Search Tips for Searching India Code

India Code has been developed using open source software "DSpace". It has deployed SOLR search engine through which one can browse, perform simple search and advance search with filter facility.

1. BROWSE

Allows you to go through a list of items in some specified order. One can browse by Community and Collection, Short title, Act number, Act year, Ministry etc.

Fig 1: Browse Menu

For example : following is the screen shot of Browsing through "Ministry"

Fig 2: Browse by **Ministry**

2. SIMPLE SEARCH

One can type any single word or group of words or phrases which are searched as free text word(s) in metadata as well in full text documents. It may locate those documents wherever these words or phrases may occur in the metadata and full text documents. As a default, SOLR search engine uses 'AND' Boolean operator, that is, search results contain all of the terms. For Example:

2.1. Case 1: Search on **National Waterways Act** as keywords

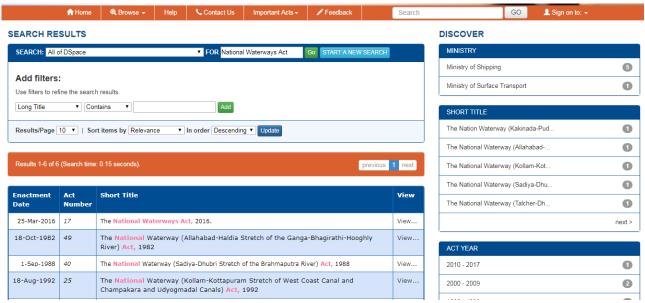It shows documents containing **National AND Waterways AND Act** as search term.

Fig 3: Search on **National Waterways Act** as keywords

2.2. Case 2: Search on **"National Waterways Act"** as a phrase

In this case it will search all the documents containing **"National Waterways Act"** where these words are occurring together.
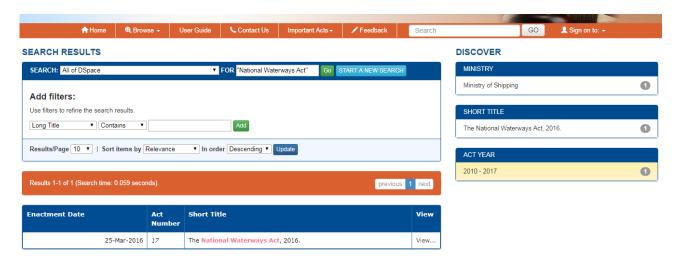

Fig 4: Search on **"National Waterways Act"** as a phrase

However, one can further refine the search by using Boolean operators.

3. BROADEN THE SEARCH USING "OR" OPERATOR

3.1. One can broaden the search results using OR operator.

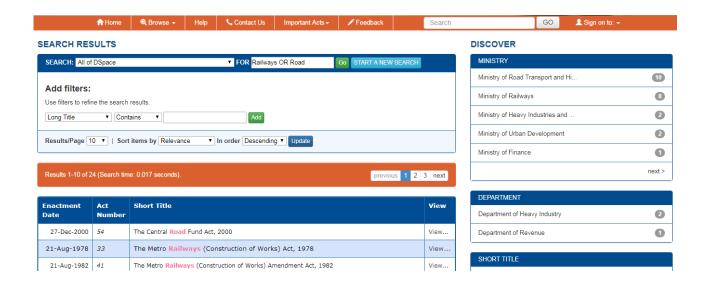For Example: **Railways OR Road**

Fig 5: Search on **Railways OR Road** as search terms

This will search documents that have keywords either **Railways OR Road** anywhere in the documents.

