</b>	xsd:restriction base: xsd:string	Contains the ISO 3166-1 two-character country code.
/ PostalAddress/ <b>PostalCode</b>	- xsd:string - S (0/1)	Codes established by postal authorities for purposes of sorting and delivering mail.
/ PostalAddress/ <b>Region</b>	- xsd:string - S (0/*)	Represents the State, Province, and/or County. Military addresses should be stored in multiple regions (hierarchy region from highest to most specific): 1 st region = APO (Army/Airforce Post Office); FPO (Fleet Post Office). 2 nd region = 2 letter designator for part of world (AE ☺ Europe, AA ☺ Americas)
/ PostalAddress/ <b>Municipality</b>	- xsd:string - S (0/1)	Represents the city, town, village, or hamlet.
/ PostalAddress/ <b>DeliveryAddress</b>	AddressLine - xsd:string - S (0/*) StreetName - xsd:string - S (0/1) BuildingNumber - xsd:string - S (0/1) Unit - xsd:string - S (0/1) PostOfficeBox - xsd:string - S (0/1)	Contains one formatted address line with all of its pieces in their proper place. This includes all of the necessary punctuation. This de-normalized form of the delivery address cannot be easily parsed. AddressLine is used for delivery by the postal service. May contain the name or number of the building, house, and/or street. If the address is decomposed into StreetName and BuildingNumber, do not use AddressLine to store the address. Examples may include: Hancock Building; 5223 Oak Street; 213; East 23rd Avenue; P.O. Box 241; Suite 200.
/ PostalAddress/ DeliveryAddress/ <b>AddressLine</b>	- xsd:string - S (0/*)	AddressLine is used for delivery by the postal service. May contain the name or number of the building, house, and/or street. If the address is decomposed into StreetName and BuildingNumber, do not use AddressLine to store the address. Examples may

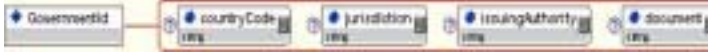
		include: Hancock Building; 5223 Oak Street; 213; East 23rd Avenue; P.O. Box 241; Suite 200.
/ PostalAddress/ DeliveryAddress/ <b>StreetName</b>	- xsd:string - S (0/1)	Contains the street name or number. This may be used for verification, building the address, or storing in a database. If the address is decomposed into StreetName, BuildingNumber and Unit, do not use AddressLine to duplicate that part of the address information. Examples may include: Oak Street; East 23rd Avenue.
/ PostalAddress/ DeliveryAddress/ <b>BuildingNumber</b>	- xsd:string - S (0/1)	This element is defined as a string to handle "numbers" such as 7A or 15/III. The term "BuildingNumber" was also used instead of HouseNumber so all types of buildings could apply (house, building, warehouse, tower, etc). This may be used for verification, building the address, or storing in a database. If the address is decomposed into StreetName, BuildingNumber and Unit, do not use AddressLine to duplicate that part of the address information. Examples may include: Hancock Building; 5223.
/ PostalAddress/ DeliveryAddress/ <b>Unit</b>	- xsd:string - S (0/1)	Contains the Apartment, Suite, Unit, Room, Floor, Trailer, Level, Hanger, etc. This may be used for verification, building the address, or storing in a database. If the address is decomposed into StreetName, BuildingNumber and Unit, do not use AddressLine to duplicate that part of the address information. Examples may include: Apt. 124, Ste. 300, Upper, Hanger A.
/ PostalAddress/ DeliveryAddress/ <b>PostOfficeBox</b>	- xsd:string - S (0/1)	Contains the Post Office Box. This may be used for verification, building the address, or storing in a database. Example: P.O. Box 241.
/ PostalAddress/ <b>Recipient</b>	PersonName - PersonNameType - S (0/1) AdditionalText - xsd:string - S (0/*) Organization - xsd:string - S (0/1) OrganizationName - xsd:string - S (0/1)	Contains information about the recipient. This may include a person's name, an organization name, and/or additional information.
/ PostalAddress/ Recipient/ <b>PersonName</b>	- PersonNameType - S (0/1)	The name of a person.
/ PostalAddress/ Recipient/ <b>AdditionalText</b>	- xsd:string - S (0/*)	May contain other recipient routing information in addition to organization and person name. AdditionalText is used for further routing after it has been delivered by the postal service.
/ PostalAddress/ Recipient/ <b>Organization</b>	- xsd:string - S (0/1)	Information identifying the organization for which the enrollment data is being transmitted.
/ PostalAddress/ Recipient/ <b>OrganizationName</b>	- xsd:string - S (0/1)	Contains information about the recipient. This may include a person's name, an organization name, and/or additional information.


