



**Feasibility study for a pan-European
storage system for information disclosed
by issuers of securities**

OAM Survey Analysis

ACTICA/PB318D003-1.0

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1 Introduction

1.1 General

1.1.1 This document has been prepared by Actica Consulting Ltd as part of the study into a pan-European storage system for information disclosed by issuers of securities. The study has been carried out for Internal Market and Services DG of the European Commission under Contract No. MARKT/2010/17/F.

1.1.2 This document is a supporting Annex to the final report of the study and should be read in conjunction with that document.

1.2 Purpose

1.2.1 This document presents the results and findings of the surveys and interviews carried out as part of the study with the operators of the 29 national Officially Appointed Storage Mechanisms¹ (OASMs or OAMs; the latter term will be used throughout this report). It addresses the requirement in the study brief to “Examine the technical characteristics of the existing national OAMs”, and specifically:

- a. how the existing national OAMs are technically structured, including how the filing of documents is organised, how filers are identified, which types of documents are filed, and the facilities available to end users etc.;
- b. whether the OAMs comply with the quality standards in paragraphs 5 to 20 of the Commission Recommendation of 2007;
- c. how the national OAMs are supervised by the national competent authorities.

1.2.2 The document provides an overview of current operations, processes and technology as an input to the technical feasibility assessment of options for providing a pan-European system. This feasibility analysis is presented in the main report of the study.

1.3 Status

1.3.1 This is the final version of this report.

1.4 Disclaimer

1.4.1 The views expressed in this document are purely those of the writer and may not, in any circumstances, be interpreted as stating an official position of the European Commission.

1.4.2 The European Commission does not guarantee the accuracy of the information included in this study, nor does it accept any responsibility for any use thereof. Reference herein to any specific products, specifications, process, or service by trade name, trademark, manufacturer, or

¹ The 27 EU Member States plus Norway and Iceland.

otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the European Commission.

- 1.4.3 All care has been taken by the author to ensure that he has obtained, where necessary, permission to use any parts of manuscripts including illustrations, maps, and graphs, on which intellectual property rights already exist from the titular holder(s) of such rights or from his or their legal representative.

1.5 Summary

- 1.5.1 The Actica team issued three surveys to 28 OAM operators – the operator of the Italian interim OAM service requested not to be included in the study. The three surveys covered the following subject areas:

- a. basic information on the nature and operations of the OAM;
- b. details of the OAM business processes and compliance with quality standards;
- c. technical details of the IT solution used to deliver the OAM service.

- 1.5.2 The surveys were supplemented by face to face interviews with the operators of 10 of the national OAMs.

- 1.5.3 Details of which OAMs responded to each survey can be found in Appendix A. The full text of the three surveys is at Appendix B.

- 1.5.4 Overall, we received usable responses from 27 of the OAMs. Although there was some variability in the level of response across the surveys, and some respondents did not answer all questions in every survey, this response rate provides a viable basis for use in the study.

1.6 Structure

- 1.6.1 The remainder of this report is structured as follows:

- a. Section 2 summarises the responses of the initial survey to provide an overview of the OAM service provision;
- b. Section 3 summarises the responses to the process survey and highlights the approaches adopted by OAMs in responding to service standards;
- c. Section 4 summarises the approaches adopted by OAMs in responding to defined service standards;
- d. Section 5 presents the responses to the technical survey describing the attributes of the current OAM provision and highlights implications for future development and extension of the service;
- e. Section 6 provides tabulations of the detailed responses by Member States to questions included in the three surveys.

2 Overview of OAM provision

2.1 Introduction

2.1.1 This section summarises the responses received from the basic information survey. The responses received from OAMs describing their services are shown in Table 6-1 and Table 6-2 in Section 6. Further information on the types of issuers covered and the information held by OAMs is shown in Table 6-3 to Table 6-7. The remainder of this section presents summaries of some of the key information from these tabulations, including:

- a. type of organisation operating the OAM;
- b. period of operation of the current service;
- c. development and operational costs;
- d. sizing information including number of issuers and documents held;
- e. types of issuers and regulated documents stored.

2.2 Type of operator

Operator	No. of OAMs
Commercial operator	1
Competent Authority	14
National Stock Exchange	10
Other/Official Journal	1
Private Entity	2
Total Responses ²	28

2.2.1 Most OAMs are operated by the Competent Authority (Regulator) or National Stock Exchange, with almost half of the operators having been legally assigned the responsibility for performing the role. There are varying local arrangements in place for the management and control of the services by the Competent Authority.

2.3 Year of 1st operation of OAM

Year	No. of OAMs
1990	1
2000	1
2005	1
2006	1
2007	7

² Data for 2 operators is based on information from CESR.

Year	No. of OAMs
2008	8
2009	3
2010	2
2011	1
Total Responses	25

- 2.3.1 Four of the OAM operators consider their services to be interim solutions (Cyprus, Finland, Ireland and Slovak Republic). Ireland, however, has no plans to replace the current service and state it could continue to provide the service indefinitely. Of the remainder, two state they are planned to be replaced by full services later in 2011 or 2012.

2.4 Size of OAM - No. of issuers covered

Size (Issuers)	No. of OAMs
Small (1-100)	9
Medium (101-600)	15
Large (>600)	4
Total Responses	28

- 2.4.1 In total, the OAM network contains information on approximately 11,000 issuers³. More than half of the OAMs are of Medium⁴ size, but it should be noted that the 4 Large OAMs manage almost 60% of the total number of issuers⁵.

2.5 Percentage of small issuers

% Small Issuers	No. of OAMs
None	2
Up to 10%	1
70-90%	7
Above 90%	4
Total Responses	14

- 2.5.1 14 of the 25 OAMs which responded (55%) provided a locally based estimate of the percentage of the issuers covered by the OAM considered “Small” by market capitalisation⁶. The responses were predominantly from the smaller OAMs, which may skew the results and makes their interpretation difficult. Nevertheless, the information provided shows there are 2300 smaller

³ For three OAM’s that did not respond to the survey, the size is based on review of the public website.

⁴ The sizing bands used follow the convention in CESR’s earlier reports.

⁵ Issuers that make filings to more than one OAM are counted multiple times in this total.

issuers covered by the 14 OAM responding, giving a lower limit to the pan-European total of such issuers.

2.6 No. of documents held by OAMs

Documents held	No. of OAMs
<5,000	7
5,000-10,000	2
10,001 – 20,000	3
20,001 – 100,000	7
100,001-250,000	1
250,001-500,000	1
>500,000	1
Total Responses	22

2.6.1 Given the range of dates at which the OAMs have begun operation, there is a wide variation in the number of documents held (as at February 2011) by OAMs, but the 22 respondents represent a combined knowledge base of over 1,600,000 documents, growing at a rate of approximately 250,000 documents a year.

2.7 Level of use of OAM search facilities

2.7.1 Less than half (13) of the respondents could provide an indication as to the number of user searches or enquiries made through the web user interface. The range of responses was extremely wide, reflecting the availability of other more established information sources within the market and the visibility of the OAM services. In follow up interviews several operators expressed the view that the OAM was not seen as a prime source of investor information and this view is supported by the very low usage statistics for several of the OAMs. It is, however, noticeable that this is not a universal position and some Member States report very high access and usage (for example, Germany, where the OAM is the only free to use source of this information, and especially Spain and Portugal).

2.8 Cost of development and operation

2.8.1 Fifteen OAMs provided details of the cost of either developing or operating the OAM service. The figures provided vary considerably, reflecting local conditions and the approach taken to both development and operation. Questioning indicated that a typical development route was to base the OAM system and service on an existing filing or news dissemination system already in use, which was not directly included in the OAM cost base. Many OAMs have also used in-house resources for either development or operation and have no firm basis for measuring full costs. As a result, the figures must be interpreted with care, especially when making comparisons between national OAMs, which may have used a different basis for calculating the costs provided.

⁶ Whilst no standard definition of what is considered a small issuer is available, the online search available for the 3 NASDAQ operated OAMs defines these as having a market capitalisation of less than 150 million Euros.

2.8.2 All OAMs provide the operational service free to end users. Three levy an annual filing fee on issuers using the service.

2.9 Types of securities covered by the documents stored

Type of security	No. of OAMs
Stocks and Shares	25
Bonds	23
Derivatives	9
Other types of securities	13
Total responses	26

2.9.1 Information on Stocks and Shares and Bonds is stored by most OAMs. Over half of the OAMs store information on other types of securities. Securities covered by individual OAMs include Warrants, Real estate depositary receipts, Securities issued by companies for investment in receivables, Closed ended funds and Collective investment schemes and a range of other types of bonds and paper.

2.10 Types of regulated documents stored

Type of document held	No. of OAMs
Annual Financial Reports	26
Interim Financial Reports - Half Yearly	25
Interim Financial Reports - Quarterly (if available)	25
Interim Management Statements (if available)	24
Price Sensitive Information	23
Corporate Governance Statements	20
Major Shareholding Notifications	23
Trading on Own Shares (Acquisition/Disposal)	24
Total number of voting rights and capital	24
Changes in rights attaching to shares or securities	23
New Loan issues	20
Choice of Home Member State	18
Take over bid announcements	21
Prospectuses	14
Other additional information	14
Total Responses	26

2.10.1 All responding OAMs store annual reports, but there is more limited coverage for several other items of regulated information. Thirteen (50% of responders) OAMs also store further information in addition to the regulated information set out in the Transparency Directive.

2.11 Other uses of filed information

Other uses for filed information	No. of OAMs
Filed information used for other purposes	13
Not used for other purposes	14
Total Responses	27

2.11.1 Almost half of Member States that responded reported that the filed information was used for purposes additional to meeting the needs of the Transparency Directive. The analysis of responses in Table 6-7 shows that in 3 cases the response relates to issuers using the OAM service for additional filing. Of the remainder, the information stored is predominantly used for Regulatory or Supervisory purposes. In the UK the commercial entity operating the service uses the information captured as a direct source for other value added information products.

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3 OAM processes

3.1 Introduction

3.1.1 This section presents the results of the second survey focusing on the current processes and operations of the national OAMs. The responses received to these questions are tabulated in Table 6-8 to Table 6-13.