4. NARROW DOWN SEARCH USING "AND" OPERATOR

4.1. One can narrow down the search by using AND operator.
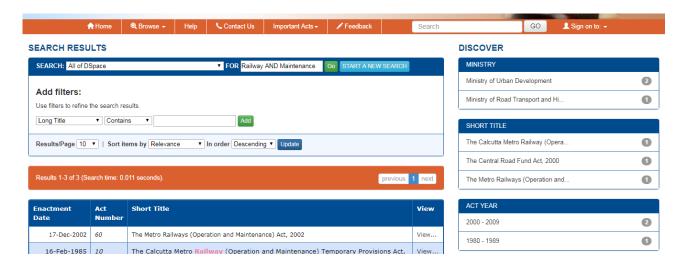
For Example**: Railway AND Maintenance**

Fig 6: Search on **Railway AND Maintenance**

This will Search documents that have both the keywords Railway AND Maintenance anywhere in the documents.

5. NEGATION OF SEARCH TERMS USING "NOT" OPERATOR

5.1. In this case, user does not want to have certain terms in the search results. It can be achieved by using "NOT" operator.

For Example: To search **Export NOT Agriculture**

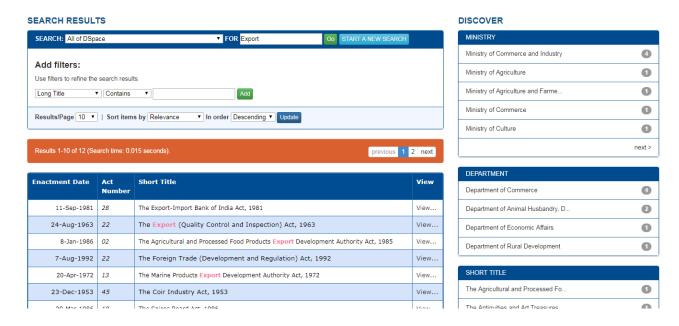Step 1: Simple search on **Export**

Fig 7: Search on **Export**

Step 2: Search on **Export NOT Agriculture**

Fig 8: Search on **Export NOT Agriculture**

This will search those documents that have **Export** but not containing **Agriculture** in them.

SEARCH USING COMBINATION OF OPERATORS

6. "AND" and "OR" combination

For Example: **(Ministry of Human Resource Department) AND (Information Technology) OR 2014**

In this, search is performed by combining AND/OR operators.

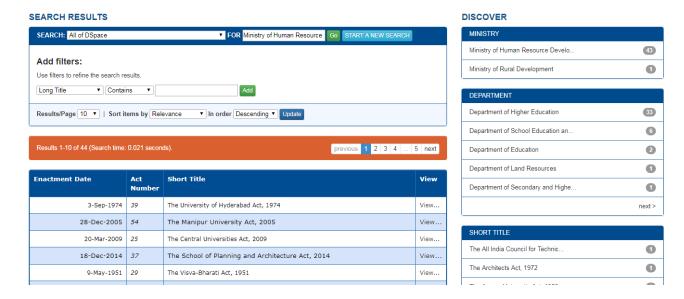Step 1: Simple search on **(Ministry of Human Resource Department)**

Fig 9: Search on **(Ministry of Human Resource Department)**

Step 2: Search on **(Ministry of Human Resource Department) AND (Information Technology)**
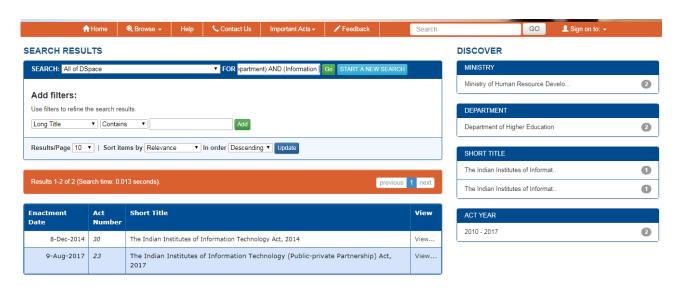

Fig 10: Search on **(Ministry of Human Resource Department) AND (Information Technology)**

