IT Development Division
Trading Systems Development Department

OASIS – RDS Reference
Data Service Files Specification

Version *1.0.3*

Athens, December 2017

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This material comprises a part of the technical documentation of the **Reference Data Service (RDS) and its underlying feed dissemination services** and is disclosed by ATHEX only to our customers Data Vendors, members, Independent Software Vendors (ISV) who intent to receive the reference data feed generated by the ATHEX-CSE common platform (spot and derivatives markets).

Revision History		
Issue	**Date**	**Description**
1.0	August 2017	Original Document
1.0.1	September 2017	Non-Bond Instrument Series report: • Removed Commodity Id field. • Added Instrument Level field. • Changed the logic for Underlying Symbol and Underlying ISIN fields. Bond Instrument Series report: • Removed Commodity Id and Underlying ISIN field. Indices Report: • Added the Local Index Id field.
1.0.2	October 2017	Added status 'N' (Inactive) to the description of Instruments possible status. Removed MLEG from instrument series possible instrument types Added XNET MARKET ID to holidays report Added reference to XNET reports retrieval to chapter 4. Added Low Dispersion value to Trading Activity flag for standard and bond series.
1.0.3	November 2017	Altered the type of the Basic Closing Method Parameter field (#46 to non-Bond and #32 in Bond Series report) from Alpha (1) to NUM(4,2). Altered the size of the Sector Name English / Local fields (#72 and #73 in Non-Bond Series report) from Alpha (12) to Alpha (50)

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1.   Introduction

1.1.   Reference Data Service

The Reference Data Service (RDS) module is a new part of the OASIS infrastructure. This service will be used for propagating all useful non-real time information (reference data) of the OASIS accommodated exchanges to market participants and information vendors with the means of ASCII delimited and XML files retrieved by the participants through standardized procedures.

1.2.   Document Scope

This document specifies the RDS scope and characteristics to market participants. In its pages the reader would find the following types of information:

- RDS description and scope in detail.
- Fully detailed description of the files created by the RDS.

1.3.   Document Layout

The document is divided in the following seven chapters.

- ***Chapter 1, Introduction.*** This is the current chapter.
- ***Chapter 2, General Overview.*** This chapter provides the general characteristics of the service.
- ***Chapter 3, Detailed Report Description.*** This chapter describes in detail the files created by the RDS and their content.
- ***Chapter 4, Data retrieval by the market participants***. This chapter provides general information regarding the market participants' access and retrieval of the data files created by the service.
- ***Chapter 5, Appendix A: Information on Various Field Codes.*** This chapter provides additional information relevant to the values found in various message categories.
- ***Chapter 6, Appendix B: XML Elements.*** This chapter provides information regarding the names of XML elements used by the XML reports.

1.4.   Definitions, Acronyms and Abbreviations

Acronym	Explanation
ANSI	American National Standards Institute
ATHEX	Athens Exchange (previously denoted as ASE)
CSE	Cyprus Stock Exchange
ETF	Exchange Traded Funds
HTML	Hyper Text Markup Language
HW	Hardware
IDS	Information Dissemination System
INAV	Indicative Net Asset Value
IOCP	Internet Oriented Communication Portal
ISO	International Standards Organization

Acronym	Explanation
IT	Information Technology
MIC	Market Identification Code
OASIS	Integrated Automated Trading System
OTC	Over The Counter
RDS	Reference Data Service
SW	Software
XML	eXtensible Markup Language

Table 1, Definitions, Acronyms and Abbreviations

1.5.   Contact Information

Please address your questions/recommendations pertinent to the contents of this document by mail to:

FOR DATA VENDORS:
Data Feed Services
Athens Exchange S.A.
110, Athinon Ave., GR 104 42 Athens
Tel. +30 210 336 6340,
Fax. (+30) 210 336 6296
DFS@athexgroup.gr

FOR ATHEXGROUP MEMBERS:
Members Support Dpt
Athens Exchange S.A.
110, Athinon Ave., GR 104 42 Athens
Tel. +30 210 336 6393
Fax. (+30) 210 336 6286
Members-support@athexgroup.gr

1.6.   Final Note

The exchange has set a number of rules which ensure the proper and rational use of its computing and network infrastructure. This service is subjected to these rules whenever it utilizes the aforementioned infrastructure.

2. General Overview

2.1. Prologue

This chapter provides the general characteristics of the Reference Data Service. Specifically, it describes the scope and purpose of the implementation.

2.2. Reference Data Service Description.

With the term Reference Data Service (RDS) we define a mechanism that will be used in order to:

1. Retrieve non-real time (a.k.a persistent or static) data from various ATHEX data sources. More specifically we refer to data that are fundamental for the operation of the exchanges accommodated in OASIS but are not (in almost all cases) changed during the trading day. For example, markets and the traded instruments are static data, while price information are not.
2. Provide a mechanism for reporting these data to XML and standard ASCII flat files that will be placed to an appropriate server for retrieval. Market participants and information vendors will be able to access these files throughout the day. The data files and their respective content will be described in full in Chapter 3.

Currently, these data are distributed to recipients by standardized ASCII messages both by the Feed/IOCP mechanism (data vendors and traders) and the ODL API (trading applications). This leads to the following problems:

1. A large number of messages are provided by the system at startup to propagate the necessary information. This leads to delays.
2. In various cases there is the need of retransmission of these data to recipients causing unnecessary delays to systems that have to handle primarily real time trading purposes.
3. Trading application vendors and data feed providers have to re-implement and redeploy their applications even when minor changes have happened to these static data, even if these data are "insignificant" to them or their customers. Furthermore, this has to happen on a single date for all (OASIS, vendors' applications and trading applications).

With the new mechanism the delays will be extinct and there will be more flexibility both on altering the data format and the adoption of the changes from the market participants. More specifically, the new service implements the following technical and business requirements:

1. The mechanism provides simple ASCII delimited and XML reports that have well defined/ described data.
2. Reports are automatically produced and will be accessible on a predefined periodic interval.
3. Ad-hoc execution of the automatic procedure is available for safety reasons.
4. The implementation allows for fast and easy altering of the data provided. If any new data are requested for propagation, the changes centrally are almost trivial. This also stands true if new information files are requested.
5. Redundancy of the service has obviously been considered.
6. The implementation allows for scalar adaptation of changes by the data recipients. In other words, when changes occur in the data provided by RDS, both the old file and a new file with the changes in the format will be provided to the market participants. This will allow the market participants to operate as usual until they are ready, in their own time, to adapt the changes. This is also valid in the case that the changes demand a new set of information. The concurrency of the old and new version of particular files will last for 1 month.
7. The information provided includes at least the information that OASIS provides to the data vendors under the current scheme.
8. The information provided is separated per exchange.
9. Each file contains as much information as possible.
10. Market participants have a minimal need for joining data between files. This is unavoidable though, in some cases.

Finally, it should be explicitly referred that the new Reference Data Service's purpose is to replace the functionality of ODL API / FIX Protocol and IOCP when it comes to static data information. Market participants should still operate the aforementioned communication protocols for retrieving real time ATHEX information.

3.   Detailed Report Description

3.1.   Reports Overview

The reports created by the new Reference Data Service have certain common characteristics.

- All reports are produced in two different formats. The first format is ASCII (ISO-8859-7) files, of variable record length. The data fields of each report are delimited with the ";" character. A delimiter is also added after the last field of the record. The second format is the well-known standardised XML format.
- Delimited files have the .csv extension while the XML files have .xml extension.
- All files (except those referring to currencies and price tick structures) refer only to one exchange. The exchange to which they refer is noted in their names with '-G' for ATHEX, '-C' for CSE and '-X' for XNET. The Currencies Exchanges Report and the Price Tick Structures Report do not include this notation given that currencies and price ticks are not exchange specific information.
- All files include the date in their name.
- All files have a version number for that day in their name (noted with '-vX' for version X). In case that any or all files are recreated during the day, obviously the version number is increased.
- Empty files are not created. In other words, if an exchange does not have e.g. Combo series, the Combination Series report for this exchange will not be created.

