

## Automation of Download

The Equity Short Interest file download process may be automated by firms using the following instructions **effective beginning on November 5, 2018**.

**NOTE: Automation instructions that may have been in use prior to November 5, 2018 will no longer be supported. In addition, column names were changed, and the order in which the columns are displayed in the download files was changed. XML column names will not change. As of January 1, 2019, XML API output will not be available.**

### Machine-download Instructions:

Firms may use their preferred method to access the data programmatically. Curl and Postman are used purely for purposes of illustrations in this document, FINRA neither limits nor guides firms on how to access the data programmatically.

### Using CURL to Retrieve Filtered Equity Short Interest Data

#### POST Query

The query lists an example of date filter for Equity Short Interest data, but any dataset column can be filtered. Data is returned in either CSV or JSON format. Outputs of CURL can be written to a file, and these CURL commands can be executed sequentially as part of a batch process if so desired.

#### *CURL command to request JSON output*

The following command enables one to filter data for a day. It requests JSON output.

```
curl -L
-d "{ \"compareFilters\": [ { \"compareType\": \"EQUAL\", \"fieldName\": \"settlementDate\",
  \"fieldValue\": \"2018-06-15\" } ] }, \"limit\": 5 } "
-H "Content-Type: application/json"
-H "Accept: application/json"
-X POST https://api.finra.org/data/group/otcMarket/name/EquityShortInterest
```

#### *JSON sample output*

```
[
  {
    "issueSymbolIdentifier": "AAALF",
    "issueName": "Aareal Bank AG AKT",
    "previousShortShareNumber": 113683,
    "marketCategoryCode": "u",
    "marketCategoryDescription": "Other OTC",
    "currentShortShareNumber": 184876,
    "changePercent": 62.62,
    "percentageChangeFromPreviousShort": 71193,
    "daysToCoverNumber": 999.99,
    "settlementDate": "2018-06-15",
    "averageShortShareNumber": 0
  },
  {
    "issueSymbolIdentifier": "AABVF",
```

```

      "issueName": "Aberdeen International Inc Ord",
      "previousShortShareNumber": 118,
      "marketCategoryCode": "u",
      "marketCategoryDescription": "Other OTC",
      "currentShortShareNumber": 118,
      "changePercent": 0,
      "percentageChangeFromPreviousShort": 0,
      "daysToCoverNumber": 1,
      "settlementDate": "2018-06-15",
      "averageShortShareNumber": 17062
    },
    {
      "issueSymbolIdentifier": "AACAF",
      "issueName": "AAC Technologies Holdings Inc",
      "previousShortShareNumber": 2545351,
      "marketCategoryCode": "u",
      "marketCategoryDescription": "Other OTC",
      "currentShortShareNumber": 3823314,
      "changePercent": 50.21,
      "percentageChangeFromPreviousShort": 1277963,
      "daysToCoverNumber": 378.47,
      "settlementDate": "2018-06-15",
      "averageShortShareNumber": 10102
    },
    {
      "issueSymbolIdentifier": "AACAY",
      "issueName": "AAC Technologies Holdings Inc",
      "previousShortShareNumber": 25893,
      "marketCategoryCode": "u",
      "marketCategoryDescription": "Other OTC",
      "currentShortShareNumber": 65723,
      "changePercent": 153.83,
      "percentageChangeFromPreviousShort": 39830,
      "daysToCoverNumber": 1,
      "settlementDate": "2018-06-15",
      "averageShortShareNumber": 120376
    },
    {
      "issueSymbolIdentifier": "ACEY",
      "issueName": "Asia Cement (China) Holdings C",
      "previousShortShareNumber": 300,
      "marketCategoryCode": "u",
      "marketCategoryDescription": "Other OTC",
      "currentShortShareNumber": 300,
      "changePercent": 0,
      "percentageChangeFromPreviousShort": 0,
      "daysToCoverNumber": 999.99,
      "settlementDate": "2018-06-15",
      "averageShortShareNumber": 0
    }
  ]