3.2 Control and monitoring of OAM services

3.2.1 OAMs report varying arrangements to manage and monitor the day-to-day operation of the OAM service. The approach adopted depends on the type of organisation operating the OAM and whether there is a commercial relationship in place with a 3rd party or in-house capability is used. Most OAMs reported a pragmatic degree of monitoring of service delivery and compliance by issuers.

3.3 Methods of receiving filings

3.3.1 A total of 25 OAMs provided details of the methods and channels accepted for the filing of electronic documents (Table 6-8).

Accepted filing channel	No. of OAMs
email submission	11
Upload via extranet or other online submission portal	21
Batch or mass transfer from issuers	2
Automatic transfer from other filing system (e.g. Stock Exchange)	13
Other (e.g. from third party/intermediary systems)	7
Total Responses	25

3.3.2 Most OAMs responding (85%) accept online submissions through uploading of individual documents from a web portal. While few OAMs allow batch transfer direct from issuers over half (13) have implemented automated transfers with other filing systems or 3rd party disseminators for some or all of the documentation required, to remove the requirement of multiple filings to different systems within the Member State.

3.4 Filing formats accepted

3.4.1 A total of 25 OAMs provided details of the filing formats accepted for one or both of the two filing types requested. Their responses are tabulated in Table 6-9 and Table 6-10.

Filing Type	Voting Rights		Financial	
	Accepted	Required	Accepted	Required
Plain Text	7	4	6	4
HTML	2	1	2	
PDF	11	9	12	10
XBRL	1		1	1
Other electronic formats (e.g. MS Word)	11	1	13	1
Paper	4		4	
Others (please specify)	1 (XML)	1 (web form)	3 (XML)	
Information not stored		3		

3.4.2 The PDF format is used across most of the OAM network; it is either Required or Accepted by all but three OAMs. Where the OAM does not accept the PDF format then the standard is XML (with attachments) (Bulgaria, Czech Republic and Germany). Only Spain requires XBRL filings (these are also accepted in Germany but not required).

3.4.3 Four OAMs require plain text submission of filings, although most of these will also accept copies in PDF or other formats.

3.5 Data retention

3.5.1 All 24 OAMs responding to this question indicated that all filings are available online for at least 5 years. Many OAMs have no formal data archiving policy and expect information to remain accessible online permanently.

3.6 Certainty as to source of filings and non-repudiation

3.6.1 Almost all of the responding OAMs have implemented multiple facilities to ensure that filings are only accepted from valid sources – the issuers, their appointed agents or other trusted information dissemination systems. Details of the arrangements in place in each OAM are shown in Table 6-11.

3.6.2 The most commonly implemented approach, by almost 80% of the OAMs responding, is to use access codes, usernames and passwords, usually in combination with one or more additional facilities. Typically, issuers register with the OAM operator and their status is confirmed before they are issued with the necessary codes to be able to submit filings to the system.

Validation arrangement implemented	No. of OAMs
Electronic signatures	13
Use of access codes, usernames or passwords	19
Encryption	11
Automated or manual checking of filings received	10
Security certificates (e.g. SSL)	15
Links to trusted system(s)(e.g. Stock Exchange filing) which manage this	10
Other	7
Total responses	25

3.6.3 Most OAMs that responded reinforce these controls by issuing electronic receipts to the registered email address of the issuer. In many cases these receipts also confirm acceptance or rejection of the filing.

3.6.4 Overall, the responses to the survey questions indicate that these arrangements provide appropriate processes to manage non-repudiation for almost all OAMs.

3.7 Post-filing processes

3.7.1 The responses to the surveys, supplemented by the follow up meetings, indicated that OAMs have implemented a range of approaches to the management of the end-to-end filing process once a submission from an issuer had been accepted. Whilst some OAMs automatically accept electronic filings and make these available with limited additional validation, others have implemented processes involving checking and review. Table 6-13 shows the capability of each OAM to manage automated docketing and “straight through” processing.

3.7.2 As shown in Table 6-13, electronic docketing was supported by 21 of the 24 OAMs responding although straight through processing of standard templates was available in only 14 OAMs (60%). This variation is reflected in the variability in the delay between a filing being received and being made available to end users in different OAMs as shown in Table 6-12. As summarised below, while over 60% of respondents make the information available in less than a minute others can take much longer, sometimes several days.

Delay before filing is available to end users	No. of OAMs
Immediately or less than 1 minute	16
1 minute to 1 hour	3
Same day	1
Next working day or longer	5
Total responses	25

3.7.3 Any delay to information being available is significant as typically end-users are interested in current, up to date information. Where the delay implies publication of information on the OAM

is delayed relative to other sources, users will tend to discount the OAM as a source of relevant information and rely on issuers or other market or commercial information sources.

4 Compliance with quality standards

4.1 Introduction

- 4.1.1 This section presents the results of the questioning in the process survey which focused on how the national OAMs have responded to aspects of the quality standards set out in the Commission Recommendation of 2007⁷. Paragraphs 5 to 20 of the Recommendation include standards covering:
- a. security;
 - b. certainty as to information source;
 - c. time recording;
 - d. ease of access by end users.

- 4.1.2 Several of the responses regarding filing processing addressed in the previous section of this document refer to aspects of the quality standards. (See Table 6-11 onwards). Additional responses received are tabulated in Table 6-14 to Table 6-21.

4.2 Summary of compliance with General Standards

- 4.2.1 Of the 23 OAM operators providing a response, 17 (75%) rated themselves as either fully or mostly compliant with both the General Standards and also the standards in all four of the areas listed above specified in the Commission Recommendation. Our analysis of other technical responses, desk research and follow-up interviewing generally supports this position.
- 4.2.2 Of the OAMs with lower stated compliance levels, the main area highlighted is in ensuring certainty of information source. This may be an issue where email is used as a significant filing mechanism and there is less opportunity to implement strong authentication as to source.

4.3 Security standards

- 4.3.1 Actica's assessment of the responses provided by OAMs concerning the security arrangements in place within the OAM are shown in Table 6-14. Arrangements to address the following were reviewed:
- a. data corruption;
 - b. attempted unauthorised access;
 - c. 24 by 7 availability to end users and issuers;
 - d. continuity of service.
- 4.3.2 In summary, based on the information provided, most OAMs appear to have appropriate arrangements in place to meet the required minimum standards.

⁷ Commission Recommendation 2007/657/EC of 11 October 2007.

4.4 Integrity of information

- 4.4.1 All 23 OAMs that responded stated they had appropriate systems and procedures in place to ensure the integrity of the document stored in the repository and that it remained a true copy of the information filed by the issuer. In particular, all OAMs had mechanisms in place to prevent documents being deleted, changed or edited once stored, with any subsequent updates or corrections being managed and stored as new linked versions of the original, retained, document.
- 4.4.2 Six OAMs (30%) that accept non-electronic filings provide the facility to convert these into electronic form for storage. In these cases the OAM carries out manual checking of the converted file against the original.

4.5 Validation, waivers and recovery

- 4.5.1 Details of the inspection methods adopted by OAMs used to check adherence to standards, completeness and accuracy of filings are shown in Table 6-15.

Inspection method	No. of OAMs
Automated checking	8
Manual checking of all filings	9
Manual checking of a sample of filings	2
No checking	5
Total Responses	24

- 4.5.2 In total some form of checking is carried out by 80% of the OAMs responding. Automated checking of submissions is carried out by one third of the OAMs and manual checking of all or a sample of filings is carried out by a further 11 (45%) OAMs. In some cases the manual checking may be carried out as a post-submission audit, in other cases it is part of a managed, non-automated submission process.
- 4.5.3 The approaches to handling waivers in the case of late submission and recovery should the filing mechanism be unavailable are tabulated in Table 6-16. A range of approaches are adopted. Whilst these may be appropriate to local processes and markets, not all fully meet the criteria set out in Paragraph 11 of the Commission Recommendations.

4.6 Certainty as to information source and time recording

- 4.6.1 The responses regarding filing processes described and analysed in Section 3 of this document identify the approaches adopted by the OAMs to meet the standards set out in Sections 3 and 4 of the 2007 Standards Recommendation. Whilst many OAMs report to having comprehensive arrangements in place, not all fully meet the quality standards.

4.7 Ease of access by end users

- 4.7.1 The following paragraphs consider elements of the recommendations regarding the ease of access to OAM information by end users.

4.8 Presentation of information

4.8.1 The responses regarding presentation of regulated information are shown in Table 6-17. Nine of the 25 OAMs responding do not provide any value added services so do not need to distinguish between regulated and value added information. Of the remaining 16 OAMs, 12 (75%) present regulated information separately as set out in the recommended minimum standards – typically by providing a dedicated OAM page as part of their web site.

4.9 Languages required and accepted

4.9.1 Of the 26 OAMs that provided details (see Table 6-18) only four require filings in a language other than that of the home member state. Many however (21 of 25 responding) meet the recommended standard of accepting and storing multiple language filings if submitted by the issuer. A number of OAMs note that many issuers voluntarily file in English even where not required.

4.10 Languages supported in user search screens

4.10.1 All OAMs provide search screens in the language of the home Member State. As shown in Table 6-19 most (22 of 25 - 90%) also provide a version of the search screen in English, meeting the recommended standard of providing search capability in “at least a language customary in the sphere on international finance”. Several OAMs also provide the screen in additional languages.

4.11 Accessibility and support

4.11.1 The time delay between receipt and display is discussed in Section 3.7 above. Whilst the processes adopted by some OAMs introduce a delay in the information being accessible to users it is not clear how this relates to the stated standard⁸. Whilst the technology adopted generally allows for virtually instantaneous publication, any delays incurred generally reflect the operational procedures and validation regime implemented, rather than “deliberate delay”.

4.11.2 Twenty three OAMs provided details of the issuer and end user support arrangements and their capability to allow users, wherever they are located, to search, view and download regulated information (see Table 6-20).

4.11.3 The responses indicate that all respondents appear to have adequate support arrangements in place. We recognise that these are predominantly focused on support for issuers/filers, as most OAMs experience little demand for end-user support.