In general, all the report names are constructed according to the following methodology:

Filename	Separator	Date	Separator	Exchange	Separator	Version	Extension
- BondSeries - CombinationSeries - Currencies - Holidays - Indices - IndicesPopulation - InstrumentSeries - Markets - MarketSchedules - PriceTickStructures	-	YYYYMMDD	-	- C - G - X	-	vX where X is the version number for the day	.csv .xml

Table 2: Reports' naming methodology

Given these, if the RDS was available on the day that this document is created, it would produce the following files:

- BondSeries-20170509-C-v1.csv and BondSeries-20170509-C-v1.xml

- BondSeries-20170509-G-v1.csv and BondSeries-20170509-G-v1.xml

- CombinationSeries-20170509-G-v1.csv and CombinationSeries-20170509-G-v1.xml

- Currencies-20170509-v1.csv and Currencies-20170509-v1.xml

- Holidays-20170509-C-v1.csv and Holidays-20170509-C-v1.xml

- Holidays-20170509-G-v1.csv and Holidays-20170509-G-v1.xml

- Holidays-20170509-X-v1.csv and Holidays-20170509-X-v1.xml

- Indices-20170509-C-v1.csv and Indices-20170509-C-v1.xml

- Indices-20170509-G-v1.csv and Indices-20170509-G-v1.xml

- IndicesPopulation-20170509-C-v1.csv and IndicesPopulation-20170509-C-v1.xml

- IndicesPopulation-20170509-G-v1.csv and IndicesPopulation-20170509-G-v1.xml

- InstrumentSeries-20170509-C-v1.csv and InstrumentSeries-20170509-C-v1.xml

- InstrumentSeries-20170509-G-v1.csv and InstrumentSeries-20170509-G-v1.xml

- InstrumentSeries-20170509-X-v1.csv and InstrumentSeries-20170509-X-v1.xml

- Markets-20170509-C-v1.csv and Markets-20170509-C-v1.xml

- Markets-20170509-G-v1.csv and Markets-20170509-G-v1.xml

- Markets-20170509-X-v1.csv and Markets-20170509-X-v1.xml

- MarketSchedules-20170509-C-v1.csv and MarketSchedules-20170509-C-v1.xml

- MarketSchedules-20170509-G-v1.csv and MarketSchedules-20170509-G-v1.xml

- MarketSchedules-20170509-X-v1.csv and MarketSchedules-20170509-X-v1.xml

- PriceTickStructures-20170509-v1.csv and PriceTickStructures-20170509-v1.xml

The following subsections describe in detail the reports currently created by RDS.

3.2.   Field Types Overview

All the data fields presented in the RDS reports are in accordance to one of the following general field types:

- **Alpha (x):** This means that the data presented are alphanumeric characters with a maximum length of x. Alphanumeric fields are **not** padded to their respective maximum length. They can also be null or ' ' according to the detailed field specification. In some cases the fields refer to standardized data types. These are referred in "Appendix A: Information on Various Field Codes" and in this case this is mentioned in the detailed field specification.
- **NUM, NUM(m) or NUM(m,n):** This is a real number that possibly includes decimal points and has a maximum of (m) digits out of which a maximum of (n) fractional digits. In all cases, the decimal separator is the "." character. Numbers are depicted in the shortest form possible, meaning that decimal points are omitted if they are obsolete and that the leading 0 is omitted in case that the number is between 0 and 1. If the notation is NUM(m) then the field has no decimal points.

3.3. Non-Bond Instrument Series

This report contains all instrument series except bonds that are traded in the OASIS system. One separate report is produced for each exchange. Please consider that multiple fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Symbol	5.1	The Instrument's fifteen-character symbol
2	CFI Code	5.5	The Instrument's CFI Code
3	Exchange ID	Alpha(15)	The Exchange where the Instrument is traded.
4	Venue ID	5.8	The Venue where the Instrument is traded
5	Operator of Venue LEI	5.7	The LEI of the operator of the venue (effectively, ATHEX's LEI)
6	Market ID	Alpha(1)	The Market where the Instrument is traded
7	XNET Market ID	Alpha(15)	The Market where the Instrument is traded if it is an XNET specific instrument
8	Product Type	NUM(10)	Indicates the type of product the instrument is associated with. Possible values for the report are: | Value	Meaning
---	---
5	Equity
11	Municipal
12	Other
13	Financing	
9	Instrument Type	Alpha(15)	Indicates type of instrument. Possible values for the report are: | Value	Meaning
---	---
CS	Common Stock
PS	Preferred Stock
MF	Mutual Fund (Exchange-Traded Fund)
WAR	Warrant
REPO	Repo
FUT	Future
OPT	Option	

No	Field	Type	Description		
			OOF	Options on Futures	
			NONE	No Security Type	
10	Put Or Call	Alpha(1)	Used only for Options. Indicates whether an option is for put or call. Possible values: • "0": Put, • "1": Call, • SPACE: Non Option		
11	Exercise Style	Alpha(1)	Used only for Options. Indicates whether an option is for European or American exercise. Possible values: • "0": European, • "1": American, • SPACE: Non Option		
12	Is Right	Alpha(1)	Define if the instrument is a right or not. • "N": Standard traded instrument, • "R": A Right		
13	Instrument Level	Alpha(1)	Indicates the level of the instrument. Possible values are: • "B": Base level. Applicable for instruments that have no underlying instrument (e.g. stocks). • "R": Relational level. Indicative of instruments that are not derivatives but have an underlying instrument (e.g. repos, warrants etc). • "1": 1st level Derivative product. • "2": 2nd level Derivative product.		
14	Expiration Date	5.12	The Instrument's expiration date.		
15	Strike Price	NUM(9,4)	The Instrument's Strike Price. Applies to derivatives.		
16	Strike Price Currency	5.3	In the case that the strike price expresses a monetary amount, the currency of this amount is described here.		
17	Issue Number	NUM(10)	Applies to derivatives to indicate a versioning of the contract when required due to corporate actions to the underlying		
18	Contract Size	NUM(10)	The Instrument's contract size. Applies to derivatives.		
19	ISIN Code	5.4	The Instrument's Isin code.		
20	BBGID Code	Alpha(12)	The Instrument's BBGID code.		
21	FISN	5.6	The Instrument's FISN code.		

No	Field	Type	Description
22	Clearing Space Id	5.11	The proper definition for the instrument to be cleared
23	Local Symbol	5.2	The Instrument's fifteen-character symbol defined in the Local language
24	English Name	Alpha(30)	The Instrument's full name defined in English
25	Local Name	Alpha(30)	The Instrument's full name defined in the Local language
26	Is Traded	Alpha(1)	Defines if the instrument is currently traded Possible values "Y","N"
27	Status	Alpha(1)	The Instrument's status. The possible values are:

Status	Description
A	Active
H	Halt
S	Suspended
R	Resumed
N	Inactive

No	Field	Type	Description
28	Last Trading Date	5.12	The date until which trading for the instrument is available
29	Last Trading Time	5.13	The time of the last trading date until which trading for the instrument is available
30	Underlying Instrument symbol	5.1	For derivative products and products that have a relational instrument level, this is the Underlying Instrument symbol with which they are related.
31	ISIN of the underlying	5.4	For derivative products and products that have a relational instrument level, this is the ISIN of the underlying instrument symbol with which they are related.
32	Notional Currency	5.3	The currency used when calculating notional values and cash flows for this instrument.
33	Commodity type	Alpha(2)	The type of the instrument's commodity Possible values:

2	COMMODITY
3	CORPORATE
4	CURRENCY
5	EQUITY
6	GOVERNMENT

No	Field	Type	Description	
			7	INDEX
			11	MUNICIPAL
			12	OTHER
			13	FINANCING
			' '	Non-derivative product
34	Commodity Traded in OASIS flag	Alpha(1)	Is the commodity traded in OASIS Infrastructure :'Y' or 'N'	
35	DSS Code	Alpha(15)	A secondary code for instruments listed in multiple venues. Applies only to XNET products.	
36	Price Notation	Alpha(1)	Indicates whether trading values refer to real numbers ("L") or percentile ("%")	
37	Price Currency	5.3	If the price refers to monetary value this field depicts the currency used.	
38	Lot Size	NUM(10)	The trading unit of the instrument	
39	Short Sell flag	Alpha(1)	Valid Short Sell mechanisms for the instruments. The Possible values are Possible Values: ' ' : No short capabilities 'S' : Short Selling only 'B': Buy to close short sell position only 'M': Both Short Sell and Buy to close short sell position allowed	
40	Volatility Interrupter flag	Alpha(1)	Defines if the trading of the instrument can be interrupted by the volatility interrupter mechanism (Y/N)	
41	Volatility Interrupter Static Limit	NUM(8,2)	Defines the percentage deviation with reference to the last auction price of the security that is allowed. If the price of a possible trade exceeds this limit then the Volatility Interrupter is triggered.	
42	Volatility Interrupter Dynamic Limit	NUM(8,2)	Defines the percentage deviation with reference to the last trade price of the security that is allowed. If the price of a possible trade exceeds this limit then the Volatility Interrupter is triggered	
43	Market Making Flag	Alpha(1)	Indicates whether there is a quoting obligation on the series if the necessary quoting conditions are met. Possible Values: Y : Yes N : No '' : Not Applicable	