Step 3: Search on **(Ministry of Human Resource Department) AND (Information Technology) OR 2014**
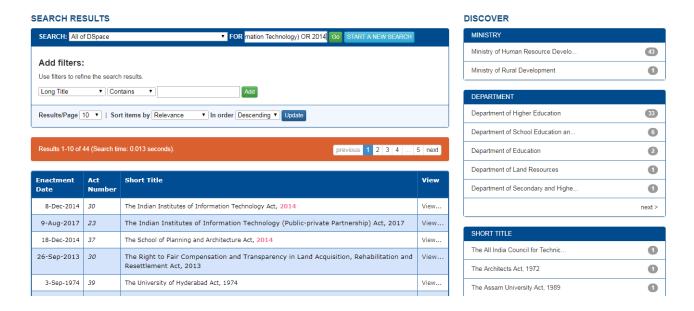
Fig 11: Search on **(Ministry of Human Resource Department) AND (Information Technology) OR 2014**

This will show those documents that have any of Ministry of Human Resource Department AND Information Technology OR 2014 in them.

7. "AND" and "NOT" COMBINATION

For Example: **(Ministry of Human Resource Department) AND (Information Technology) NOT 2014**

In this, search is performed by combination of AND/NOT operators.

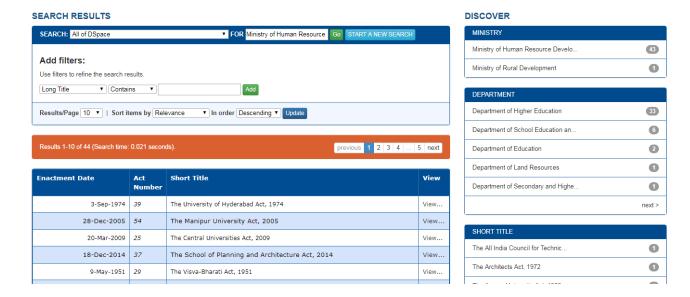Step 1: Simple search on **(Ministry of Human Resource Department)**

Fig 12: Search on **(Ministry of Human Resource Department)**

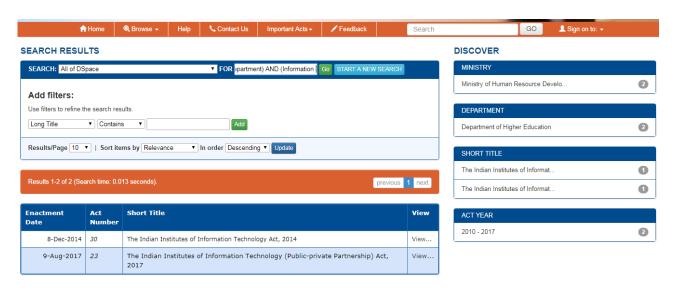Step 2: Search on **(Ministry of Human Resource Department) AND (Information Technology)**

Fig 13: Search on **(Ministry of Human Resource Department) AND (Information Technology)**

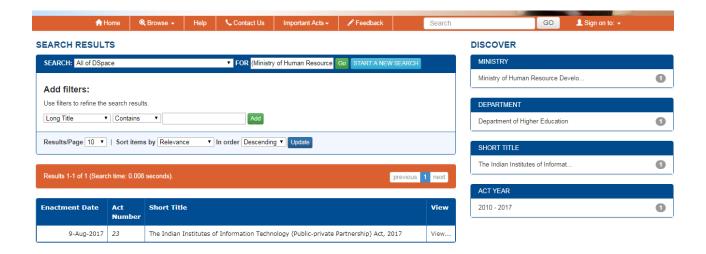Step3: Search on   **(Ministry of Human Resource Department) AND (Information Technology) NOT 2014**

Fig 14: Search on (**Ministry of Human Resource Department**) AND (**Information Technology) NOT 2014**

This will show those documents that have (Ministry of Human Resource Department) AND (Information Technology) NOT 2014