4.11.4 Through the use of open, portable document formats (typically PDF) and public web access all respondents are adequately meeting the recommended standard for access by end users.

⁸ “Information should be accessible to end users by the storage mechanism as soon as technically feasible from its filing, taking into consideration the structures and operating procedures of the storage mechanism. The storage mechanism should not deliberately delay the process.”

4.12 Metadata stored and accessible by end-user searches

4.12.1 Twenty five OAMs provided details of the reference metadata held against each filed document, and its source (provided by the issuer or added by the OAM as part of the filing process). Details of all responses are shown in Table 6-21.

4.12.2 Most respondents store the six metadata items recommended as the minimum standard in Section 5 of the Commission's 2007 Recommendation and highlighted in bold in the table below. The remaining items listed make up the extension proposed in CESR's 2010 consultation and report. Eleven respondents (45% of those responding) already store all these metadata.

Metadata item	No. of OAMs
Minimum Standard	
Regulated information indicator	21
Name of issuer	25
Title of the filed document	25
Time and date information was disseminated	25
Language of filed document	23
Type of regulated information that filing relates to	23
<u>CESR Extensions</u>	
Name of issuer in all languages used by issuer	12
Unique issuer identifier or code	17
Country of incorporation	16
Home Member State of issuer	16
Regulated markets where issuer's securities are admitted to trading	13
Industry code of the issuer's principal activities	11
ISIN codes for the issuer's securities	17
Reporting period to which a specific filing relates (e.g. Q4/2010)	17
ISIN codes for the securities covered by the individual filing	11
Total responses	25

4.12.3 The responses indicate that extended metadata is already stored and available for search from many OAMs. Coupled with the responses received regarding the flexibility of the technical solutions to accommodate additional metadata, it appears that it should be technically possible, given appropriate engagement with issuers to ensure they provide the information, for all OAMs to move towards harmonisation of metadata to cover all the items surveyed.

4.12.4 Five of the responding OAMs (Bulgaria, Malta, Slovenia, Spain and United Kingdom) are able to distinguish the type of issuer (Issuers of shares, Issuers of debts and Issuers of other securities) from the metadata held. In all cases the same metadata items are stored irrespective of the type of issuer.

- 4.12.5 There was limited indication that the metadata or coding structures used are aligned with other storage mechanisms or other repositories of financial information. We note however that there is a high level of consistency across the three OAMs operated on the same technical platform (Finland, Lithuania and Iceland) and the United Kingdom solution which is based on a global repository and coding structure operated by Morningstar.

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5 OAM technical details and future development

5.1 Introduction

5.1.1 This section presents the results of the questioning concerning the technical infrastructure used to implement the national OAMs.

5.2 Technology adopted

5.2.1 Twenty three OAMs provided details of the technology infrastructure used to implement the OAM solution.

	No. of OAMs
SQL database	21
Document management system or similar package (Documentum, Sharepoint)	2
Total Responses	23

5.2.1 Almost all OAMs (21) have adopted the approach of using a SQL database (SQL Server, Oracle or MySQL) as the basis of the document repository. Of these, six indicate that the database stores only the metadata and a lookup reference to the filed document held in an external file system. In particular, Germany has implemented a distributed model where the national OAM database stores only metadata and links to documents stored in local state databases.

5.2.2 There is more variation in the approaches adopted for the provision of the web-based user interface. Some OAMs have based their solution on proprietary web portal or content management solutions; others have developed a bespoke coded solution using a range of different technologies.

5.3 Flexibility of technical systems

5.3.1 The technologies adopted by all OAMs are up-to-date and form an appropriate basis for the OAM services and a platform for further development and enhancement. The technologies present no major barriers to the extension of the OAM network, but the variation in approach to the storage of the filed documents may present challenges to the development of a distributed system implementation. This is evidenced and supported by the OAM operators' positive responses to questions regarding the flexibility of their systems to accommodate extensions to the scope of the documents and metadata held, shown in Table 6-22.

5.4 Connectivity with other filing systems

5.4.1 None on the OAMs surveyed have system links or have implemented data sharing with other OAMs. However, Finland, Iceland and Lithuania filings are all hosted on the same database

system and available for integrated user search, but the information for each country is maintained independently.

5.4.2 The responses from 15 of the OAMs (approximately 60%) shown in Table 6-22 indicate they have implemented some form of system-to-system connectivity with other filing or news/data dissemination systems. These reduce the need for issuers to manage filings to multiple locations and can streamline the filing process by allowing bulk filing from intermediaries' systems rather than online web forms for manual upload of documents.

5.4.3 Several OAMs comment that such integrated filing approaches account for almost all of their filings (e.g. Denmark and the NASDAQ operated OAMs for Finland, Iceland and Lithuania).

5.4.4 Such interoperability (and specifically the use of web services for direct interaction between systems) is a key element required for the effective implementation and operation of a pan-European OAM service. That such approaches are already in place at some OAMs illustrates that the technology adopted is capable of supporting such functionality and indicates that there already exists a body of knowledge and expertise on its use within the current operators.

5.5 Other technical considerations

5.5.1 22 OAMs provided further details of the technical infrastructure of their IT systems together with actual and designed capacity and actual peak loads. Overall, these OAMs have a total current database size of over 1300 GB with available capacity to manage growth and the ability to increase this flexibly, if required.

5.5.2 Based on these responses, there appears to be sufficient capacity in place to allow for the increased filing or transfer of information to a secondary repository implied by any of the technical options being considered, and that adding additional document types or metadata to the databases is not a significant issue. Connectivity and processing capacity also appears sufficient to allow for further growth in data transfers or searches generated from any of the potential pan-European service models which retain local OAMs.

5.5.3 In summary, the responses indicate that implemented solutions are generally well architected and scalable and have capacity to allow for further development of integration capability (additional searches or transfer of data) without the need for major redevelopment or technical change. As an example, Morningstar's UK solution in particular is based on a very scalable, global infrastructure.

5.6 Issues raised regarding development of a pan-European service

5.6.1 The surveys specifically asked for views on any legal, regulatory or operational barriers to 3 potential development scenarios:

1. Scenario 1: Storage of a copy of the regulated data held by the national OAM in a second location outside the Member State
2. Scenario 2: Replacement of the national OAM storage by a central mechanism holding regulated data for all Member States
3. Scenario 3: The searching and indexing of documents held within the national OAM by a central service operating from outside the Member State

-
- 5.6.2 Of the 21 OAMs responding, 16 (75%) raised issues with one or more of the proposed scenarios. Only six of these highlighted issues or barriers relating to either Scenario 1 or 3.
- 5.6.3 Most issues raised were regarding Scenario 2, replacing national OAMs by a central storage facility. Specific issues included legal requirements to file with local service and practical implications of managing and policing the filing process from a central service location.
- 5.6.4 Most OAMs that commented recognised that technical issues were not a significant barrier to any of the proposed scenarios.
- 5.6.5 Most OAMs did not identify any major, long term contractual arrangements which might have a bearing on options for future development. Of the five responses indicating current contractual commitments for the provision of the OAM service the longest ran until 2016. Others (8) mentioned existing IT support contracts with external suppliers for the maintenance and support of the OAM infrastructure, but most of these were of short duration with annual renewal/termination clauses; only one long term contract (to 2018) was highlighted.

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6 Tabulations of key responses by Member State

6.1 OAM Operator

Member State	Operator
AUSTRIA	Private Entity
BELGIUM	Competent Authority
BULGARIA	Competent Authority
CYPRUS	National Stock Exchange
CZECH REPUBLIC	Competent Authority
DENMARK	Competent Authority
ESTONIA	Competent Authority
FINLAND	National Stock Exchange
FRANCE	DILA (Direction de l'information légale et administrative), service of the Prime Minister's department
GERMANY	Private Entity
GREECE	National Stock Exchange (CESR Data)
HUNGARY	Competent Authority
ICELAND	National Stock Exchange
IRELAND	National Stock Exchange
ITALY (excluded from study)	National Stock Exchange Interim Soln (CESR Data)
LATVIA	Competent Authority (CESR Data)
LITHUANIA	National Stock Exchange
LUXEMBOURG	National Stock Exchange
MALTA	National Stock Exchange
NORWAY	National Stock Exchange
POLAND	Competent Authority
PORTUGAL	Competent Authority
ROMANIA	Competent Authority
SLOVAK REPUBLIC	Competent Authority
SLOVENIA	National Stock Exchange
SPAIN	Competent Authority
SWEDEN	Competent Authority
THE NETHERLANDS	Competent Authority
UNITED KINGDOM	Commercial Operator

Table 6-1: Type of organisation acting as OAM Operator

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6.2 Basic OAM information

Member State	Year of 1 st operation	Type of solution	Size	No. of issuers	Est. small issuers %	Documents held 02/11	Estimated growth p.a.	Annual Searches
AUSTRIA	2007		Medium	188	N/R	13000	3500	N/R
BELGIUM	2011		Medium	167	N/R	169	N/A	N/A
BULGARIA	2008		Medium	513	N/R	N/R	N/R	N/A
CYPRUS	2008	Interim ⁹	Medium	121	79%	36826	4000	N/R
CZECH REPUBLIC	2005		Small	65	N/R	1967	1402	N/R
DENMARK	2007		Medium	225	88%	36869	9881	36000
ESTONIA	2009		Small	27	93%	1800	600	400
FINLAND	2008	Interim	Medium	138	90%	38000	7900	0
FRANCE	2009		Large	919	N/R	60000	25000	100000
GERMANY	2007		Large	1000	0%	256000	57000	1800000
GREECE	N/R		Medium	240 (Est)				
HUNGARY	2007		Small	86	70%	12000	4000	1500

⁹ Full solution scheduled for implementation in 2012. All Cyprus OAM responses refer to the capability of the planned system, not the current interim service.