No	Field	Type	Description
44	Marking Flag	Alpha(1)	Indicates whether the instrument has a closing price less than 0.05 for more than 3 days, thus the volatility interrupter parameters are altered for this series. Possible Values: Y : Yes N : No '' : Not Applicable
45	Basic Closing Method	Alpha(1)	Indicating the Basic Closing Method used. Possible values are: 1: Last trade price 2: Average number of trades 3: Average percent of trades 4: Average trades during time 5: Average percent of trade volume 6: Average of trades during time + BBO 7: Significant Percent of Trades '' : Not Applicable
46	Basic Closing Method Parameter	NUM(4,2)	Indicating the value of the parameter used for the Basic Closing Method. More specifically, if the Basic Closing Method is: 1 or 7: the field is null. 2: the number expresses the number of trades to use for the calculation. 3: The number expresses the percent of the trades used for the calculation. 4 or 6: The number expresses the time period used in minutes. 5: The number expresses the percent of the trade volume used for the calculation.
47	Auction Closing Method	Alpha(1)	If an auction is performed for calculating the closing value for the series, this is a number indicating the Auction Closing Method used, otherwise, not Applicable. Possible values are: 1: Auction Price 2: Alternative Auction Price 3: Alternative Auction Price Plus '' : Not Applicable
48	Trading Activity Flag	Alpha(1)	Indicates the trading activity of the series. Possible Values: 1: High Activity 2: Middle Activity 3: Low Activity 4: Low Dispersion

No	Field	Type	Description
			': Not applicable
49	Main Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board. Possible Values: Y : Yes N : No '' : Not Applicable
50	Special Terms Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board. Possible Values: Y : Yes N : No '' : Not Applicable
51	Trade Report Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board. Possible Values: Y : Yes N : No '' : Not Applicable
52	Odd Lot Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board. Possible Values: Y : Yes N : No '' : Not Applicable
53	Forced Sales Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board. Possible Values: Y : Yes N : No '' : Not Applicable
54	Pre-Call Phase Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified phase. Possible Values: Y : Yes N : No '' : Not Applicable
55	Continuous Phase Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified phase.

No	Field	Type	Description
			Possible Values:
			Y : Yes
			N : No
			'' : Not Applicable
56	Closing Phase Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified phase.
			Possible Values:
			Y : Yes
			N : No
			'' : Not Applicable
57	Tick Size Id	Alpha(15)	The Price Tick Structure ID of the instrument. This field should be used as a link to the Price Tick Structures Report.
58	Last Trade Date	5.12	The date that the last trade on this instrument occurred
59	Last Trade Time	5.13	The time that the last trade of the instrument occurred.
60	Outstanding shares	NUM(10)	The total number of Securities allotted for trading. Applies ONLY to equities related instruments
61	Open Interest	NUM(10)	Total number of outstanding contracts. Applies to derivatives.
62	Daily Average Traded Volume	NUM(10)	The instrument's Daily Average Traded Volume
63	Daily Average Traded Value	NUM(12,2)	The instrument's Daily Average Traded Value
64	Max Order Volume	NUM(10)	The maximum order volume allowed.
65	Min Order Volume Pre-call Phase	NUM(10)	The minimum order volume allowed during the pre-call trading phase.
66	Min Order Volume Continuous Phase	NUM(10)	The minimum order volume allowed during the continuous trading phase.
67	Min Order Volume Closing Phase	NUM(10)	The minimum order volume allowed during the closing trading phase.
68	General Risk	NUM(10,4)	The instrument's general risk percentage.
69	Special Risk	NUM(10,4)	The instrument's special risk percentage. If it is null then it is set to 100.
70	Company Name English	Alpha(40)	The company that issued the instrument in English

No	Field	Type	Description
71	Company Name Local	Alpha(40)	The company that issued the instrument in Greek
72	Sector name English	Alpha(50)	The industry sector of the company in English
73	Sector name Local	Alpha(50)	The industry sector of the company in Greek
74	Pre-Dividend	NUM(20,2)	The amount returned to security-holders, for each Security, via pre-divided
75	Nominal Value	NUM(12,2)	The Security's nominal value
76	Shares Issued	NUM(10)	The shares issued for the instrument. Applies to stocks.
77	Dividend	NUM(9,4)	The amount returned to security-holders, for each Security, via divided
78	Maximum Trading Percent	NUM(10,4)	The maximum amount of securities eligible for trading each day, in percentage
79	Introduction Price	NUM(9,4)	The price of the Security when it was first entered into the market.
80	Issue Date	5.12	The date that the instrument was created
81	Removal Date	5.12	The date that the instrument was deleted
82	Transactions to be cleared	Alpha(1)	Code to identify whether the transactions for this instrument will be cleared. Applies to derivatives only. Possible values are: 'Y': Transactions will be cleared 'N': Transactions will not be cleared ' ' : Non Derivative products.

Table 3: Non-Bond Instrument Series report description

3.4. Combination Series

This report contains the combination series that are traded in the OASIS system in process. One separate report is produced for each exchange. Please consider that multiple fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Symbol	5.1	The Standard Combination fifteen-character symbol
2	CFI Code	5.5	The Instrument's CFI Code
3	Exchange ID	Alpha(15)	The Exchange where the Instrument is traded.
4	Venue ID	5.8	The Venue where the Instrument is traded
5	Operator of Venue LEI	5.7	The LEI of the operator of the venue (effectively, ATHEX's LEI)
6	Market ID	Alpha(1)	The Market where the Instrument is traded
7	Commodity Id	Alpha(15)	The Instrument's Commodity
8	Strike Price	NUM(9,4)	The Instrument's Strike Price.
9	Strike Price Currency	5.3	In the case that the strike price expresses a monetary amount, the currency of this amount is described here.
10	Short Name	Alpha(15)	The Instrument's fifteen-character symbol defined in the Local language
11	Product Type	NUM(10)	Indicates the type of product the instrument is associated with. Possible values for the report are: <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>12</td><td>Other</td></tr></table>
12	Instrument Type	Alpha(15)	MLEG (Multi leg instrument)
13	Combination subtype	Alpha(1)	Denotes the type of combination. Possible values are: <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>"E"</td><td>Time Spread</td></tr><tr><td>"D"</td><td>Spread</td></tr><tr><td>"B"</td><td>Butterfly</td></tr><tr><td>"S"</td><td>Straddle</td></tr></table>
14	ISIN Code	5.4	The Instrument's Isin code.
15	FISN Code	5.6	The Instrument's FISN code.
16	Notional Currency	5.3	The currency used when calculating notional values and cash flows for this instrument.

No	Field	Type	Description
17	Expiration Date	5.12	The Instrument's expiration date.
18	Last Trading Date	5.12	The date until which trading for the instrument is available
19	Last Trading Time	5.13	The time of the last trading date until which trading for the instrument is available
20	Price Notation	Alpha(1)	Indicates whether trading values refer to real numbers ("L") or percentile ("%")
21	Price Currency	5.3	If the price refers to monetary value this field depicts the currency used.
22	Tick Size Id	Alpha(15)	The Price Tick Structure ID of the instrument. This field should be used as a link to the Price Tick Structures Report.
23	Transactions to be cleared	Alpha(1)	Code to identify whether the transactions for this instrument will be cleared. Applies to derivatives only. Possible values are: 'Y': Transactions will be cleared 'N': Transactions will not be cleared ' ' : Non Derivative products.
24	Number of legs	NUM(10)	Denotes the number of legs composing the Combination
25	Leg 1 Instrument Symbol	5.1	The first leg's instrument's fifteen-character symbol
26	Leg 1 Operation if buy	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when buying the combination.
27	Leg 1 Operation if Sell	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when selling the combination.
28	Leg 1 Ratio	NUM(10)	Specify the ratio concerning the volume between the different legs.
29	Leg 2 Instrument Symbol	5.1	The second leg's instrument's fifteen-character symbol
30	Leg 2 Operation if buy	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when buying the combination.
31	Leg 2 Operation if Sell	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when selling the combination.
32	Leg 2 Ratio	NUM(10)	Specify the ratio concerning the volume between the different legs.
33	Leg 3 Instrument Symbol	5.1	The third leg's instrument's fifteen-character symbol

No	Field	Type	Description
34	Leg 3 Operation if buy	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when buying the combination.
35	Leg 3 Operation if Sell	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when selling the combination.
36	Leg 3 Ratio	NUM(10)	Specify the ratio concerning the volume between the different legs.
37	Leg 4 Instrument Symbol	5.1	The fourth leg's instrument's fifteen-character symbol
38	Leg 4 Operation if buy	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when buying the combination.
39	Leg 4 Operation if Sell	Alpha(1)	Specify whether the specific leg should be Bought ('B') or Sold ('S') when selling the combination.
40	Leg 4 Ratio	NUM(10)	Specify the ratio concerning the volume between the different legs.