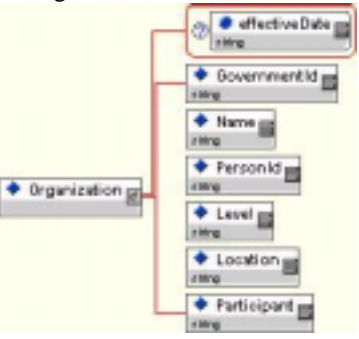
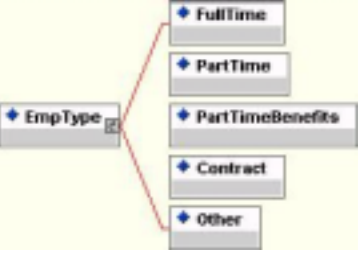

### 3 Implementation Considerations

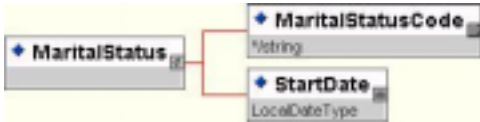
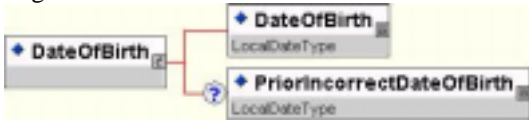
### 4 Known Limitations

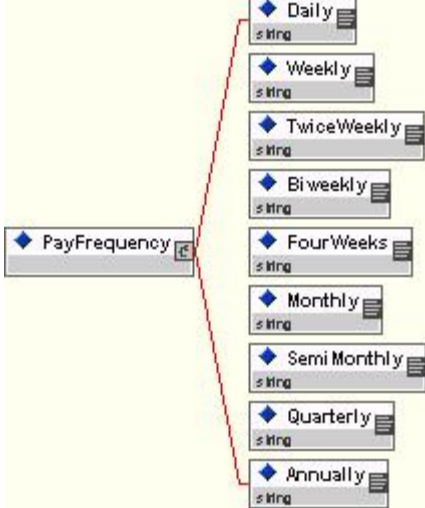
This design may not represent payment methods for all international aspects.

### 5 Issues List

Issue	Description	Disposition
Should exempt and non-exempt be a Boolean value or elements?		
Is GoalYTD a duplication of ToDateAmount?		
Change PlanID to PlanId	<p>According to naming conventions in TSC schema design doc, this should be "PlanId".</p> <p>We also may want to consider generalizing the definition given in the specification slightly. The Benefit Contribution spec is intended for use in the US, but we shouldn't use US-centric terms unless it is really necessary. Thus, change "Plan identifier that will be used by the 401(k) administrator" to "Plan identification code used by the plan administrator."</p>	<p>Done. This is now an attribute of ContributionAmount</p> <p>Changed definition.</p>
Change GovID to GovernmentId	<p>TSC naming conventions; align with SEP model. That model looks like this:</p>  <p>In the context of the PayrollBenefitContributions schema, a typical use of GovernmentId might be to transmit a U.S. Federal Employer Identification Number. This might be accomplished like so &lt;GovernmentId countryCode="US" document="FEIN" issuingAgency="IRS"&gt;77-9999999&lt;/GovernmentId&gt;</p>	<p>Done.</p>
Change OrgGovID to GovernmentId	<p>We can imply that this is an organizational id versus an individual id by context.</p> <pre>&lt;Organization&gt; &lt;GovernmentId countryCode="US" document="FEIN" issuingAgency="IRS"&gt;77-9999999&lt;/GovernmentId&gt; &lt;/Organization&gt;</pre>	<p>Done.</p>
Change Location to LocationSummary	<p>Can this conform with the SEP LocationSummary element? For instance:</p> <pre>&lt;LocationSummary&gt;   &lt;Municipality&gt;Detroit&lt;/Municipality&gt;   &lt;Region&gt;Michigan&lt;/Region&gt; &lt;/LocationSummary&gt;</pre>	<p>Done.</p>

<p>Elimination of an element PersonDetailInformation</p>	 <p>The existence of this element does not seem to add value here except as a grouping element. Can we promote all children of PersonDetailInformation to be siblings of PersonID. Eliminate the element PersonDetailInformation.</p>	<p>Done.</p>
<p>Restructure OrganizationInformation</p>	<p>Change to this:</p> 	<p>Done.</p>
<p>Change the following element names to meet TSC naming conventions</p>	<p>OrgLevel to OrganizationLevel OrgName to OrganizationName Amt abbreviations to Amount PayFreq to PayFrequency</p>	<p>Done.</p>
<p>EmpType</p>	<p>This seems to combine a number of different concepts. I wonder if we might re-defined this into a more generalized, but more detailed model or whether we might at least change the name of the element. Currently the EmpType model looks like this:</p>  <p>The Enrollment Schema includes a HumanResourceType element:</p>  <p>The HumanResourceType is a little less hard-coded than the EmpType, but has the disadvantage that trading partners need to agree on single code that may actually describe a few different concepts. I'd suggest going with the HumanResourceType model above or a detailed model that broke out the specific parameters such as the ones below:</p> <p>ScheduleType fullTime</p>	<p>Changed to Employee Schedule as datatype with enumerated list.</p> <p>We will make this a string and add the list to the documentation.</p>