Member State	Year of 1 st operation	Type of solution	Size	No. of issuers	Est. small issuers %	Documents held 02/11	Estimated growth p.a.	Annual Searches
ICELAND	2008		Medium	120	90%	7000	1500	N/R
IRELAND	2007	Interim	Large	1600	95%	85500	20000	180000
LATVIA	N/R	N/R	Small	62 (Est)				
LITHUANIA	2008		Small	43	95%	7800	2200	
LUXEMBOURG	2009		Medium	504	N/A	4305	2203	23592
MALTA	2007		Small	38	95%	2407	216	N/A
NORWAY	2008		Medium	302	N/R	232000	23000	N/R
POLAND	2008		Medium	386	N/R	N/R	N/R	N/R
PORTUGAL	2000		Medium	102	10%	40038	6500	31,000,000
ROMANIA	2006		Small	75	81%	16293	2437	73000
SLOVAK REP.	2008	Interim ¹⁰	Small	90	90%	2065	N/R	N/R
SLOVENIA	2010		Small	88	N/R	2439	N/R	N/R
SPAIN	1990		Medium	444	N/R	760000	65000	80 million
SWEDEN	2007		Medium	312	N/R	70780	18957	N/R

¹⁰ Full solution is live from June 2011. All responses relate to full solution where relevant.

Member State	Year of 1 st operation	Type of solution	Size	No. of issuers	Est. small issuers %	Documents held 02/11	Estimated growth p.a.	Annual Searches
THE NETHERLANDS	N/R		Medium	600	N/R	N/R	N/R	27801
UNITED KINGDOM	2010		Large	2587	N/R	N/R	N/R	N/R

Table 6-2 Basic OAM Information

6.3 Types of securities and issuers covered by OAMs

Member State	Stocks and Shares	Bonds	Derivatives	Other
AUSTRIA	✓	✓	✓	✓
BELGIUM	✓	✓	✓	✓
BULGARIA	✓	✓		
CYPRUS	✓	✓		✓
CZECH REPUBLIC	✓	✓	✓	
DENMARK	✓	✓		
ESTONIA	✓	✓		
FINLAND	✓			
FRANCE	✓	✓		
GERMANY		✓		✓
HUNGARY	✓	✓		✓
ICELAND	✓	✓		
IRELAND	✓	✓	✓	✓
LITHUANIA	✓			
LUXEMBOURG	✓		✓	
MALTA	✓	✓		✓
NORWAY	✓	✓		✓
POLAND	✓	✓		✓
PORTUGAL	✓	✓		✓
ROMANIA	✓	✓		
SLOVAK REPUBLIC	✓	✓		✓
SLOVENIA	✓	✓		
SPAIN	✓	✓	✓	✓
SWEDEN	✓	✓	✓	
THE NETHERLANDS	✓	✓	✓	
UNITED KINGDOM	✓	✓	✓	✓

Table 6-3: Types of securities covered by OAMs

Member State	Types of issuers covered by OAM
AUSTRIA	(i) Issuers of shares with registered office in Austria; (ii) Issuers of debt securities with registered office in Austria; (iii) Issuers of debt securities with a denomination of more than 1000 € if Austria is chosen as home Member State.
BELGIUM	Issuers of securities listed on a regulated market (NYSE Euronext Brussels) Issuers of securities listed on Alternext (Brussels)
BULGARIA	Issuers of shares Issuers of bonds Real Estate Investment Trusts Special Purpose Vehicles Management companies
CYPRUS	Public Companies Central Bank (Ministry of Finance)
CZECH REPUBLIC	Issuers admitted to trading on Czech regulated market.
DENMARK	All issuers covered by the transparency directive.
ESTONIA	Wide range of issuers from different sectors of economy. All issuers who have listed their securities on regulated market have to file with OAM.
FINLAND	All kind of issuers listed on the Stock Exchange
FRANCE	Issuers whose financial instruments are admitted to trading on a regulated market (Euronext A, B,C) and on a non regulated market (Alternext). Bond issuers who provide final terms releases and documents incorporated by reference for prospectus
GERMANY	All types of issuers of securities in accordance to the EU-directive
HUNGARY	Issuers of publicly issued shares (stocks) and listed at the Budapest Stock Exchange; Issuers of publicly issued bonds; Issuers of debentures, mortgage bonds; Issuers of investment funds (the use of the national OAM is optional in their case for data providing purposes)
ICELAND	Shares Bonds
IRELAND	Common Contractual Fund Credit Institution Limited Partnership Public Limited Company PCC SPC SPV Trust Unit Trust
LITHUANIA	Public companies
LUXEMBOURG	All types of issuers, at the exclusion of sovereign and open ended investment funds. Equity and non equity issuers.
MALTA	Issuers of equities, corporate bonds and open and closed-ended collective investment schemes.
NORWAY	Shares Bonds Exchange traded funds (ETF) Exchange traded notes(ETN) Warrants
POLAND	commercial companies, local government entities, closed - end investment funds, states,
PORTUGAL	Issuers of shares admitted to trading on regulated market; - Issuers of debt securities admitted to trading on regulated market; - Issuers of debt securities with nominal value equal or superior to 50.000€ admitted to trading on regulated market; - Securitization companies; - Exchange traded funds; - State owned companies; - Member State; - MS regional authority; - MS local authority.
ROMANIA	All issuers whose securities are traded on regulated market, such as :commercial companies from various industries, banks, insurance companies, etc.
SLOVAK REPUBLIC	Public Limited Company; Credit Institution
SLOVENIA	All issuers listed on the Ljubljana Stock Exchange
SPAIN	Issuers of shares; Issuers of bonds; Open-end Investment companies; Securitization funds management companies
SWEDEN	All companies that has transferable securities listed on a regulated market in Sweden.

Member State	Types of issuers covered by OAM
THE NETHERLANDS	4 types of issuers as defined according to the Transparency Directive: Securities issuer; Debt security Issuer; Closed end investment undertaking; Collective investment undertaking
UNITED KINGDOM	Those instruments on the UKLA Main Official List as well as instruments admitted to trading on UK prescribed markets (AIM and PLUS).

Table 6-4: Issuers covered by OAM

6.4 Information held and used by OAMs

Member State	Annual Financial Reports	Interim Financial Reports - Half Yearly	Interim Financial Reports - Quarterly	Interim Management Statements	Corporate Governance Statements	Price Sensitive Information	Major Shareholding Notifications	Trading on Own Shares (Acquisition /Disposal)	Total number of voting rights and capital	Changes in rights attaching to shares or securities	New Loan issues	Choice of Home Member State	Take over bid announcements	Prospectuses
AUSTRIA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
BELGIUM	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y		
BULGARIA	Y		Y	Y	Y	Y		Y	Y	Y	Y			
CYPRUS	Y	Y	Y	Y		Y	Y	Y	Y		Y	Y	Y	Y
CZECH REPUBLIC	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
DENMARK	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
ESTONIA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FINLAND	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FRANCE	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y
GERMANY	Y	Y	Y	Y	Y			Y	Y	Y		Y	Y	Y
HUNGARY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y
ICELAND	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y
IRELAND	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
LITHUANIA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LUXEMBOURG	Y	Y	Y	Y		Y	Y		Y	Y	Y	Y		
MALTA	Y	Y	Y	Y		Y	Y	Y					Y	

Member State	Annual Financial Reports	Interim Financial Reports - Half Yearly	Interim Financial Reports - Quarterly	Interim Management Statements	Corporate Governance Statements	Price Sensitive Information	Major Shareholding Notifications	Trading on Own Shares (Acquisition /Disposal)	Total number of voting rights and capital	Changes in rights attaching to shares or securities	New Loan issues	Choice of Home Member State	Take over bid announcements	Prospectuses
NORWAY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	
POLAND	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	
PORTUGAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ROMANIA	Y	Y	Y				Y	Y	Y	Y	Y			
SLOVAK REPUBLIC	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	
SLOVENIA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SPAIN	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y
SWEDEN	Y	Y	Y	Y		Y	Y							
THE NETHERLANDS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
UNITED KINGDOM	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 6-5: Types of regulated information held by OAMs

Member State	Additional Information held by OAM
AUSTRIA	Optional information (convening of the shareholders' meeting, results of shareholders' meeting, interest rate fixings, dividends, capital increase, stock split, other corporate actions).
BELGIUM	Annual announcement Notice of general meeting Announcement of dividend or payment of interest
BULGARIA	"Trading on own shares" and "New loan issues" are included in the form regarding the inside information.
CYPRUS	Corporate Government Statements are also held as regulated information
CZECH REPUBLIC	Notification of Suspicion of Abuse of inside information Notification of Suspicion of Market Manipulation Notification of transaction List of persons with access to inside information
DENMARK	Information required by article 6 (4) in MAD (Information from: Persons discharging managerial responsibilities)
FRANCE	Final Terms Reference documents Fees paid to statutory auditors Statement of intent in case of rumours
HUNGARY	Any type of extraordinary information defined by law.
PORTUGAL	- Identification of board members; - Securities holders meeting notices; - Shareholders agreements; - Short positions; - Long positions (including cash settled derivatives); - Squeeze-outs. (Note that the same requirements do not apply equally to all types of issuers.)
ROMANIA	Financial calendar, preliminary annual financial statements.
SLOVAK REPUBLIC	Information on allocation and payment of dividends Information on issue of new shares Documentation on information published within the last 12 months Inside information Other information (optional): Announcement of the GM (<i>information on the general meeting and its agenda - annual general meeting and/or extraordinary general meeting</i>) <ul style="list-style-type: none"> • Information on the total number of shares and voting rights and on the rights of shareholders to participate in general meeting • Shareholders' structure • Results of the GM (<i>information on proceedings and results of the General Meeting</i>) • Change of business name • Amendment of instrument of incorporation or articles of association (<i>alternatively current wording of articles of association and instrument of incorporation</i>) • Personnel changes in the bodies of the company (<i>personnel change in the statutory, management and supervisory bodies, etc.</i>) • Other changes in the business register (<i>e.g. information on fusion, merger, division or dissolution of the company, etc.</i>) • Changes in the share capital (<i>capital increase/issue of additional shares, capital decrease</i>) • Organizational structure of the company

Member State	Additional Information held by OAM
	<ul style="list-style-type: none"> • Managerial transactions (<i>announcement of persons discharging managerial responsibilities within an issuer or persons closely associated with them who conducted transactions on their own account involving shares of the respective issuer or financial instruments related to such shares under the Art. 132d (1) of Securities Act</i>) • Identification on market where securities are admitted to trading, or their change • Suspension of trading in securities • Takeover bids (<i>Information on Takeover Bids under the Securities Act, Takeover bid document, Standpoint of the offeree company board members on takeover bid, in case of a takeover bid under the Art. 119 of Securities Act – information on the progress of the takeover bid – information on status of the share of the voting rights in the offeree company expressed as the number of shares and as percentage, overall outcome of the takeover bid, etc.</i>) • Other financial measures • Declaration of compliance with the Corporate Governance Code • Other announcements (<i>e.g. change of the scope of business activities of the company – expansion, etc.</i>) • Information for holders of debt securities
SPAIN	Investor alerts Disciplinary penalties Incidents with traded securities Audit opinion Delisting of stocks Trading halts
THE NETHERLANDS	License holders according to the MIFID requirements; Equivalent requirements for Third country issuers in regard to the Accountancy Supervision Act; Information on the supervision tasks set by the Dutch Act on Financial Supervision; Information in regard to the Dutch Act on the Supervision of Financial reporting
UNITED KINGDOM	Information required under the Listing Rules.