Table 4: Combination Series report description

3.5. Bond Series

This report contains the bond instrument series that are traded in the OASIS system in process. One separate report is produced for each exchange. Please consider that multiple fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Symbol	5.1	The Instrument's fifteen-character symbol
2	CFI Code	5.5	The Instrument's CFI Code
3	Exchange ID	Alpha(15)	The Exchange where the Instrument is traded.
4	Venue ID	5.8	The Venue where the Instrument is traded
5	Operator of Venue LEI	5.7	The LEI of the operator of the venue (effectively, ATHEX's LEI)
6	Market ID	Alpha(1)	The Market where the Instrument is traded
7	XNET Market ID	Alpha(15)	The Market where the Instrument is traded if it is an XNET specific instrument
8	Product Type	NUM(10)	Indicates the type of product the instrument is associated with.
9	Instrument Type	Alpha(15)	Indicates type of instrument. Possible Values for this report are:

Field 8 — Product Type values:

Value	Meaning
3	Corporate bond
6	Government bond

Field 9 — Instrument Type values:

Value	Meaning
TB	Treasury Bill – non US
TINT	Interest Strip From Any Bond Or Note
TCAL	Principal Strip Of A Callable Bond Or Note
TIPS	Treasury Inflation Protected Security
EUSOV	Euro Sovereigns
TPRN	Principal Strip From A Non-Callable Bond Or Note
XLINKD	Indexed Linked
STRUCT	Structured Notes
EUCORP	Euro Corporate Bond
EUFRN	Euro Corporate Floating Rate Notes
DUAL	Dual Currency

No	Field	Type	Description		
			CORP	Corporate Bond	
			CPP	Corporate Private Placement	
			CB	Convertible Bond	
10	Expiration Date	5.12	The Instrument's expiration date if any (= if it is not 31/12/3000)		
11	ISIN Code	5.4	The Instrument's Isin code.		
12	BBGID Code	Alpha(12)	The Instrument's BBGID code.		
13	FISN	5.6	The Instrument's FISN code.		
14	Clearing Space Id	5.11	The proper definition for the instrument to be cleared		
15	Local Symbol	5.2	The Instrument's fifteen-character symbol defined in the Local language		
16	English Name	Alpha(30)	The Instrument's full name defined in English		
17	Local Name	Alpha(30)	The Instrument's full name defined in the Local language		
18	Is Traded	Alpha(1)	Defines if the instrument is currently traded Possible values "Y","N"		
19	Status	Alpha(1)	The Instrument's status. The possible values are:		

The possible values for Status (field 19):

Status	Description
A	Active
H	Halt
S	Suspended
R	Resumed
N	Inactive

No	Field	Type	Description
20	Last Trading Date	5.12	The date until which trading for the instrument is available
21	Last Trading Time	5.13	The time of the last trading date until which trading for the instrument is available
22	Notional Currency	5.3	The currency used when calculating notional values and cash flows for this instrument.
23	Price Notation	Alpha(1)	Indicates whether trading values refer to real numbers ("L") or percentile ("%")
24	Price Currency	5.3	If the price refers to monetary value this field depicts the currency used.
25	Lot Size	NUM(10)	The trading unit of the instrument

No	Field	Type	Description
26	Volatility Interrupter flag	Alpha(1)	Defines if the trading of the instrument can be interrupted by the volatility interrupter mechanism (Y/N)
27	Volatility Interrupter Static Limit	NUM(8,2)	Defines the percentage deviation with reference to the last auction price of the security that is allowed. If the price of a possible trade exceeds this limit then the Volatility Interrupter is triggered.
28	Volatility Interrupter Dynamic Limit	NUM(8,2)	Defines the percentage deviation with reference to the last trade price of the security that is allowed. If the price of a possible trade exceeds this limit then the Volatility Interrupter is triggered
29	Market Making Flag	Alpha(1)	Indicates whether there is a quoting obligation on the series if the necessary quoting conditions are met. Possible Values: Y : Yes N : No '' : Not Applicable
30	Marking Flag	Alpha(1)	Indicates whether the instrument has a closing price less than 0.05 for more than 3 days, thus the volatility interrupter parameters are altered for this series. Possible Values: Y : Yes N : No '' : Not Applicable
31	Basic Closing Method	Alpha(1)	A number indicating the Basic Closing Method used. Possible values are: 1: Last trade price 2: Average number of trades 3: Average percent of trades 4: Average trades during time 5: Average percent of trade volume 6: Average of trades during time + BBO 7: Significant Percent of Trades '' : Not Applicable
32	Basic Closing Method Parameter	NUM(4,2)	A number indicating the value of the parameter used for the Basic Closing Method. More specifically, if the Basic Closing Method is: • 1 or 7: the field is null. • 2: the number expresses the number of trades to use for the calculation. • 3: The number expresses the percent of the trades used for the calculation.

No	Field	Type	Description
			• 4 or 6: The number expresses the time period used in minutes.
			• 5: The number expresses the percent of the trade volume used for the calculation.
33	Auction Closing Method	Alpha(1)	If an auction is performed for calculating the closing value for the series, this is a number indicating the Auction Closing Method used, otherwise, not Applicable. Possible values are:
			1: Auction Price
			2: Alternative Auction Price
			3: Alternative Auction Price Plus
			'' : Not Applicable
34	Trading Activity Flag	Alpha(1)	Indicates the trading activity of the series. Possible Values:
			1: High Activity
			2: Middle Activity
			3: Low Activity
			4: Low Dispersion
			'': Not applicable
35	Main Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board.
			Possible Values:
			Y : Yes
			N : No
			'' : Not Applicable
36	Special Terms Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board.
			Possible Values:
			Y : Yes
			N : No
			'' : Not Applicable
37	Trade Report Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board.
			Possible Values:
			Y : Yes
			N : No
			'' : Not Applicable
38	Odd Lot Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board.
			Possible Values:

No	Field	Type	Description
			Y : Yes N : No '' : Not Applicable
39	Forced Sales Board Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified board. Possible Values: Y : Yes N : No '' : Not Applicable
40	Pre-Call Phase Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified phase. Possible Values: Y : Yes N : No '' : Not Applicable
41	Continuous Phase Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified phase. Possible Values: Y : Yes N : No '' : Not Applicable
42	Closing Phase Flag	Alpha(1)	A flag indicating whether the instrument can participate in trading in the specified phase. Possible Values: Y : Yes N : No '' : Not Applicable
43	Tick Size Id	Alpha(15)	The Price Tick Structure ID of the instrument. This field should be used as a link to the Price Tick Structures Report.
44	Last Trade Date	5.12	The date that the last trade on this instrument occurred
45	Last Trade Time	5.13	The time that the last trade of the instrument occurred.
46	Daily Average Traded Volume	NUM(10)	The instrument's Daily Average Traded Volume
47	Daily Average Traded Value	NUM(12,2)	The instrument's Daily Average Traded Value
48	Max Order Volume	NUM(10)	The maximum order volume allowed.
49	Min Order Volume Precall Phase	NUM(10)	The minimum order volume allowed during the pre-call trading phase.

No	Field	Type	Description
50	Min Order Volume Continuous Phase	NUM(10)	The minimum order volume allowed during the continuous trading phase.
51	Min Order Volume Closing Phase	NUM(10)	The minimum order volume allowed during the closing trading phase.
52	General Risk	NUM(10,4)	The instrument's general risk percentage.
53	Special Risk	NUM(10,4)	The instrument's special risk percentage. If it is null then it is set to 100.
54	Asset Local Group Description	Alpha(20)	A detailed description of the Asset Type, in the Local language
55	English Asset Group Description	Alpha(20)	A detailed description of the Asset Type, in the English language
56	Issuer	Alpha(30)	Contains the Bond issuer's name
57	Market Segment	Alpha(1)	The exchange's Segment in which the bond belongs
58	Issue Date	5.12	The date the Bond was issued
59	Maturity Date	5.12	The maturity date of the Bond
60	Max Nominal Value	NUM(10,2)	The maximum denomination (face value) of the Bond. The minimum nominal value could be derived via the "Nominal Trading Unit" field.
61	Payment Type	Alpha(1)	The way in which the given Bond pays the holder. Current values: • "0": Discounted • "1": Zero Coupon • "2": Nominal.
62	Nominal Trading Unit	NUM(10,2)	The trading unit for the specific Bond (lowest denomination)
63	Issue Date in Trading Platform	5.12	Denotes the date when the electronic trading for the given Bond was initially started
64	Number of Securities	NUM(10)	The number of Bonds issued
65	Tax Rate	NUM(5,2)	The percentage with which the given Bond will be taxed.
66	Coupon Type	Alpha(1)	The type of the coupon, either fixed interest rate noted as "0" or floating interest rate noted as "1".
67	Index	Alpha(1)	If the Bond has a floating interest rate then this field indicates the interest rate related to the given Bond. Possible values are: • "0": One Year Treasury Bills • "1": Euribor • "2": Libor