	<p>partTime BenefitsEligible yes   no OverTimeStatus exempt   nonExempt EmployeeStatus DirectHireEmployee VendorEmployee (e.g., employee of temp staffing co) OtherContractor (e.g., individual 1099) Duration Regular (on-going, no-set end date) Temporary (set end date or will end before outside cutoff date)</p> <p>Note: if the group decides to go with the “HumanResourceTypeCode approach” the element should be made optional, so the door would be left open for a backwardly-compatible future version with a more detailed and generalized description of HumanResourceType. For example</p> <pre>&lt;!ELEMENT HumanResourceType (HumanResourceTypeCode?, ScheduleType?, BenefitsEligible?, OvertimeStatus?, EmployeeStatus?, Duration?)&gt;</pre>	
MaritalStatus	<p>This seems pretty simple, but I wonder if the enumerations are adequate. Below is the model in the benefits enrollment spec. Perhaps it can be reused:</p>  <p>The Enrollment DTD does not constrain the value of MaritalStatusCode in the schema, but they list these values in the documentation: Registered Domestic Partner   Divorced   Single   Married   Unreported   Separated   Unmarried   Widowed   Legally Separated</p> <p>[If what is desired is an enumeration, I would eliminate the element “MaritalStatus” and make it an enumerated attribute of PersonDetailInformation.]</p>	<p>Done.</p> <p>Make this an enumerated list with start date. This may be a good candidate for the TSC extension.</p>
Change DOB to DateOfBirth	<p>This is the convention in SEP and in the Enrollment spec. You might also want to consider this model in the Enrollment spec:</p> 	<p>Done.</p> <p>Change complex DOB element to DateOfBirthInformation. Make simple DOB element to data type.</p>
Dates	Examine all date fields and make sure you have the proper cpo date data type in light of the recent recommendation.	Done
PersonName,	Use includes of these recent specs to keep these objects current.	Done

PostalAddress	<p>&lt;xsd:include schemaLocation="http://schemas.hr-xml.org/xc/canon/CPO/PersonName-1_1/PersonName-1_1.xsd/&gt;</p> <p>&lt;xsd:include schemaLocation="http://schemas.hr-xml.org/xc/canon/CPO/PostalAddress-1_1/PostalAddress-1_1.xsd/&gt;</p>	
Change PayFrequency to enumeration.	 <p>Make this an attribute of PayrollInformation with an enumerated list of these values.</p>	Changed to datatype with enumerated list.
Change CompensationType element to attribute enumeration.	Can make CompensationTyp an enumeration?	Remove sub-elements and add enumeration to CompensationType
Reduce planType enumeration occurrences	Can we make planType (i.e. 401k) enumerations an attribute of <Contribution> and eliminate it from all of its children? If not, we can make it a reusable and reduce duplicative declarations. If so, it will reduce replication of declarations.	Move attributes (planType and contributionType) from ContributionAmount and ToDateAmount to Contribution element.
CurrencyCode	Verify that all amount fields have a currencyCode attribute associate with it.	Done
PersonId	<p>Change PersonID to PersonId per tsc naming conventions.</p> <p>Should this be ParticipantId? It seems that PersonId seems like a bigger concept.</p>	<p>Changed.</p> <p>Leave as PersonId because the person may not be a participant</p>

## 6 Appendix A - Document Version History

Version	Date	Description
1.0	01/19/2001	Initial Draft
1.0	02/26/2001	Revised dtd and description of elements based on workgroup sessions at HR-XML 1/01 meeting.
1.0	03/27/2001	Minor revisions to dtd (changed Goal to LoanAmount), added design considerations and activity diagram
1.0	04/16/2001	Added example of xml, added '419' as plan type, updated source and activity diagram.
1.0	07/03/2001	Added Hash Totals as element, added more pay frequencies, made more fields optional based on feedback from Hewitt, updated example and source.
1.0	2001-Oct-23	Major changes to Schema based on issues list. Change 'defined' to 'benefit' contributions. Reformat document.
1.0	2001-Oct-29	Add definitions table, update issues list.

## 7 Appendix B – Related Documents

Reference	Link
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## 8 Appendix C – Reference Examples