Table 6-6: OAMs holding additional information

Member State	Other uses of information filed to OAM (Actica summary: OAM detail)
AUSTRIA	Supervision: Forwarding of regulated information to competent authorities. All other uses are in relation to and support of Transparency e.g. - Automated notification by email system etc;
BELGIUM	Supervision: The filed information is also used by FSMA for supervisory purposes.
BULGARIA	Additional filing and supervision: Supervised entities use OAM service to distribute and store other information (e.g. corporate actions, invitations to AGMs and minutes from meetings). Uploaded information is also used for regulatory purposes.
CYPRUS	Additional filing: Supervised entities use OAM service to distribute and store other information (e.g. corporate actions, invitations to AGMs), but the operator does not make use of the filed information for other purposes.
CZECH REPUBLIC	Additional reporting: The OAM service also supports filing of : Notification of Suspicion of Market Manipulation - based on 2003/6/ES Notification of a transaction - based on 2003/6/ES Comprehensive documentation about the data published during the previous 12 month - based on 2003/6/ES
DENMARK	Supervision: Market surveillance - The information is routed to the DFSA monitoring tools.
ESTONIA	Supervision: As an input to market supervision tools.
IRELAND	Dual filing: Many issuers use the service for simultaneous dissemination of the information to the market. (The interim OAM solution uses this process and system.) The operator does not make use of the filed information for other purposes
PORTUGAL	Additional reporting: Filed information is also used for the purposes of: - Prospectus directive; - Market abuse directive; - Takeover bids directive; - Shareholders' rights directive.
SLOVAK REPUBLIC	Supervision: The filed information is mainly used for the purposes of TD requirements. However the information can also be used for off-site supervision purposes
SLOVENIA	Supervision: By The Securities Market Agency
SPAIN	Supervision
UNITED KINGDOM	Additional products: Information is used within other commercial products by the operator (Morningstar)

Table 6-7: Member States using OAM information for other purposes

6.5 Filing methods, formats and supporting processes

	email submission	Upload via extranet or other online submission portal	Batch or mass transfer from issuers	Automatic transfer from other filing system (e.g. Stock Exchange)	Other (OAM provided details)
AUSTRIA		✓			Automatic transfer from service providers
BELGIUM		✓			
BULGARIA		✓			
CYPRUS	✓	✓			In case of technical issues, Fax and email methods are allowed.
CZECH REPUBLIC		✓			The Czech Republic have an "E-government act", which supports a special way of receiving electronic filings - namely "Data boxes". This information system supports fully authenticated and secure delivery of information among subjects. Communication is based on XML format.
DENMARK		✓		✓	
ESTONIA		✓	✓	✓	

	email submission	Upload via extranet or other online submission portal	Batch or mass transfer from issuers	Automatic transfer from other filing system (e.g. Stock Exchange)	Other (OAM provided details)
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)		✓		✓	An xml based online api / webservice is provided to transmit the disclosures for filing with the OAM and to retrieve the meta data needed for the filing. This is available for News Service Providers and Issuers, but only News Service Provider have signed up for it. A similar webservice is available for the FSA's enabling them to retrieve data from the database, but no one uses it. They all use the enquiry function instead
FRANCE	✓			✓	Transfer is from Financial Market Authority, AMF
GERMANY	✓	✓	✓	✓	Automatic transfer from www.ebundesanzeiger.de website
HUNGARY		✓			
IRELAND	✓			✓	
LUXEMBOURG	✓	✓			email submission only to be used if portal unavailable
MALTA	✓	✓			

	email submission	Upload via extranet or other online submission portal	Batch or mass transfer from issuers	Automatic transfer from other filing system (e.g. Stock Exchange)	Other (OAM provided details)
POLAND	✓			✓	OAM filings are automatically transferred from the ESPI system. Every issuer which is a public company is a member of this system. The information is sent to ESPI by the issuers through an email.
PORTUGAL	✓	✓		✓	
ROMANIA		✓			
SLOVAK REPUBLIC	✓ to June 11	✓ from June 11			
SLOVENIA		✓		✓	
SPAIN		✓			
SWEDEN		✓		✓	Automatic transfer. The issuer can leave authorization to a third party that will transfer the information automatically to the OAM.
THE NETHERLANDS	✓	✓			

	email submission	Upload via extranet or other online submission portal	Batch or mass transfer from issuers	Automatic transfer from other filing system (e.g. Stock Exchange)	Other (OAM provided details)
UNITED KINGDOM	✓	✓		✓ (Transfer from RIS Providers)	Final Terms forwarded by the UK Listing Authority

Table 6-8: Methods supported for receiving electronic filings

Member State	Formats required or accepted for filing of voting rights						
	Plain Text (Electronic document)	HTML	PDF	XBRL	Other electronic formats (e.g. MS Word)	Paper	Other/OAM provided notes
AUSTRIA	Required Format		Required Format				
BELGIUM			Required Format				The OAM only contains information filed by issuers.
BULGARIA							For the time being there is no electronic form in the E-Register for filing Holdings of voting rights. This information is submitted on paper and subsequently the FSC publish it in another database on the FSC website, called ERiK.
CYPRUS			Accepted Format		Accepted Format		
CZECH REPUBLIC		Required Format					
DENMARK	Accepted Format	Accepted Format	Accepted Format		Accepted Format		
ESTONIA	Required Format	Accepted Format	Accepted Format		Accepted Format		

Member State	Formats required or accepted for filing of voting rights						
	Plain Text (Electronic document)	HTML	PDF	XBRL	Other electronic formats (e.g. MS Word)	Paper	Other/OAM provided notes
FINLAND	Required Format		Required Format		Accepted Format		
FRANCE	N/A	N/A	N/A	N/A	N/A	N/A	We do not file voting rights
GERMANY				Accepted Format			XML
HUNGARY			Required Format				
ICELAND	Accepted Format		Required Format		Accepted Format		
IRELAND			Required Format		Required Format		
LITHUANIA	Accepted Format		Accepted Format		Accepted Format		
LUXEMBOURG			Required Format				
NORWAY	Required Format		Accepted Format		Accepted Format		
PORTUGAL			Required Format				
ROMANIA			Accepted Format				
SLOVAK REPUBLIC	Accepted Format		Accepted Format		Accepted Format		

Member State	Formats required or accepted for filing of voting rights						
	Plain Text (Electronic document)	HTML	PDF	XBRL	Other electronic formats (e.g. MS Word)	Paper	Other/OAM provided notes
SLOVENIA	Accepted Format		Accepted Format		Accepted Format		
SPAIN			Accepted Format			Accepted Format	PDF form
SWEDEN	Accepted format		Required Format			Accepted Format. They can send the information by fax, e-mail or mail.	Required format. Web form on web site
THE NETHERLANDS	Accepted Format		Accepted Format		Accepted Format	Accepted Format	
UNITED KINGDOM			Accepted Format		Accepted Format	Accepted format	OAM has ability to accept XBRL due to handling the format in the US market

Table 6-9: Formats adopted for filing of voting rights

Member State	Formats accepted or required for filing of financial Information						
	Plain Text (Electronic document)	HTML	PDF	XBRL	Other electronic formats (e.g. MS Word)	Paper	Other/OAM provided notes
AUSTRIA	Required Format		Required Format				
BELGIUM			Required Format				
BULGARIA							The submission form is XML. The supervised entities include in the submission form separate documents, which could be in a range of formats: .doc, .txt, .xls, .pdf, .jpg, .jpeg, .tif, .tiff, .gif and .ps7.
CYPRUS			Accepted Format		Accepted Format		
CZECH REPUBLIC							XML
DENMARK	Accepted Format	Accepted Format	Accepted Format		Accepted Format		
ESTONIA	Required Format	Accepted Format	Accepted Format		Accepted Format		
FINLAND	Required Format		Required Format		Accepted Format		
FRANCE			Accepted Format		Accepted Format		
GERMANY				Accepted Format			XML

Member State	Formats accepted or required for filing of financial Information						
	Plain Text (Electronic document)	HTML	PDF	XBRL	Other electronic formats (e.g. MS Word)	Paper	Other/OAM provided notes
HUNGARY			Required Format				
ICELAND	Accepted Format		Required Format		Accepted Format		
IRELAND			Required Format		Required Format		
LITHUANIA	Accepted Format		Accepted Format		Accepted Format		
LUXEMBOURG			Required Format				
MALTA			Required Format				
NORWAY	Required Format		Accepted Format		Accepted Format		
POLAND							
PORTUGAL			Required Format				
ROMANIA			Accepted Format		Accepted Format		
SLOVAK REPUBLIC	Accepted Format		Accepted Format		Accepted Format		
SLOVENIA	Accepted Format		Accepted Format		Accepted Format		
SPAIN			Accepted Format	Required Format		Accepted Format	