No	Field	Type	Description
68	Index Spread	NUM(5,2)	If the Bond has a floating interest rate then this field contains the percentage of the Bond's spread based on the interest rate indicated by the Index field
69	Current Coupon Rate	NUM(5,2)	Current interest rate
70	Initial Coupon Rate	NUM(5,2)	Initial interest rate.
71	Periodicity	Alpha(1)	The frequency in which the Bond pays interest. Values: • "0": Every month • "1": Every two months • "2": Every three months • "3": Every four months • "4": Every six months • "5": Every nine months • "6": Every year
72	Gross Coupon Amount	NUM(10,2)	The gross amount in the issue-currency (before tax deduction) paid by the coupon.
73	Net Coupon Amount	NUM(10,2)	The net amount in the issue-currency (after tax deduction) paid by the coupon.
74	Current Coupon Ex-Date	5.12	Expiration date of the current coupon.
75	Current Coupon Payment Date	5.12	Payment date of the current coupon.
76	Current Coupon Beginning Date	5.12	Beginning date of the current coupon.
77	Issued Amount	NUM(13)	The amount of the issued Bonds entered in the system for trading
78	Coupon No.	NUM(3)	Sequence number of the current coupon.
79	Days' Basis	Alpha(1)	The number of days as a basis for the IRR and the accrued interest calculations. Values: • "0": 30/360 • "1": 30/365 • "2": Actual/360 • "3": Actual/365 • "4": Actual/Actual
80	Issuer Code	NUM(10)	An ATHEX-specific code which defines uniquely the Issuer
81	Bond Code	NUM(10)	An ATHEX-specific code which defines uniquely the security. The code is issued upon the bond's entry into the trading platform and becomes void upon its exit

No	Field	Type	Description
82	DSS Code	Alpha(15)	A secondary code for instruments listed in multiple venues. Applies only to XNET products.
83	Redemption Value	NUM(12,2)	The Bond's redemption value.
84	Callable Type	Alpha(1)	The field is set to 'C' if this is a callable bond
85	Puttable Type	Alpha(1)	The field is set to 'P' if this is a puttable bond
86	Convertible Type	Alpha(1)	The field is set to 'V' if this is a convertible bond
87	Perpetuity Type	Alpha(1)	The field is set to 'R' if this is a perpetual bond
88	Pricing Method	Alpha(1)	The pricing method of the bond. Values are: 'C': Clean 'D': Dirty
89	Settlement Type	NUM(10)	The days to Settlement

Table 5: Bond Instrument Series report description

3.6. Markets

This report contains the markets set in the OASIS system in process. One separate report is produced for each exchange. Please consider that multiple fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Market Id	Alpha(1)	The market's identification character
2	XNET Market ID	Alpha(15)	The Id of a market specified only for XNET trading
3	Exchange ID	Alpha(15)	The Exchange where the market belongs
4	Venue Id	5.8	The Venue where the market belongs
5	Market Short Name	Alpha(12)	The market's short name in English
6	Market Short Name Local	Alpha(12)	The market's short name in Greek
7	Market Long Name	Alpha(30)	The market's long name in English
8	Market Long Name Local	Alpha(30)	The market's long name in Greek
9	Market Type	Alpha(1)	Possible Values are : 'M' : for Main 'A' : for Auction
10	Main Board Schedule Id	Alpha(15)	The identification of the main board schedule. This is a lookup field for the market schedules report. (Market Id can be used for the same purpose).
11	Special Terms Board Flag	Alpha(1)	Possible values: 'Y' : The board is valid for this market 'N' : The board is invalid for this market
12	Special Term Board Start Time	5.13	If the board is valid for this market then the start time of the board, otherwise 0.
13	Special Term Board End Time	5.13	If the board is valid for this market then the end time of the board, otherwise 0.
14	Odd Lot Board Flag	Alpha(1)	Possible values: 'Y' : The board is valid for this market 'N' : The board is invalid for this market
15	Odd Lot Board Start Time	5.13	If the board is valid for this market then the start time of the board, otherwise 0.
16	Odd Lot Board End Time	5.13	If the board is valid for this market then the end time of the board, otherwise 0.
17	Forced Sales Board Flag	Alpha(1)	Possible values: 'Y' : The board is valid for this market

No	Field	Type	Description
			'N' : The board is invalid for this market
18	Forced Sales Board Start Time	5.13	If the board is valid for this market then the start time of the board, otherwise 0.
19	Forced Sales Board End Time	5.13	If the board is valid for this market then the end time of the board, otherwise 0.
20	Trade Report Board Flag	Alpha(1)	Possible values: 'Y' : The board is valid for this market 'N' : The board is invalid for this market
21	Trade Report Board Start Time	5.13	If the board is valid for this market then the start time of the board, otherwise 0.
22	Trade Report Board End Time	5.13	If the board is valid for this market then the end time of the board, otherwise 0.
23	Clearing Space Id	5.11	The Clearing Space where products of this market are cleared

Table 6: Markets report description

3.7.   Market Schedules

This report contains the schedules of the main boards of the markets. Market Id or the Main Board Schedule Id fields can be used for connecting the schedules to the appropriate markets. One report is created per exchange. Please consider that multiple fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Market Id	Alpha(1)	The market's identification character
2	XNET Market ID	Alpha(15)	The Id of a market specified only for XNET trading
3	Main Board Schedule Id	Alpha(15)	The identification of the main board schedule. This is a lookup field for the market schedules report. (Market Id can be used for the same purpose).
4	Trading Phase	Alpha(1)	Indicates the trading phase id. Possible values are: <table><tr><th>Value</th><th>Meaning</th></tr><tr><td>'P'</td><td>Pre-Open</td></tr><tr><td>'J'</td><td>Projected Open</td></tr><tr><td>'T'</td><td>Continuous / Auction</td></tr><tr><td>'C'</td><td>Close</td></tr><tr><td>'R'</td><td>Run-off</td></tr><tr><td>'E'</td><td>End</td></tr></table>
5	Start Time	5.13	The time that the trading phase starts according to the market's main board schedule

Table 7: Market Schedules report description

3.8.   Indices

This report contains the indices defined in the OASIS system in process. One separate report is produced for each exchange. Please consider that multiple fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Symbol	5.1	The Index's fifteen-character symbol
2	Exchange ID	Alpha(15)	The Exchange where the index belongs
3	Venue Id	5.8	The Venue where the index belongs
4	CFI Code	5.5	The Index's CFI Code
5	English Name	Alpha(30)	The Index's full name defined in the English language
6	Local Symbol	5.2	The Index's fifteen-character symbol in the Local language.
7	Local Name	Alpha(30)	The Index's full name defined in the Local language
8	ISIN Code	5.4	The Index's ISIN code
9	BBGID	Alpha(12)	The Index's BBGID code
10	Divisor	NUM(15,2)	Denotes the Base Value in Indices, or the Fund's total number of shares (the latter applies to ETFs)
11	Assets	NUM(15,2)	Denotes the Fund's Assets and applies only to ETFs. Indices have this field filled with zeros
12	Liabilities	NUM(15,2)	Denotes the Fund's Liability and applies only to ETFs. Indices have this field filled with zeros
13	Reference Index symbol	5.1	The fifteen-character symbol of the referenced index. Applies only to Index ETFs.
14	Index Category	Alpha(1)	Possible values are 'I': Index 'N': INav
15	Previous Day's Closing Reference Value	NUM(9,4)	Denotes the last price calculated for an Index on the previous day, or the Fund's Net Asset Value (the latter applies to ETFs)
16	Index Population Id	Alpha(15)	Provides the link for the index population records
17	Index Population Count	NUM(10)	Provides the number of securities that constitute the index.

Table 8: Indices report description

3.9. Indices Population

This report contains the instruments that populate the indices defined in the OASIS system in process. The Index Population Id is the key field for connecting the instruments to the appropriate index. One report is created per exchange. Please consider that some fields may be null or empty, indicating unavailability or inapplicability of the specific data field, even if this not explicitly specified in the following table.

No	Field	Type	Description
1	Index Population Id	Alpha(15)	Provides the link for the index records
2	Symbol	5.1	The name of the instrument that participates in the index.
3	Weight	NUM(9,4)	The Instrument's weight to the index expressed as a percentage
4	Instrument's Outstanding shares	NUM(10)	The total number of Securities allotted for trading.
5	Capping Factor	NUM(7,6)	Capping Factor is a number (between 0 – 1 with six decimals) used to limit the weight of an index constituent during a review period.

Table 9: Indices population report description

3.10. Currencies Exchange Rates

This report contains the currencies defined in the OASIS system in process along with their exchange rate with respect to EURO currency.