8. "OR" AND "NOT" COMBINATION

For Example: **Research OR Development NOT Agriculture**

In this, search is performed by combination of OR/NOT operators.
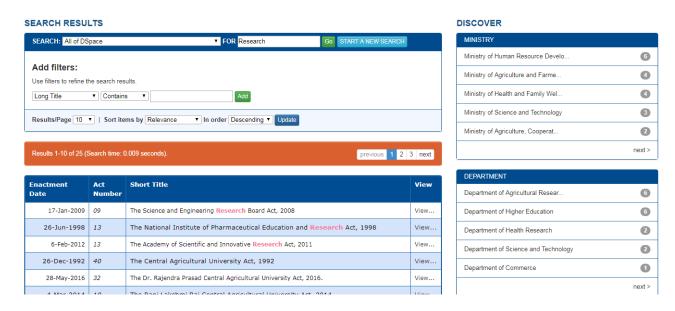
Step1: Simple search on **Research**

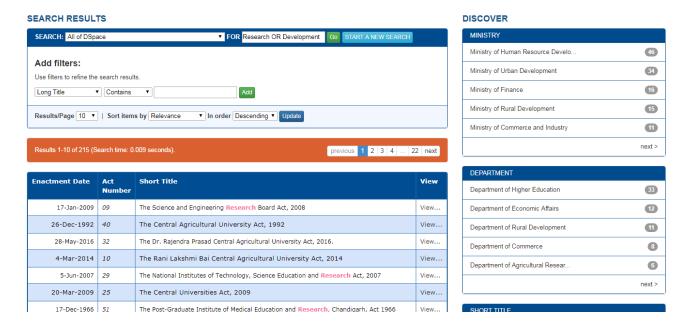Fig 15: Search on **Research**

Step2: Search on **Research OR Development**

Fig 16: Search on **Research OR Development**

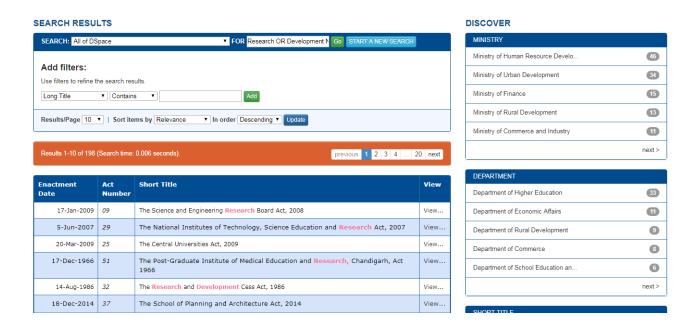Step3: Search on **Research OR Development NOT Agriculture**

Fig 17: Search on **Research OR Development NOT Agriculture**

This will show those documents that have any of Research OR Development NOT Agriculture in them.

9. SEARCH WITH FILTERS

SOLR search engine provides facility to apply search filters to limit the search results to specific fielded search criteria.

Filter search has three components such as **Field Name, Filter Operators and Field Value.**

Field Name: It is the metadata fields such as Short Title, Act Number, Act year, Ministry etc. which can be selected from combo box.

Filter Operators: It provides various search filter operators such as **"Contains" "Not Contains" "Equals" "Not Equals"** which can be selected from combo box.

Field Value: Users has to type value for the field name. It also provides auto completion facility.

For Example:

9.1.   Search on **National** has been performed as a free text search.
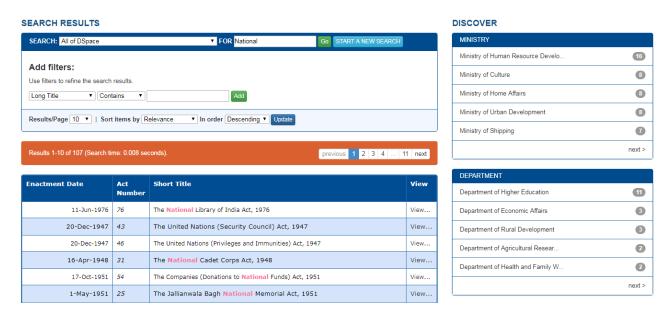

Fig 18: Filter Simple search on **National**

Search can be refined using search filters. Here search term **"National"** will be searched with Search field "**Ministry**" with Search Filter as "**contains**". Screen shot of search is shown in fig19.
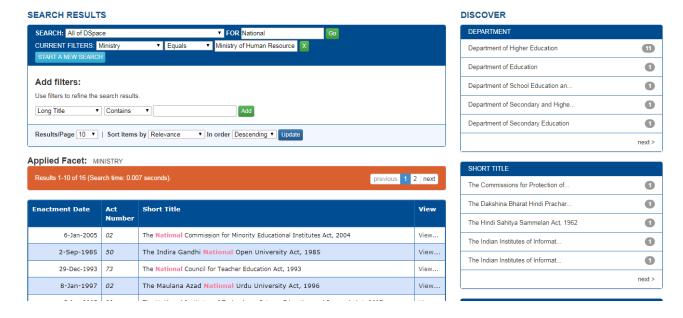
Fig 19: Filter search on term **National** with Search field as "**Ministry**" and with Search Filter as "**contains**"

9.2.   Search can further refine using "**Act year**" as search filter. Screen shot of search is shown in fig 20.
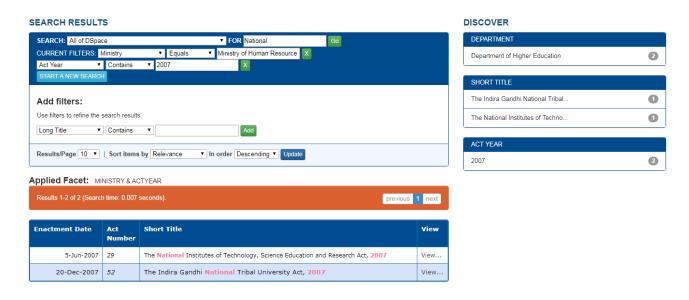

Fig 20: Filter search on **2007** in **Act year** field.

10. SOME MORE EXAMPLES USING VARIOUS SEARCH FIELD OPERATORS

10.1. Contains Search Operator

It searches word or phrase present anywhere in the field.

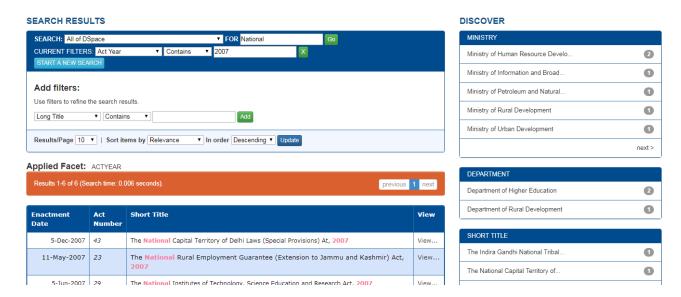For Example: If you have to search National having Act Year as 2007 using "CONTAIN" field operator:

Fig 21: Search results using **"CONTAIN"** as field operator

10.2. Not Contains Search Operator

It searches word or phrase does not exist anywhere in the field.
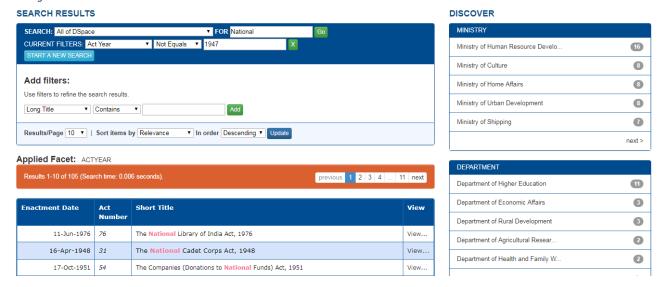For Example: If you have to search National documents and doesn't contain 1947 in act year