Member State	Formats accepted or required for filing of financial Information						
	Plain Text (Electronic document)	HTML	PDF	XBRL	Other electronic formats (e.g. MS Word)	Paper	Other/OAM provided notes
SWEDEN			Required Format			Accepted Format	
THE NETHERLANDS	Accepted Format		Accepted Format		Accepted Format	Accepted Format	
UNITED KINGDOM			Accepted Format		Accepted Format	Accepted Format	OAM has ability to accept XBRL due to handling of the format for the US and Japan etc. markets

Table 6-10: Formats adopted for filing of financial information

Member State	Techniques used to ensure certainty as to source of filings						Does the storage mechanism electronically acknowledge receipt of documents?	Do acknowledgements confirm validation or reject a submission with reasons for rejection	How is 'non-repudiation' managed in the OAM?	
	Electronic signatures	Use of access codes, usernames or passwords	Encryption	Automated or manual checking of filings received	Security certificates (e.g. SSL)	Links to trusted system(s)(e.g. Stock Exchange)				Other
AUSTRIA	Yes	Yes			Yes			Yes	Yes	All information flows in/out are recorded in the system and can be viewed by online client
BELGIUM	Yes	Yes	Yes	Yes	Yes		Authentication process of the filer is equivalent to "electronic signature" .	Yes	Yes	Log and timestamp of all actions taken by the issuer or operator.
BULGARIA	Yes				Yes			No	Yes	Unique entry number, provided to both sender and recipient.
CYPRUS	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Fillings are timestamped and signed by a digital certificate specifically issued for the Issuer. Acknowledgement of receipt of document is sent to successful filers.
CZECH REPUBLIC	Yes				Yes			No	Yes	Guaranteed by the registered user, who is fully authenticated via electronic signature.
DENMARK		Yes			Yes	Yes		Yes	Yes	Authentication to the system made by digital signature (x.509 - certificates). The filed messages are not digitally signed.

Member State	Techniques used to ensure certainty as to source of filings						Does the storage mechanism electronically acknowledge receipt of documents?	Do acknowledgements confirm validation or reject a submission with reasons for rejection	How is 'non-repudiation" managed in the OAM?	
	Electronic signatures	Use of access codes, usernames or passwords	Encryption	Automated or manual checking of filings received	Security certificates (e.g. SSL)	Links to trusted system(s)(e.g. Stock Exchange)				Other
ESTONIA	Yes	Yes			Yes	Yes		Yes	Yes	The sender electronically signs the filing. Reception of the filing recorded in the system logs.
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)		Yes	Yes			Yes	The providers using the XML interface are authenticated with user id and password when automatically uploading the news items.	Yes	Yes	On each transaction the sender and the time of filing is registered and each filing has a unique number that can be traced back to the id that has uploaded the message
FRANCE	Yes							No		
GERMANY	Yes	Yes	Yes	Yes	Yes	Yes	link to www.ebundesanzeiger.de	Yes	Yes	The issuer registers and authenticates himself and submits his files via his personal account. Submission is recorded in system log files.
HUNGARY	Yes	Yes		Yes	Yes		Pre-registration.	Yes	Yes	Managed by digital signature.

Member State	Techniques used to ensure certainty as to source of filings						Does the storage mechanism electronically acknowledge receipt of documents?	Do acknowledgements confirm validation or reject a submission with reasons for rejection	How is 'non-repudiation' managed in the OAM?	
	Electronic signatures	Use of access codes, usernames or passwords	Encryption	Automated or manual checking of filings received	Security certificates (e.g. SSL)	Links to trusted system(s)(e.g. Stock Exchange)				Other
IRELAND				Yes			No	Not applicable	Announcements are released through the ISE Companies Announcement Office, received by email and are then displayed on the ISE website. Announcements released through other PIP's are further displayed on the ISE website however the ISE have no input into the release of these announcements as they are sent in directly by the company involved.	
LUXEMBOURG		Yes	Yes		Yes		A contract is established and signed with a filing entity before giving access to the OAM service. Access codes are sent by 2 different channels.	Yes	The filing entity is identified by a login, password, TAN code and the system is protected by encryption. In addition, the sender receives an acknowledgement of receipt indicating the documents with signature and time stamp.	
MALTA		Yes	Yes		Yes	Yes		Yes	No	An e-mail is issued to recipients whenever an announcement is uploaded.

Member State	Techniques used to ensure certainty as to source of filings							Does the storage mechanism electronically acknowledge receipt of documents?	Do acknowledgements confirm validation or reject a submission with reasons for rejection	How is 'non-repudiation" managed in the OAM?
	Electronic signatures	Use of access codes, usernames or passwords	Encryption	Automated or manual checking of filings received	Security certificates (e.g. SSL)	Links to trusted system(s)(e.g. Stock Exchange)	Other			
POLAND		Yes						Yes	Not applicable	Information can only be submitted by users with named accounts on the system and a password issued by the competent authority. On receiving the report confirmation is send to the issuer containing name and date of receiving the report
PORTUGAL	Yes	Yes	Yes		Yes			Yes	Not applicable	Registration in a database and log files of transfers of files sent by issuers.
ROMANIA		Yes		Yes				Yes	Yes	Users all have account usernames and passwords. Each reporter must sign an agreement that they are responsible for maintaining full confidentiality of account information and, also, are responsible for any information sent using the account. Issuers must assign the reporting task to a limited number of employees who can use company's credentials.
SLOVAK REPUBLIC		Yes		Yes			sender's e-mail address (until June 2011)	Yes	N/R	N/R
SLOVENIA	Yes	Yes	Yes		Yes	Yes		Yes	Not applicable	Electronic signatures, valid personal certificates, time stamps, encryption

Member State	Techniques used to ensure certainty as to source of filings							Does the storage mechanism electronically acknowledge receipt of documents?	Do acknowledgements confirm validation or reject a submission with reasons for rejection	How is 'non-repudiation" managed in the OAM?
	Electronic signatures	Use of access codes, usernames or passwords	Encryption	Automated or manual checking of filings received	Security certificates (e.g. SSL)	Links to trusted system(s)(e.g. Stock Exchange)	Other			
SPAIN	Yes			Yes				Yes	Yes	Electronic signature procedure
SWEDEN					Yes			Yes	No – manual checks	
THE NETHERLANDS	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Timestamp mechanism as well an addressee confirmation
UNITED KINGDOM		Yes		Yes	Yes	Yes	Authorization letter with two signatures by authorized officers of the issuer is required	Yes	Yes	Access logs are maintained

Table 6-11: Techniques adopted to ensure certainty as to source of filings

	Average time between initial receipt and docketing of a filing by the OAM and it being accessible to end users	Additional Comments from OAM
AUSTRIA	Less than 1 minute	
BELGIUM	Information is available as soon as docketed	
BULGARIA	More than 1 day	Information is automatically available in less than 1 minute after the 3-level approval (validation) of the data. The 3-level approval takes between 1 to 3 working days depending on workload.
CYPRUS	Information is available as soon as docketed	Filing may be published at a later scheduled time for legal reasons.
CZECH REPUBLIC	Information is available as soon as docketed	
DENMARK	Information is available as soon as docketed	
ESTONIA	Less than 1 minute	
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Information is available as soon as docketed	
FRANCE	1 hour for automated submissions from AMF.	2 days for manual submissions via email
GERMANY	Next working day	Next working day at the latest
HUNGARY	1 minute to 1 hour	1-2 minutes.
IRELAND	1 minute to 1 hour	Announcements feed through to our website in intervals, depending of release time or time received for release
LUXEMBOURG	Information is available as soon as docketed	
MALTA	Information is available as soon as docketed	
POLAND	Same working day	
PORTUGAL	Information is available as soon as docketed	
ROMANIA	Less than 1 minute	
SLOVAK REPUBLIC	Information is available as soon as docketed	From July 2011
SLOVENIA	Next working day	
SPAIN	Information is available as soon as docketed	
SWEDEN	Information is available as soon as docketed	Applies to financial information

	Average time between initial receipt and docketing of a filing by the OAM and it being accessible to end users	Additional Comments from OAM
THE NETHERLANDS	Next working day	
UNITED KINGDOM	Next working day	

Table 6-12: Time until information is available to external users

Member State	Does the OAM have the ability to automatically docket electronically as they enter the mechanism	Additional Comments	Does the OAM provide facilities for "straight through" automated processing of filings using pre-determined formats and templates?	If Yes - please provide details of templates used	If particular templates or formats are imposed, are they aligned to those used for filing the same information with the competent authority?	Further details provided by OAM
AUSTRIA	Yes		Yes	XML format provided to service providers (not issuers) for automated upload of documents and metadata	Yes	To the knowledge of the Austrian OAM, regulated information is provided in the same manner to the regulator and media
BELGIUM	Yes		No		Not applicable	
BULGARIA	Yes		Yes		Not applicable	The OAM is created and managed by the Financial Supervision Commission, so the submission of information to the OAM is also the submission of information to the competent authority. Therefore, the templates and formats are the same.
CYPRUS	Yes		Yes		No	
CZECH REPUBLIC	Yes		Yes		Yes	

Member State	Does the OAM have the ability to automatically docket electronically as they enter the mechanism	Additional Comments	Does the OAM provide facilities for "straight through" automated processing of filings using pre-determined formats and templates?	If Yes - please provide details of templates used	If particular templates or formats are imposed, are they aligned to those used for filing the same information with the competent authority?	Further details provided by OAM
DENMARK	Yes	Yes filing are automatically time stamped and the system also gives the ability to distinguish between date for publication and date for registration - if an issuer want to file beforehand (hidden for external users within the system until publicised)	Yes	Web-service	Not applicable	
ESTONIA	Yes		Yes		Yes	The filings to regulated market, to OAM and to CA are all aligned.
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Yes		Yes		Yes	The same formats are used for filing with the OAM and the Exchange
FRANCE	Yes					All filings are provided by the competent authority (automatic transfer or email). There's no direct submission to OAM
GERMANY	Yes		Yes		Yes	
HUNGARY	Yes		No		Not applicable	-