No	Field	Type	Description
1	Currency Id	5.3	The Currency's Short Name
2	Currency Name	Alpha(30)	The Currency's Full name in English
3	Currency Name Local	Alpha(30)	The Currency's Full name in Greek
4	Current Exchange Rate	NUM(13,6)	The Currency's current exchange rate against EURO
5	Previous Close Exchange Rate	NUM(13,6)	The Currency's previous closing exchange rate against EURO

Table 10: Currencies exchange rates report description

3.11. Holidays

This report contains the future holidays that are defined in the OASIS system. Holidays are defined for each exchange independently, therefore report are produced per exchange.

No	Field	Type	Description
1	Exchange Id	Alpha(15)	The exchange for which the holiday is applicable
2	XNET Market ID	Alpha(15)	The Id of a market specified only for XNET trading
3	Holiday Date	5.12	The Date of the holiday
4	Description	Alpha(30)	The holiday's description

Table 11: Holidays report description

3.12. Price Tick Structures

This report contains all the available price tick structures with their pricing bands and steps. Traded instruments are connected to the actual structure with the use of the Tick Size Id field.

No	Field	Type	Description
1	Tick Size ID	Alpha(15)	The ID of the Price Tick Structure.
2	Description	Alpha(30)	A short description of the price tick.
3	Low Price	NUM(9,4)	The low limit (inclusive) of the price range for which this tick size is valid.
4	High Price	NUM(9,4)	The upper limit (exclusive) of the price range for which this tick size is valid.
5	Tick size	NUM(9,4)	The actual price step defined for the price range.

Table 12: Price Tick Structures report description

3.13. Latest Reports report

For the purposes of the market participants, each time a new report or set of reports is created, a standardised report that contains information regarding all the latest reports is also created. The name of this report is LatestReports.<extension>, where the extension parameter defines the file format (.xml or .csv). Therefore, two reports will always be available for informing the member participants for the latest files to download. It must be noted that this file of files does not contain itself as an entry.

The format of this report is the following:

No	Field	Type	Description
1	Created Date	5.12	The date that the report is created
2	Created Time	5.13	The time that the report is created
3	File Type	Alpha(10)	The type of the report. Currently, the possible values are: "csv" : For Comma delimited files "xml" : For XML files.
4	Filename	Alpha(150)	The report's complete name.
5	Daily Version	NUM(2)	The version number of the report for that day.

Table 13: Latest reports report description

4.   Data retrieval by the market participants.

Documents will be retrieved by the market participants with the use of https protocol from the ATHEX site, using a process relative to the one currently used by the users for retrieving daily trading related files.

First of all, users should retrieve the LatestReport.<extensions> file, for the system of their interest using the following static URLs:

For reports generated from the UAT system:

https://www.athexgroup.gr/rds/-/rdsFile/UAT_LatestReports_csv for retrieving a comma separated file containing the reports produced for the UAT system.

https://www.athexgroup.gr/rds/-/rdsFile/UAT_LatestReports_xml for retrieving a XML file containing the reports produced for the UAT system.

 For reports generated from the production system:

https://www.athexgroup.gr/rds/-/rdsFile/PROD_LatestReports_csv for retrieving a comma separated file containing the reports produced for the production system.

https://www.athexgroup.gr/rds/-/rdsFile/PROD_LatestReports_xml for retrieving a XML file containing the reports produced for the production system.

For reports referring to XNET functionality of the production system:

https://www.athexgroup.gr/rds/-/rdsFile/XNET_PROD_LatestReports_csv for retrieving a comma separated file containing the reports that refer to the XNET functionality of the production system.

https://www.athexgroup.gr/rds/-/rdsFile/XNET_PROD_LatestReports_xml for retrieving a XML file containing the reports that refer to the XNET functionality of the production system.

For reports referring to XNET functionality of the UAT system:

https://www.athexgroup.gr/rds/-/rdsFile/XNET_UAT_LatestReports_csv for retrieving a comma separated file containing the reports that refer to the XNET functionality of the UAT system.

https://www.athexgroup.gr/rds/-/rdsFile/XNET_UAT_LatestReports_xml for retrieving a XML file containing the reports that refer to the XNET functionality of the UAT system.

After receiving and parsing the contents of this file user should then submit requests to the URL created by the concatenation of

- The static string https://www.athexgroup.gr/rds/-/rdsFile/
- The system (UAT or PROD or XNET_UAT or XNET_PROD) followed by an underscore ("_").
- The name of the specific file to be retrieved, after substituting the dot (".") with an underscore ("_").

So the URL of any of the files will be as follows:

https://www.athexgroup.gr/rds/-/rdsFile/<system>_filename_<extension>

Example 1: https://www.athexgroup.gr/rds/-/rdsFile/UAT_InstrumentSeries_20170925_G_v1_csv is the URL for downloading the comma delimited file of the Instrument series of the Greek Exchange as included in the UAT system.

Example 2: https://www.athexgroup.gr/rds/-/rdsFile/PROD_Markets_20170925_G_v1_xml is the URL for downloading the XML file of the Markets of the Greek Exchange in the Production System.

Example 3:

https://www.athexgroup.gr/rds/-/rdsFile/XNET_PROD_Markets_20170925_X_v1_xml is the URL for downloading the XML file of the XNET Markets of the Production System.

GET requests from inside an application or command line tools like cURL can be used. The authentication is the Basic (Base64 encoded user name and password to HTTP Header).

Procedures of how to get user credentials and authorization access will be descripted in another document.

5.   Appendix A: Information on Various Field Codes

5.1.   Symbol

It is symbol of the tradeable instrument (stock or bond) or Index, written in the English Language. The symbol name could be up to 15 characters long.

5.2.   Local Symbol

It is symbol of the tradeable instrument (stock, bond etc) or Index, written in the Local Language. The symbol name could be up to 15 characters long

5.3.   Currency Code

Currency codes depicted in the report refer to different values (e.g. strike price currency or notional currency). In all cases the currency is a three letter representation as defined by the ISO 4217 standard.

5.4.   ISIN Code

The International securities identification numbering system (ISIN) for securities and related financial instruments as defined by the ISO 6166 standard.

5.5.   CFI Code

The Classification of Financial Instrument code for securities and related financial instruments as defined by the ISO 10962 standard.

5.6.   FISN Code

The Financial Instrument Short Name as defined by the ISO 18774 standard.

5.7.   LEI

The Legal Entities Identifier that is appointed to a legal entity relevant to any financial transaction as defined by the ISO 17442 standard.

5.8. Venue ID (MIC)

The four letter representation of a given Exchange/Regulated or Unregulated Market defined by the ISO 10383 standard. Table 14 lists the MIC codes used.

MIC	Venue ID
XATH	Athens Exchange (ATHEX) Cash Market
XCYS	Cyprus Stock Exchange (CSE)
ENAX	Alternative
XECM	Emerging Companies Market
XADE	Athens Exchange (ATHEX) Derivatives Market
BMFM	DERIVATIVES REGULATED MARKET (SIBIU)
SBMF	SPOT REGULATED MARKET (SIBIU)
BMFA	ALTERNATIVE TRADING SYSTEM FOR EQUITIES (SIBIU)

Table 14: Venue Id's

5.9. Board ID

It defines uniquely the Board under which the instruments of a given Market can be traded. The following table lists these IDs and their description.

Board ID	Board Description
M	Main Board
O	Odd Lot Board
B	Pre-Agreed Board
S	Special Terms (with the Hit & Take Method) Board
F	Forced Sales (with the Hit & Take Method) Board

Table 15: Board Id's

5.10. Phase ID

It defines the trading phase of a given instrument. **Error! Reference source not found.** lists these I Ds and their description.

Phase ID	Phase Description
SPACE	Null Phase
P	Pre-Call
T	Continuous
C	Closing Price Trading
S	Stop

Table 16: Phase Id's

5.11. Clearing Space Id

It defines the Clearing Space where transactions for an instrument are cleared according to ATHEX rules. The following values exist for the Clearing Spaces:

Clearing Space ID	Description
CATH	The Clearing Space for ATHEX equity products
CDER	The Clearing Space for ATHEX derivatives.
CCYS	The Clearing Space for CSE
ECYS	The Clearing Space for CSE
CRDE	The Clearing Space for SIBIU
CROU	The Clearing Space for SIBIU

Table 17: Clearing Space Id's

5.12. Date

Dates are presented according to the basic format of the ISO 8601 standard as an Alpha(8) field with the form 'YYYYMMDD'. This is used for all dates, unless otherwise specified.

5.13. Time

Timestamps are presented according to the basic format of the ISO 8601 standard as an Alpha(15) field with the form 'HHMMSS.sss±HHMM' .An example is 143256.789+0300, meaning that the local time is 2 in the afternoon and 32 minutes and 56 seconds and 789 milliseconds. The +0300 indicates the time zone in Greece during daylight savings time. This is used for all timestamps, unless otherwise specified.

