



# PAYE Modernisation

SOAP Lookup RPN by Range Guide

**Version**  
**Date**

**1.0 Release Candidate 2**  
**20/07/2018**

## Latest Version History

Version	Date	Section	Change Description
1.0 Release Candidate 2	20/07/2018	All	New Document

### Audience

This document is for any software provider who has chosen to build or update their products using SOAP services to allow for PAYE Modernisation.

### Document context

This document provides descriptions and usage of Lookup RPN by Range request. This document is expected to serve as a guide for using the Lookup RPN by Range functionality.

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### 1 INTRODUCTION

The purpose of this document is to serve as a guide for using the Lookup RPN by Range functionality.

Ranged lookups have been implemented to facilitate RPN Lookups for large employers using our SOAP services. For lookups that contain more than a configurable number of RPNs the employer will need to submit multiple requests using **From** and **To** elements of the range parameters as described in the *SOAP Schema Reference*<sup>1</sup>. For live it is intended that a limit of 4,500 RPNs can be returned in one SOAP request and all additional RPNs are accessible through repeated lookups using the above parameters.

Currently for PIT the limit is 20 RPNs.

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<sup>1</sup> <https://revenue-ie.github.io/payee-employers-documentation/soap/soap-schema-reference/webframe.html#topic217.html>

## 2 LOOK UP ALL RPN'S WITHOUT FILTERS OR LOOK UP RPN'S FILTER BY LAST UPDATED DATE

When Lookup RPN by Employer or Lookup RPN using dateLastUpdated filter is submitted, the lookup RPN response contains the TotalRPNCOUNT field and first 4500 records. Subsequent Lookup requests with range parameters should be submitted to get the remaining records. Revenue does not indicate the number of RPN Lookups needed. The payroll software will need to calculate the number of requests and ranges based on the TotalRPNCOUNT field. When a Lookup RPN request is sent with a range that is not available then an error (Validation code: 3001) is returned.

### **Range Parameters:**

'FROM' – From Index is Inclusive. It starts from 0.

'TO' – TO index is exclusive.

For large number of employees, Range Parameters is not expected in the first request but they must exist in the subsequent requests to retrieve the next batch of RPNs.

**Note:** Subsequent requests need to be sent within one hour from the first one otherwise, data will be expired and requests need to be submitted from the start.

*Please note that there is no guarantee that data will not expire within one hour after first request.*

### 2.1 Example Scenario for Look up all RPN's without filters or Look up RPN's filter by last updated date

Assume an employer has 15,000 RPN's for his employees. Flow will be as below.

- Employer makes first request to get RPN's without Range parameters.
- Service returns 15000 as TotalRPNCOUNT and returns first 4500 RPN's.
- Employer will need to make 3 more requests  $((15,000-4,500)/4500 = 3)$  to get the remaining data.
- Employer need to make another request with range parameters (FROM is 4500 and TO is 9000) to get the next 4500 RPN's.
- Another request with FROM as 9000 and TO as 13500
- Another request with FROM as 13500 and TO as 15000

### 3 LOOK UP RPN'S FILTER BY EMPLOYEEIDS.

Range parameters are not applicable in the case of Lookup RPN requests by EmployeeId. Employers can request Lookup RPNs for a maximum of 4500 employeeIds in a single request.

If an employer has more than 4500 employeeIds they want to submit Lookup RPN request for, then they will have to make multiple requests.

**Note:** Service returns error if an employer tried to send more than 4500 employee Ids in request.

#### 3.1 Example Scenario for Lookup RPNs by employeeIds

If an employer wants to Lookup RPNs for 6000 employees. They will have to make 2 Lookup RPN requests, one with 4500 employeeIds and another with the remaining 1500 employeeIds.

#### Validation Rules around the Lookup RPN request with Range parameters

Scenario	Code	Message
Range Parameters must be within the range of the Total RPN Count.  TO cannot be more than Total count	3001	Range Parameters selected are outside the range of RPN available.
From should not be negative	3008	FROM should not be negative.
To cannot be zero or empty.	3009	TO should not be empty and should be greater than 0.
From should be less than TO	3010	FROM should be less than TO.
Page size cannot be more than 1000	3011	Page size should not be more than 4500
Date Expired	3012	Data not found.