Member State	Does the OAM have the ability to automatically docket electronically as they enter the mechanism	Additional Comments	Does the OAM provide facilities for "straight through" automated processing of filings using pre-determined formats and templates?	If Yes - please provide details of templates used	If particular templates or formats are imposed, are they aligned to those used for filing the same information with the competent authority?	Further details provided by OAM
IRELAND	No	All key activity times are logged including receipt, processing and publication times.	No		Not applicable	
LUXEMBOURG	Yes		No		Yes	Formats of documents must be pdf
MALTA	Yes		No		Not applicable	
POLAND	N/R	N/R	N/R	N/R	N/R	N/R
PORTUGAL	Yes		No	We only accept pdf. files but with no specific format.	Not applicable	
ROMANIA	Yes		Yes		Not applicable	
SLOVAK REPUBLIC	Yes		No		Not applicable	

Member State	Does the OAM have the ability to automatically docket electronically as they enter the mechanism	Additional Comments	Does the OAM provide facilities for "straight through" automated processing of filings using pre-determined formats and templates?	If Yes - please provide details of templates used	If particular templates or formats are imposed, are they aligned to those used for filing the same information with the competent authority?	Further details provided by OAM
SLOVENIA	Yes	All important time stamps are logged.	Yes	Most documents come to OAM from our SEOnet system and are passed to OAM automatically via web service. Predefined formats are used for attached files where most information is held. Otherwise all types of information have one template, but each document is categorized.	Yes	OAM service provided for Authority Agency; workflows and formats are aligned with their demands.
SPAIN	Yes		Yes	The issuers can create the XML or XBRL files (depending on the type of information) by their own means or, alternatively, can use webforms to input data manually.	Yes	The OAM and the Competent Authority are the same body and receive the same information in the same format.
SWEDEN	N/R	N/R	Yes – partial	Templates apply to authorities filing on behalf of the issuer. Issuers use their own formats for direct filing		
THE NETHERLANDS	No		No		Not applicable	

Member State	Does the OAM have the ability to automatically docket electronically as they enter the mechanism	Additional Comments	Does the OAM provide facilities for "straight through" automated processing of filings using pre-determined formats and templates?	If Yes - please provide details of templates used	If particular templates or formats are imposed, are they aligned to those used for filing the same information with the competent authority?	Further details provided by OAM
UNITED KINGDOM	Yes		Yes	Email template and web form are available	No	

Table 6-13: Capability for automated processing of filings

6.6 Security standards

Member State	Actica assessment of the survey responses regarding security arrangements in place within the OAM to deal with: <ol style="list-style-type: none"> 1. Data corruption 2. Attempted unauthorised access 3. 24 by 7 availability to end users and issuers 4. Continuity of service (backup and business continuity)
AUSTRIA	Appropriate arrangements in place for managing data corruption, unauthorised access, availability and continuity of service. Assessment based on catalogue of policies and procedures stated to be in place.
BELGIUM	Appropriate arrangements for managing data corruption, availability and continuity of service No information available to assess arrangements for preventing unauthorised access
BULGARIA	Appropriate arrangements for managing data corruption and availability. Detailed multi-level checking and approval arrangements for ensuring validity of users/certainty as to information source. Reasonable arrangements for business continuity based on regular offsite archiving of information.
CYPRUS	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
CZECH REPUBLIC	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
DENMARK	Appropriate arrangements for managing data corruption and unauthorised access, availability and continuity of service.
ESTONIA	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.

Member State	Actica assessment of the survey responses regarding security arrangements in place within the OAM to deal with: 1. Data corruption 2. Attempted unauthorised access 3. 24 by 7 availability to end users and issuers 4. Continuity of service (backup and business continuity)
FRANCE	No information provided
GERMANY	Appropriate arrangements for managing data corruption and unauthorised access. 24/7 service provided to issuers and end users, but limited further information provided on arrangements to deliver availability and continuity of service.
GREECE	No information provided
HUNGARY	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
IRELAND	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
LATVIA	No information provided
LUXEMBOURG	Appropriate arrangements for managing data corruption and unauthorised access. Reasonable arrangements to address availability and continuity of service.
MALTA	Reasonable arrangements for managing data corruption and unauthorised access. Limited information on availability and continuity of service arrangements
NORWAY	No information provided
POLAND	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
PORTUGAL	No information provided - subject to confidentiality arrangements

Member State	Actica assessment of the survey responses regarding security arrangements in place within the OAM to deal with: 1. Data corruption 2. Attempted unauthorised access 3. 24 by 7 availability to end users and issuers 4. Continuity of service (backup and business continuity)
ROMANIA	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
SLOVAK REPUBLIC	Reasonable arrangements for managing data corruption, unauthorised access, availability and continuity of service.
SLOVENIA	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
SPAIN	Appropriate arrangements for managing data corruption, unauthorised access, availability and continuity of service.
SWEDEN	Limited information provided – claims compliancy in all areas
THE NETHERLANDS	Limited information provided indicates reasonable backup and archive processes to manage data corruption and continuity of service.
UNITED KINGDOM	Appropriate arrangements for managing data corruption and unauthorised access, availability and continuity of service.

Table 6-14: Assessment of arrangements in place to meet security standards

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6.7 Validation, checking and acceptance of waivers

	Inspection method used to check adherence to standards, completeness and accuracy
AUSTRIA	Automated inspection
BELGIUM	Manual inspection of all filings
BULGARIA	Manual inspection of all filings
CYPRUS	Manual inspection of all filings
CZECH REPUBLIC	Both automated and manual inspection
DENMARK	Automated inspection
ESTONIA	The issuer is responsible for checking that the information published is complete and accurate.
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Automated inspection
GERMANY	Automated inspection as well as random sampling
HUNGARY	Manual inspection of all filings
IRELAND	No inspection
LUXEMBOURG	Automated inspection
MALTA	The OAM does not inspect the document because the Competent Authority monitors the content.
POLAND	Automated inspection
PORTUGAL	No inspection
ROMANIA	Manual inspection of all filings plus automated inspection of format and some data fields
SLOVAK REPUBLIC	Manual inspection of all filings
SLOVENIA	No inspection
SPAIN	Manual inspection of a sample of filings
SWEDEN	Manual inspection of all filings
THE NETHERLANDS	Manual inspection of all filings
UNITED KINGDOM	Manual inspection of a sample of filings

Table 6-15: Methods of validation used

Member State	Acceptance of waivers and recovery
	Evaluation processes for reviewing and accepting or denying waivers for late filings, and recovery tools available for use when the prescribed filing mechanism is out of order
AUSTRIA	Waivers: No specific arrangements for accepting waivers Recovery tools: Alternative submissions procedures are in place in the case of total disruption of service including backup systems. Issuers must then refile when systems are available.
BELGIUM	Waivers: No specific arrangements The application provides reporting facilities for follow up of late filings. Recovery tools: No specific arrangements Technical measures are in place to avoid the filing mechanism being out of order for a long period.
BULGARIA	Waivers: During the 3-level expert evaluation the experts themselves and their superiors decide in each specific case whether to accept or deny waiver for late filings. Recovery tools: When the filing mechanism is out of order, the issuers can submit regulated information via e-mail signed again with an electronic signature.
CYPRUS	Waivers: No specific arrangements Recovery tools: Filing by email and fax is allowed when prescribed filing mechanism is out of order.
CZECH REPUBLIC	Waivers: Not supported Recovery tools: Submission by email allowed
DENMARK	Waivers: Application enforces a valid filing window, No specific waiver arrangements. Recovery tools: Not offered. If a filing is late due to OAM being out of order Danish FSA would not sanction the issuer.
ESTONIA	Waivers: Process is not formalised and will be dealt with on an ad hoc basis should it ever be required. Recovery tools: If the filing mechanism is out of order the issuer is compelled to try to submit the information once the system is back on-line.
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Waivers: No specific arrangements for late filings. Filings are never denied. Recovery tools: The disclosure process continues to the Market/Media and the missing filings are uploaded manually or resent by the news service provider via the xml api
GERMANY	Waivers: At the discretion of the supervisory authority Recovery tools: No information provided
HUNGARY	No specific information provided
IRELAND	Waivers: Not applicable The ISE provides both filing and publication services (using the same system) when acting as the OAM, so the circumstance does not arise, i.e. filing does not happen after publication has occurred. Recovery tools: As above
LUXEMBOURG	Waivers: Late filings are accepted: in that case the publication date is always the real one and shown on the search page. Recovery tools: Email submissions are allowed if the filing mechanism is unavailable.
MALTA	Waivers: No information provided Recovery tools: Usually a manual upload by OAM takes place rather than the usual upload by issuer. Such issues are however decided by the Competent Authority.

Member State	Acceptance of waivers and recovery Evaluation processes for reviewing and accepting or denying waivers for late filings, and recovery tools available for use when the prescribed filing mechanism is out of order
POLAND	Waivers: No information provided Recovery tools: In case of system failure, the system is changed to duplicate system and the information re-sent by emergency mechanisms.
PORTUGAL	Waivers: Not applicable. As information is required to be sent in the first instance to the supervisory authority (CMVM) (also the OAM), acceptance/denial of late filings does not apply. Recovery tools: If the email system is not working, delivery on magnetic media. The requirement of complying with the rules regarding security, integrity and confidentiality of information applies.
ROMANIA	Waivers: Late filings can be submitted but only for existing versions of each type of report. System alerts the CNVM's users in case of late filings. Recovery tools: Reports are submitted by other means (email, fax). The submitting of electronic reports after system recovery is mandatory.
SLOVAK REPUBLIC	Waivers: N/A Recovery tools: paper filing allowed
SLOVENIA	Waivers: No specific arrangements Recovery tools: Backup mechanism is provided (no further details provided)
SPAIN	Waivers: If an issuer does not submit before deadline, the CNMV claims in writing for its submission. Recovery tools: Submission in hard copy with the original signature of the issuer's secretary of the board or directors and manually added to the OAM. As soon as the automatic filing mechanism is restored, the issuer is obliged to submit same information electronically
THE NETHERLANDS	Waivers and recovery tools: Ad hoc arrangements on case by case basis.
UNITED KINGDOM	Waivers and recovery tools: No information (outside operators remit)