```

### [CURL command to request CSV output](#)

The following command enables one to filter data for a day. It requests default (CSV) output.

```

curl -L
-d "{ \"compareFilters\": [ { \"compareType\": \"EQUAL\", \"fieldName\": \" settlementDate\",
  \"fieldValue\": \" 2018-06-15\" } ] }, \"limit\":5 } "
-H "Content-Type: application/json"
-X POST https://api.finra.org/data/group/otcMarket/name/EquityShortInterest

```

## CSV sample output

```
"issueSymbolIdentifier", "settlementDate", "issueName", "marketCategoryCode", "currentShortShareNumber", "previousShortShareNumber", "changePercent", "percentageChangeFromPreviousShort", "averageShortShareNumber", "daysToCoverNumber", "marketCategoryDescription"
"AAALF", "2018-06-15", "Aareal Bank AG AKT", "u", "184876", "113683", "62.62", "71193", "0", "999.99", "Other OTC"
"AABVF", "2018-06-15", "Aberdeen International Inc Ord", "u", "118", "118", "0.00", "0", "17062", "1.00", "Other OTC"
"AACAF", "2018-06-15", "AAC Technologies Holdings Inc", "u", "3823314", "2545351", "50.21", "1277963", "10102", "378.47", "Other OTC"
"AACAY", "2018-06-15", "AAC Technologies Holdings Inc", "u", "65723", "25893", "153.83", "39830", "120376", "1.00", "Other OTC"
"AACEY", "2018-06-15", "Asia Cement (China) Holdings C", "u", "300", "300", "0.00", "0", "0", "999.99", "Other OTC"
```

## Using Postman IDE to Retrieve Filtered Equity Short Interest Data

An IDE such as Postman can be used to retrieve data. The Content-Type and Accept headers should be set to either JSON or text in the IDE. The following payload must be submitted to <https://api.finra.org/data/group/otcMarket/name/EquityShortInterest>.

```
{  "compareFilters": [ {  "compareType": "EQUAL", "fieldName": "settlementDate", "fieldValue": "2018-06-15"  } ],  "limit": 5  }
```

Similarly, one may submit a payload to the monthly or the block summary URI.

## JSON Output

```
[  {  {  "issueSymbolIdentifier": "AAALF",  "issueName": "Aareal Bank AG AKT",  "previousShortShareNumber": 113683,  "marketCategoryCode": "u",  "marketCategoryDescription": "Other OTC",  "currentShortShareNumber": 184876,  "changePercent": 62.62,  "percentageChangeFromPreviousShort": 71193,  "daysToCoverNumber": 999.99,  "settlementDate": "2018-06-15",  "averageShortShareNumber": 0  },  {  "issueSymbolIdentifier": "AABVF",  "issueName": "Aberdeen International Inc Ord",  "previousShortShareNumber": 118,  "marketCategoryCode": "u",  "marketCategoryDescription": "Other OTC",  "currentShortShareNumber": 118,  "changePercent": 0,  "percentageChangeFromPreviousShort": 0,  "daysToCoverNumber": 1,  "settlementDate": "2018-06-15",  "averageShortShareNumber": 17062  },  {  "issueSymbolIdentifier": "AACAF",  "issueName": "AAC Technologies Holdings Inc",  "previousShortShareNumber": 2545351,  "marketCategoryCode": "u",  "marketCategoryDescription": "Other OTC",  "currentShortShareNumber": 3823314,  "changePercent": 50.21,  "percentageChangeFromPreviousShort": 1277963,
```

```

    "daysToCoverNumber": 378.47,
    "settlementDate": "2018-06-15",
    "averageShortShareNumber": 10102
  },
  {
    "issueSymbolIdentifier": "AACAY",
      "issueName": "AAC Technologies Holdings Inc",
    "previousShortShareNumber": 25893,
    "marketCategoryCode": "u",
    "marketCategoryDescription": "Other OTC",
    "currentShortShareNumber": 65723,
    "changePercent": 153.83,
    "percentageChangeFromPreviousShort": 39830,
    "daysToCoverNumber": 1,
    "settlementDate": "2018-06-15",
    "averageShortShareNumber": 120376
  },
  {
    "issueSymbolIdentifier": "ACEY",
      "issueName": "Asia Cement (China) Holdings C",
    "previousShortShareNumber": 300,
    "marketCategoryCode": "u",
    "marketCategoryDescription": "Other OTC",
    "currentShortShareNumber": 300,
    "changePercent": 0,
    "percentageChangeFromPreviousShort": 0,
    "daysToCoverNumber": 999.99,
    "settlementDate": "2018-06-15",
    "averageShortShareNumber": 0
  }
]