6. Appendix B: XML Elements

Special care has been applied throughout the implementation of XML reporting so that the reported XML element have names that are self-evident of their content in a report. Despite that, this appendix provides the names of all XML elements included in each report for completeness.

6.1. Non-Bond Instrument Series

No	Field	XML Element Name
1	Symbol	INST_SERIES_ID
2	CFI Code	CFI_CODE
3	Exchange Id	EXCHANGE_ID
4	Venue ID	VENUE_ID
5	Operator of Venue LEI	VENUE_OPERATOR_LEI
6	Market ID	MARKET_ID
7	XNET Market ID	XNET_MARKET_ID
8	Product Type	PRODUCT_TYPE
9	Instrument Type	INSTRUMENT_TYPE
10	Put Or Call	OPTION_PUT_OR_CALL
11	Exercise Style	OPTION_EXERCISE_STYLE
12	Is Right	IS_RIGHT_FLAG
13	Instrument Level	SERIES_LEVEL
14	Expiration Date	EXPIRATION_DATE
15	Strike Price	STRIKE_PRICE
16	Strike Price Currency	STRIKE_PRICE_CURRENCY
17	Issue Number	ISSUE_NUMBER
18	Contract Size	CONTRACT_SIZE
19	ISIN Code	ISIN
20	BBGID Code	BBGID
21	FISN	FISN
22	Clearing Space Id	CLEARING_SPACE_ID
23	Local Symbol	INST_SERIES_ID_LOCAL
24	English Name	INST_SERIES_NAME
25	Local Name	INST_SERIES_NAME_LOCAL
26	Is Traded	TRADED_FLAG
27	Status	STATUS
28	Last Trading Date	TRADING_END_DATE

No	Field	XML Element Name
29	Last Trading Time	TRADING_END_TIME
30	Underlying Instrument symbol	UNDERLYING_SERIES_ID
31	ISIN of the underlying	UNDERLYING_ISIN
32	Notional Currency	NOTIONAL_CURRENCY
33	Commodity type	COMMODITY_TYPE
34	Commodity Traded in OASIS flag	COMM_TRADED_OASIS
35	DSS Code	DSS_CODE
36	Price Notation	PRICE_TYPE
37	Price Currency	PRICE_CURRENCY
38	Lot Size	LOT_SIZE
39	Short Sell flag	SHORT_SELL_FLAG
40	Volatility Interrupter flag	VOLATILITY_INTERRUPT_FLAG
41	Volatility Interrupter Static Limit	VI_STATIC_LIMIT
42	Volatility Interrupter Dynamic Limit	VI_DYNAMIC_LIMIT
43	Market Making Flag	MARKETMAKING_FLAG
44	Marking Flag	MARKING_FLAG
45	Basic Closing Method	BASIC_CLOSING_METHOD
46	Basic Closing Method Parameter	BASIC_CLOSING_METHOD_PARAM
47	Auction Closing Method	AUCTION_CLOSING_METHOD
48	Trading Activity Flag	TRADING_ACTIVITY_FLAG
49	Main Board Flag	MAIN_BOARD_FLAG
50	Special Terms Board Flag	SPECIAL_TERMS_BOARD_FLAG
51	Trade Report Board Flag	TRADE_REPORT_BOARD_FLAG
52	Odd Lot Board Flag	ODD_LOT_ BOARD_FLAG
53	Forced Sales Board Flag	FORCED_SALES_ BOARD_FLAG
54	Pre-Call Phase Flag	PRECALL_PHASE_FLAG
55	Continuous Phase Flag	CONTINUOUS_PHASE_FLAG
56	Closing Phase Flag	CLOSING_PHASE_FLAG

No	Field	XML Element Name
57	Tick Size Id	TICK_SIZE_ID
58	Last Trade Date	LAST_TRADE_DATE
59	Last Trade Time	LAST_TRADE_TIME
60	Outstanding shares	OUTSTANDING_SHARES
61	Open Interest	OPEN_INTEREST
62	Daily Average Traded Volume	DAILY_AVG_TRADED_VOLUME
63	Daily Average Traded Value	DAILY_AVG_TRADED_VALUE
64	Max Order Volume	MAX_ORDER_VOLUME
65	Min Order Volume Precall Phase	MIN_ORDER_VOLUME_PRECALL
66	Min Order Volume Continuous Phase	MIN_ORDER_VOLUME_CONTINUOUS
67	Min Order Volume Closing Phase	MIN_ORDER_VOLUME_CLOSING
68	General Risk	GENERAL_RISK
69	Special Risk	SPECIAL_RISK
70	Company Name English	COMPANY_NAME
71	Company Name Local	COMPANY_NAME_LOCAL
72	Sector name English	SECTOR_NAME
73	Sector name Local	SECTOR_NAME_LOCAL
74	Pre-Dividend	PREDIVIDEND
75	Nominal Value	NOMINAL_VALUE
76	Shares Issued	SHARES_ISSUED
77	Dividend	DIVIDEND
78	Maximum Trading Percent	MAX_TRADING_PERCENT
79	Introduction Price	INTRODUCTION_PRICE
80	Issue Date	ISSUE_DATE
81	Removal Date	REMOVAL_DATE
82	Transactions to be cleared	TX_TO_BE_CLEARED

Table 18: Non-Bond Instrument Series XML Elements

6.2. Combination Series

No	Field	XML Element Name
1	Symbol	COMBO_SERIES_ID
2	CFI Code	CFI_CODE
3	Exchange ID	EXCHANGE_ID
4	Venue ID	VENUE_ID
5	Operator of Venue LEI	VENUE_OPERATOR_LEI
6	Market ID	MARKET_ID
7	Commodity Id	COMMODITY_ID
8	Strike Price	STRIKE_PRICE
9	Strike Price Currency	STRIKE_PRICE_CURRENCY
10	Short Name	SHORT_NAME_LOCAL
11	Product Type	PRODUCT_TYPE
12	Instrument Type	INSTRUMENT_TYPE
13	Combination subtype	COMBO_SUBTYPE
14	ISIN Code	ISIN
15	FISN Code	FISN
16	Notional Currency	NOTIONAL_CURRENCY
17	Expiration Date	EXPIRATION_DATE
18	Last Trading Date	TRADING_END_DATE
19	Last Trading Time	TRADING_END_TIME
20	Price Notation	PRICE_TYPE
21	Price Currency	PRICE_CURRENCY
22	Tick Size Id	TICK_SIZE_ID
23	Transactions to be cleared	TX_TO_BE_CLEARED
24	Number of legs	NO_OF_LEGS
25	Leg 1 Instrument Symbol	LEG_1_SERIES_ID
26	Leg 1 Operation if buy	LEG_1_OP_IF_BUY
27	Leg 1 Operation if Sell	LEG_1_OP_IF_SELL
28	Leg 1 Ratio	LEG_1_RATIO
29	Leg 2 Instrument Symbol	LEG_2_SERIES_ID
30	Leg 2 Operation if buy	LEG_2_OP_IF_BUY
31	Leg 2 Operation if Sell	LEG_2_OP_IF_SELL
32	Leg 2 Ratio	LEG_2_RATIO
33	Leg 3 Instrument Symbol	LEG_3_SERIES_ID
34	Leg 3 Operation if buy	LEG_3_OP_IF_BUY

No	Field	XML Element Name
35	Leg 3 Operation if Sell	LEG_3_OP_IF_SELL
36	Leg 3 Ratio	LEG_3_RATIO
37	Leg 4 Instrument Symbol	LEG_4_SERIES_ID
38	Leg 4 Operation if buy	LEG_4_OP_IF_BUY
39	Leg 4 Operation if Sell	LEG_4_OP_IF_SELL
40	Leg 4 Ratio	LEG_4_RATIO

Table 19: Combination Series XML elements

6.3. Bond Series

No	Field	XML Element Name
1	Symbol	INST_SERIES_ID
2	CFI Code	CFI_CODE
3	Exchange ID	EXCHANGE_ID
4	Venue ID	VENUE_ID
5	Operator of Venue LEI	VENUE_OPERATOR_LEI
6	Market ID	MARKET_ID
7	XNET Market ID	XNET_MARKET_ID
8	Product Type	PRODUCT_TYPE
9	Instrument Type	INSTRUMENT_TYPE
10	Expiration Date	EXPIRATION_DATE
11	ISIN Code	ISIN
12	BBGID Code	BBGID
13	FISN	FISN
14	Clearing Space Id	CLEARING_SPACE_ID
15	Local Symbol	INST_SERIES_ID_LOCAL
16	English Name	INST_SERIES_NAME
17	Local Name	INST_SERIES_NAME_LOCAL
18	Is Traded	TRADED_FLAG
19	Status	STATUS
20	Last Trading Date	TRADING_END_DATE
21	Last Trading Time	TRADING_END_TIME
22	Notional Currency	NOTIONAL_CURRENCY
23	Price Notation	PRICE_TYPE
24	Price Currency	PRICE_CURRENCY
25	Lot Size	LOT_SIZE
26	Volatility Interrupter flag	VOLATILITY_INTERRUPT_FLAG
27	Volatility Interrupter Static Limit	VI_STATIC_LIMIT
28	Volatility Interrupter Dynamic Limit	VI_DYNAMIC_LIMIT
29	Market Making Flag	MARKETMAKING_FLAG
30	Marking Flag	MARKING_FLAG
31	Basic Closing Method	BASIC_CLOSING_METHOD