Fig 22: Search results using **"NOT CONTAIN"** as field operator

10.3. Equals Search Operator

It searches exact match of word or phrase in the field. For Example: If you have to search documents of Education of year 2009
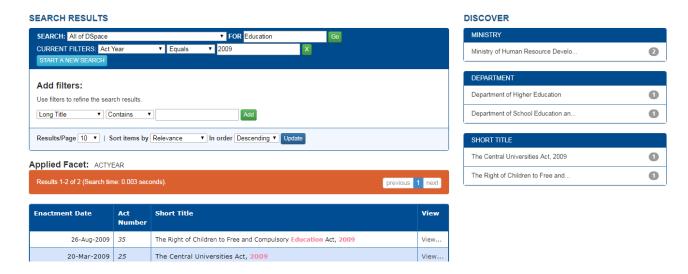

Fig 23: Search results using **"EQUAL"** as field operator.

10.4. Not Equals Search Operator

It searches for documents with other than where there is an exact match of word or phrase in the field. For Example: If you have to search documents of Education of all year but not 2009
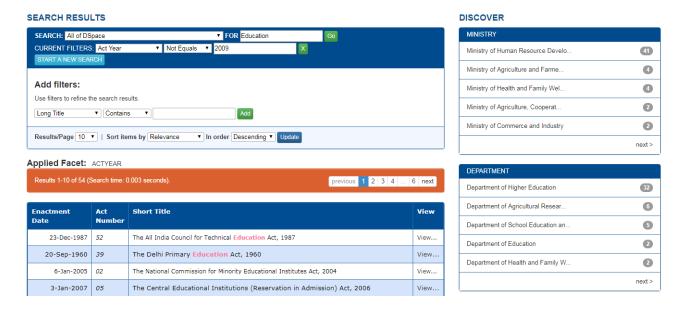

Fig 24: Search results using "**NOT EQUAL**" as field operator.

One can filter and customize search results by using the option "Add Filter" on the advance search page. Many search filters can be added by clicking "Add" button.

NOTE:
For specific search use simple search and then use filters to further refine search results and get specific information.

11. WILD CARD SEARCHES

One can also search multiple character as wildcard search by using asterisk "*" symbol.

For Example: to search for "Nation", "National", "Nationals" One can use the search as **Nation***
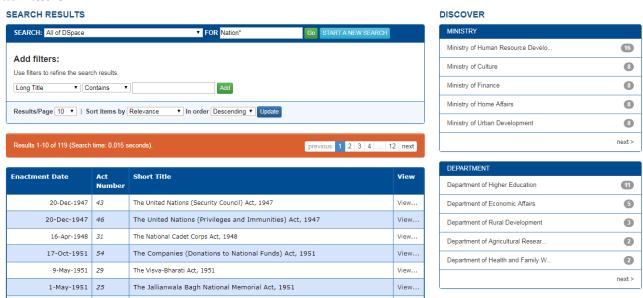
Fig 25: Search results of **Nation***

One can also use the wildcard in the middle of a term.
Example: Nati*n.

12. FUZZY SEARCHES

Fuzzy search is the technique of finding string that match a pattern approximately, rather than exactly. One can do a fuzzy search using the tilde **"~"** symbol at the end of the Single word term.

For Example: To search for word similar in spellings to "Role" one can do the fuzzy search: **role~**

This search will find terms like rome, rola, rale, pole, gole etc.

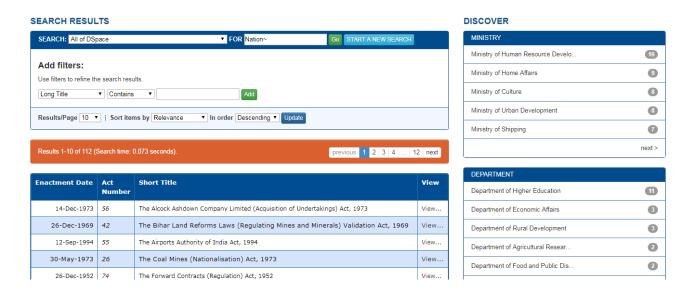Here in this example **Nation~** searches words like "National".

Fig 26: Search results of **Nation~**