```

### CSV Output

```

"issueSymbolIdentifier","settlementDate","issueName","marketCategoryCode","currentShortShareNumber","previousShortShareNumber","changePercent","percentageChangeFromPreviousShort","averageShortShareNumber","daysToCoverNumber","marketCategoryDescription"
"AAALF","2018-06-15","Aareal Bank AG AKT","u","184876","113683","62.62","71193","0","999.99","Other OTC"
"AABVF","2018-06-15","Aberdeen International Inc Ord","u","118","118","0.00","0","17062","1.00","Other OTC"
"AACAF","2018-06-15","AAC Technologies Holdings Inc","u","3823314","2545351","50.21","1277963","10102","378.47","Other OTC"
"AACAY","2018-06-15","AAC Technologies Holdings Inc","u","65723","25893","153.83","39830","120376","1.00","Other OTC"
"ACEY","2018-06-15","Asia Cement (China) Holdings C","u","300","300","0.00","0","0","999.99","Other OTC"

```

### XML

The following endpoint returns XML data for a day.

<https://api.dapi.dev.finra.org/api/EquityShortInterest/GetESI?settlementDate=31-Jul-18>

### XML data format example

```

<ArrayOfEquityShortInterestAPIModel>
  <EquityShortInterestAPIModel>
    <AverageDailyVolume>187670</AverageDailyVolume>
    <Change>5507702</Change>
    <CurrentShort>Other OTC</CurrentShort>
    <DaysToCover>781</DaysToCover>
    <IssueName>AAC Technologies Holdings Inc</IssueName>
    <Market>OTCBB</Market>
    <PercentChangeFromPrevious>3.41</PercentChangeFromPrevious>
    <PreviousShort>5695372</PreviousShort>
    <SettlementDate>07/31/2018</SettlementDate>
    <Symbol>AACAF</Symbol>
  </EquityShortInterestAPIModel>
</ArrayOfEquityShortInterestAPIModel>

```

## Data Dictionary

API name	API description	API type
issueSymbolIdentifier	Issue symbol identifier	String
settlementDate	Settlement Date	Date
issueName	Name of the issue	String
marketCategoryCode	Indicates whether the issue is OTC Bulletin Board (U) or non-Bulletin Board (u)	String
marketCategoryDescription	Describes the code that indicates whether the issue is OTC Bulletin Board (OTCBB) or non-Bulletin Board (Other OTC)	String
currentShortShareNumber	The total number of shares in the issue that are reflected on the books and records of the reporting firms as short as defined by Rule 200 of Regulation SHO as of the current cycle's designated settlement date.	Number
previousShortShareNumber	The total number of shares in the issue that are reflected on the books and records of the reporting firms as short as defined by Rule 200 of Regulation SHO as of the prior cycle's designated settlement date.	Number
changePercent	Change in Shares Short from Previous Cycle: Difference in short interest between the current cycle and the previous cycle	Number
percentageChangefromPreviousShort	The percent change from the current cycle's short interest compared to the previous cycle's short interest. Formula: (Current Cycle Short Interest - Previous Cycle Short Interest) / Previous Cycle Short Interest, x 100, Rounded to Hundredths.	Number
averageShortShareNumber	Total Volume or Adjusted Volume in case of splits / Total trade days between (previous settlement date + 1) to (current settlement date). The NULL values are translated as zero	Number

API name	API description	API type
daysToCoverNumber	The number of days of average share volume it would require to buy all of the shares that were sold short during the reporting cycle. Formula: Short Interest / Average Daily Share Volume, Rounded to Hundredths. 1.00 will be displayed for any values equal or less than 1 (i.e., Average Daily Share is equal to or greater than Short Interest). N/A will be displayed If the days to cover is Zero (i.e., Average Daily Share Volume is Zero).	Number