No	Field	XML Element Name
32	Basic Closing Method Parameter	BASIC_CLOSING_METHOD_PARAM
33	Auction Closing Method	AUCTION_CLOSING_METHOD
34	Trading Activity Flag	TRADING_ACTIVITY_FLAG
35	Main Board Flag	MAIN_BOARD_FLAG
36	Special Terms Board Flag	SPECIAL_TERMS_BOARD_FLAG
37	Trade Report Board Flag	TRADE_REPORT_BOARD_FLAG
38	Odd Lot Board Flag	ODD_LOT_ BOARD_FLAG
39	Forced Sales Board Flag	FORCED_SALES_ BOARD_FLAG
40	Pre-Call Phase Flag	PRECALL_PHASE_FLAG
41	Continuous Phase Flag	CONTINUOUS_PHASE_FLAG
42	Closing Phase Flag	CLOSING_PHASE_FLAG
43	Tick Size Id	TICK_SIZE_ID
44	Last Trade Date	LAST_TRADE_DATE
45	Last Trade Time	LAST_TRADE_TIME
46	Daily Average Traded Volume	DAILY_AVG_TRADED_VOLUME
47	Daily Average Traded Value	DAILY_AVG_TRADED_VALUE
48	Max Order Volume	MAX_ORDER_VOLUME
49	Min Order Volume Precall Phase	MIN_ORDER_VOLUME_PRECALL
50	Min Order Volume Continuous Phase	MIN_ORDER_VOLUME_CONTINUOUS
51	Min Order Volume Closing Phase	MIN_ORDER_VOLUME_CLOSING
52	General Risk	GENERAL_RISK
53	Special Risk	SPECIAL_RISK
54	Asset Local Group Description	ASSET_GROUP_LOCAL
55	English Asset Group Description	ASSET_GROUP_EN
56	Issuer	ISSUER
57	Market Segment	MARKET_SEGMENT
58	Issue Date	ISSUE_DATE
59	Maturity Date	MATURITY_DATE
60	Max Nominal Value	MAX_NOMINAL_VALUE
61	Payment Type	PAYMENT_TYPE

No	Field	XML Element Name
62	Nominal Trading Unit	NOMINAL_TRADING_UNIT
63	Issue Date in Trading Platform	ISSUE_DATE_IN_ASE
64	Number of Securities	NUMBER_OF_SECURITIES
65	Tax Rate	TAX_RATE
66	Coupon Type	COUPON_TYPE
67	Index	BASE_INDEX
68	Index Spread	INDEX_SPREAD
69	Current Coupon Rate	CURRENT_COUPON_RATE
70	Initial Coupon Rate	INITIAL_COUPON_RATE
71	Periodicity	PERIODICITY
72	Gross Coupon Amount	GROSS_COUPON_AMOUNT
73	Net Coupon Amount	NET_COUPON_AMOUNT
74	Current Coupon Ex-Date	CURRENT_COUPON_EXPIRE_DATE
75	Current Coupon Payment Date	CURRENT_COUPON_PAYMENT_DATE
76	Current Coupon Beginning Date	CURRENT_COUPON_BEGIN_DATE
77	Issued Amount	ISSUED_AMOUNT
78	Coupon No.	COUPON_NO
79	Days' Basis	DAY_BASIS
80	Issuer Code	ISSUER_CODE
81	Bond Code	BOND_CODE
82	DSS Code	DSS_CODE
83	Redemption Value	REDEMPTION_VALUE
84	Callable Type	CALLABLE_TYPE
85	Puttable Type	PUTABLE_TYPE
86	Convertible Type	CONVERTIBLE_TYPE
87	Perpetuity Type	PERPETUITY_TYPE
88	Pricing Method	PRICING_METHOD
89	Settlement Type	T_PLUS_DAYS_TO_SETTLEMENT

Table 20: Bond Instrument Series XML Elements

6.4. Markets

No	Field	XML Element Name
1	Market Id	MARKET_ID
2	XNET Market ID	XNET_MARKET_ID
3	Exchange ID	EXCHANGE_ID
4	Venue Id	VENUE_ID
5	Market Short Name	SHORT_NAME
6	Market Short Name Local	SHORT_NAME_LOC
7	Market Long Name	LONG_NAME
8	Market Long Name Local	LONG_NAME_LOC
9	Market Type	MARKET_TYPE
10	Main Board Schedule Id	MAIN_BOARD_SCHD_ID
11	Special Terms Board Flag	SPECIAL_TERMS_ACTIVE
12	Special Term Board Start Time	SPECIAL_TERMS_START_TIME
13	Special Term Board End Time	SPECIAL_TERMS_END_TIME
14	Odd Lot Board Flag	ODD_LOT_ACTIVE
15	Odd Lot Board Start Time	ODD_LOT_START_TIME
16	Odd Lot Board End Time	ODD_LOT_END_TIME
17	Forced Sales Board Flag	FORCED_SALES_ACTIVE
18	Forced Sales Board Start Time	FORCED_SALES_START_TIME
19	Forced Sales Board End Time	FORCED_SALES_END_TIME
20	Trade Report Board Flag	TRADE_REPORT_ACTIVE
21	Trade Report Board Start Time	TRADE_REPORT_START_TIME
22	Trade Report Board End Time	TRADE_REPORT_END_TIME
23	Clearing Space Id	CLEARING_SPACE_ID

Table 21: Markets report XML Elements

6.5. Market Schedules

No	Field	XML Element Name
1	Market Id	MARKET_ID
2	XNET Market Id	XNET_MARKET_ID
3	Main Board Schedule Id	MAIN_BOARD_SCHD_ID
4	Trading Phase	TRADING_PHASE
5	Start Time	START_TIME

Table 22: Market Schedules report XML Elements

6.6. Indices

No	Field	XML Element Name
1	Symbol	INDEX_ID
2	Exchange ID	EXCHANGE_ID
3	Venue Id	VENUE_ID
4	CFI Code	CFI_CODE
5	English Name	ENGLISH_NAME
6	Local Symbol	LOCAL_INDEX_ID
7	Local Name	LOCAL_NAME
8	ISIN Code	ISIN
9	BBGID	BBGID
10	Divisor	DIVISOR
11	Assets	ASSETS
12	Liabilities	LIABILITIES
13	Reference Index symbol	REFERENCE_INDEX
14	Index Category	CATEGORY
15	Previous Day's Closing Reference Value	PREV_DAY_CLOSING_VALUE
16	Index Population Id	INDEX_POPULATION_ID
17	Index Population Count	INDEX_POPULATION_COUNT

Table 23: Indices report XML Elements

6.7.   Indices Population

No	Field	XML Element Name
1	Index Population Id	INDEX_POPULATION_ID
2	Symbol	INST_SERIES_ID
3	Weight	WEIGHT
4	Instrument's Outstanding shares	OUTSTANDING_SHARES
5	Capping Factor	CAPPING_FACTOR

Table 24: Indices population report XML Elements

6.8.   Currencies Exchange Rates

No	Field	XML Element Name
1	Currency Id	CURRENCY_ID
2	Currency Name	CURRENCY_NAME
3	Currency Name Local	CURRENCY_NAME_LOCAL
4	Current Exchange Rate	EXCHANGE_RATE
5	Previous Close Exchange Rate	PREV_DAY_EXCHANGE_RATE

Table 25: Currencies exchange rates report XML Elements

6.9.   Holidays

No	Field	XML Element Name
1	Exchange Id	EXCHANGE_ID
2	XNET Market Id	XNET_MARKET_ID
3	Holiday Date	HOLIDAY_DATE
4	Description	HOLIDAY_DESCRIPTION

Table 26: Holidays report XML Elements

6.10. Price Tick Structures

No	Field	XML Element Name
1	Tick Size ID	TICK_SIZE_ID
2	Description	TICK_DESCRIPTION
3	Low Price	LOW_PRICE
4	High Price	HIGH_PRICE
5	Tick size	TICK_SIZE

Table 27: Price Tick Structures report XML Elements

6.11. Latest Reports

No	Field	XML Element Name
1	Created Date	CREATED_DATE
2	Created Time	CREATED_TIME
3	File Type	FILE_TYPE
4	Filename	FILE_NAME
5	Daily Version	DAILY_VERSION

Table 28: Latest Reports report XML Elements