Table 6-16: Approach to waivers and recovery

6.8 User presentation

Member State	Does the presentation to end users distinguish between regulated financial information and any value added service provided by the storage mechanism?
AUSTRIA	Yes
BELGIUM	Not applicable (No value-added services)
BULGARIA	No
CYPRUS	Yes
CZECH REPUBLIC	Yes
DENMARK	Not applicable (No value-added services)
ESTONIA	Not applicable (No value-added services)
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Yes
FRANCE	No
GERMANY	Not applicable (No value-added services)
HUNGARY	Not applicable (No value-added services)
IRELAND	No
LUXEMBOURG	Yes
MALTA	No
POLAND	Not applicable (No value-added services)
PORTUGAL	Not applicable (No value-added services)
ROMANIA	Not applicable (No value-added services)
SLOVAK REPUBLIC	Yes
SLOVENIA	Yes
SPAIN	Yes
SWEDEN	Not applicable (No value-added services)
THE NETHERLANDS	No
UNITED KINGDOM	Yes

Table 6-17: Presentation of information to end users

6.9 Languages supported

Member State	Is information required to be filed in additional languages other than that of the Home Member State?	Does the OAM store and facilitate access to all versions submitted	Are filings stored in English if provided?	If Yes - approximately what percentage (%) of filings are available in English	Comments provided by OAM
AUSTRIA	No	Yes	Yes	More than 35%	
BELGIUM	No	Yes	Yes	60%	
BULGARIA	No	No	Yes		
CYPRUS	No	Yes	Yes	N/R	
CZECH REPUBLIC	No	Yes	Yes		
DENMARK	Yes	Yes	Yes		In specific cases filing should also be done in English
ESTONIA	No	Yes	Yes		It is not an obligation, but most of the issuers file in also in English.
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	No	Yes	Yes	Approx 30 - 50%	
FRANCE	No	Yes	Yes	30%	
GERMANY	No	Yes	Yes	Approx. less than 10%	Other languages can be added optionally
HUNGARY	No	Yes	Yes	12%	
IRELAND	No	No	Yes	100%	
LUXEMBOURG	No	Yes	Yes	88%	Four languages accepted in Luxembourg

Member State	Is information required to be filed in additional languages other than that of the Home Member State?	Does the OAM store and facilitate access to all versions submitted	Are filings stored in English if provided?	If Yes - approximately what percentage (%) of filings are available in English	Comments provided by OAM
MALTA	No	Yes	Yes	100%	
NORWAY	Yes	N/R	N/R	N/R	Companies for which Norway is the home state pursuant to Section 5-4 of the Securities Trading Act are required to use the Norwegian language when publishing information. If such a company wishes to publish its announcements in English, it must apply for an exemption to this effect.
POLAND		Yes	No		
PORTUGAL	No	Yes	Yes		
ROMANIA	No	No	Yes	less than 0.1% (only 2 reports)	
SLOVAK REPUBLIC	No	Yes	Yes	Less than 1%	Apart from Slovak language (as obligatory language), it is also allowed to submit information in English (or other languages).
SLOVENIA	Yes	Yes	Yes	All from our Prime market and some others	English (only for the issuers of the Prime Market, for others only recommendation)
SPAIN	No	Yes	Yes	The % of filings available in English is minimal	Issuers have to submit regulated information in Spanish. Additionally, in case they also submit information in English, it is also stored in the OAM.
SWEDEN	No	Yes	Yes	Not available	
THE NETHERLANDS	Yes	Yes	Yes	50%	
UNITED KINGDOM	No	Yes	Yes	Stats are not available - however non-English filings are not expected in the UK	

Table 6-18: Languages in which filings are held

Member State	Languages available in online search facilities (other than that of home state)	
	English	Others
AUSTRIA	Y	
BELGIUM	Y	
BULGARIA	N	N/A
CYPRUS	Y	
CZECH REPUBLIC	Y	
DENMARK	Y	
ESTONIA	N	
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Y	The system is available in Swedish, Finnish, Lithuanian and Icelandic
FRANCE	Y	
GERMANY	Y	German, French, Italian, Spanish
HUNGARY	Y	
IRELAND	Y	
LUXEMBOURG	Y	French
MALTA	Y	
POLAND	N	N/A
PORTUGAL	Y	Spanish (dual listing)
ROMANIA	Y	
SLOVAK REPUBLIC	Y	
SLOVENIA	Y	Can be any language if attached in document. Search mechanism also searches documents content
SPAIN	Y	
SWEDEN	Y	
THE NETHERLANDS	Y	
UNITED KINGDOM	Y	

Table 6-19: Languages in which online search is available

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6.10 User support services provided

Member State	User support services provided	Capability of the OAM to enable users, wherever they are located, to search, order and interrogate, view, download and print the full content of regulated information held. (Actica assessment of current web service)
AUSTRIA	Telephone help desk and email support in working hours	Full capability: Web interface; flexible search and sorting, PDF document download via browser. Plus: Subscription to email alerts of new information on selected companies
BELGIUM	Online help Service desk during business hours 24/7 response to infrastructure technical problems	Full capability: Web interface; flexible search and sorting, PDF or other document download via browser.
BULGARIA	Online help Telephone help desk Both are carried out by the in-house IT during working hours.	Good capability: Web interface with limited search, many results are announcements/news not regulated information. Where documents available documents are downloaded via browser.
CYPRUS	Email support Telephone help desk 07:30 am - 06:00 pm	Interim solution: Based on SE announcement system. Searches return regulated and non-regulated information. Not all filings contain full document; where available can be downloaded via web browser
CZECH REPUBLIC	Limited online help Internal service support during working hours	Full capability: Web interface; flexible search, PDF or other document download via browser.
DENMARK	Email support request from web page	Extended capability: web interface with flexible search (no sort) and download, plus: Subscription on email notifications based on metadata/ parameters RSS feeds based on metadata/parameters Web service access

Member State	User support services provided	Capability of the OAM to enable users, wherever they are located, to search, order and interrogate, view, download and print the full content of regulated information held. (Actica assessment of current web service)
ESTONIA	Business hours support for internal users 24/7 technical support for internal users and administrators	Extended capability: web interface with flexible search, sort and download where attachments available, plus: CSV download of search results RSS feed Subscription to mailing list
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	Telephone and email Help desk for issuers and external users 8 - 17 in the local time zone Online help available for issuers but not for information users (other than the on screen help)	Extended capability – web interface with flexible search on an extended range of metadata and text within body of announcements, sorting of results and download of attachments via web browser, plus download an xls or pdf list of query results
FRANCE	FAQ, e-mail support	Good capability: Web interface with basic search but no sorting. Attachment/PDF document download via browser.
GERMANY	Online help and FAQs (24/7) Email support and telephone help desk (Monday - Friday 8.00 AM to 8:00 PM)	Extended capability: Web interface; flexible search and sort, print format option and PDF download via browser. Access available from mobile devices; Search on extended document sets and by metadata on legal status, local register court etc.
GREECE	N/R	Limited capability: Appears to be the SE list/news service. Not clear how to use for regulated information search purposes (No further information supplied by operator in response to surveys)
HUNGARY	Online help and information, FAQ Email support and telephone help desk.	Full capability: Web interface; flexible search, PDF or other document download via browser.
IRELAND	ISE provide support services from 07.00am – 06.00pm Monday to Friday	Interim solution using the SE general announcements website Limited search on name and date only, and viewing of headline/full text of announcements.

Member State	User support services provided	Capability of the OAM to enable users, wherever they are located, to search, order and interrogate, view, download and print the full content of regulated information held. (Actica assessment of current web service)
LATVIA	N/R	Good capability: Web interface; flexible search, PDF or other document download via browser, but document not always available direct from OAM
LUXEMBOURG	Online user guide and FAQ in French and English email support And telephone helpdesk during business hours	Full capability: Web interface; flexible search and sort, PDF document download via browser.
MALTA	E-mail support and telephone help desk.	Basic capability: Based on SE announcement system. Limited search capability returns regulated and non-regulated information. Not all filings contain full document; where available can be downloaded as PDF via web browser
NORWAY	N/R	Good capability: Integrated with overall SE news service. Web interface with basic search but no sorting. Attachment/PDF document download via browser.
POLAND	N/R	No information provided – could not access service
PORTUGAL	Email and telephone, during business hours - 9h00 am - 9h00 pm	Good capability: Web interface with multi-level menu selections (limited capability to flexibly search). Attachment/PDF document download via browser.
ROMANIA	Service Help Desk and second line support for all classes of user during working hours. Software supplier provides 3 rd line technical support	Extended capability: web interface with flexible search, sort and download of PDF attachments Excel download of search results Version management/display
SLOVAK REPUBLIC	e-mail support and telephone by the National Bank of Slovakia employees, during working hours (Filers only)	Interim solution :No user capability available Issuers submit filings by email (PDF or Word attachments)
SLOVENIA	email, help desk (8:00 - 16:00) on working days.	Extended capability: Web interface; flexible search and sort, PDF document download via browser. Plus: Chained searches RSS feed

Member State	User support services provided	Capability of the OAM to enable users, wherever they are located, to search, order and interrogate, view, download and print the full content of regulated information held. (Actica assessment of current web service)
SPAIN	Help desk, Monday to Friday from 08:30 till 19:00	Good capability: Limited search with regulated information integrated with other filings. Download in XBRL and PDF formats. Note – links from MiFID database broken. Review based on Actica's understanding of site.
SWEDEN	Online Q&A	Full capability: Web interface; limited search capability, but can return summary of ALL information held for a company with links to full documents. Sort and select PDF document download via browser.
THE NETHERLANDS	e-mail support and telephone help-desk	Good capability: Need to use menu to find regulated information display. Web interface with very limited searching and no sort; Attachment/PDF document download via browser.
UNITED KINGDOM	Ticket based support is provided and support is available 0800 to 1800 during UK office hours	Full capability: Web interface; flexible search and sort, PDF document download via browser.

Table 6-20: Support and accessibility arrangements

6.11 Metadata available and its source

Items are either provided by issuer when submitting filing or added by OAM after receipt

Member State	Regulated information indicator	Name of issuer	Title of the filed document	Time and date information was disseminated	Language of filed document	Type of regulated information that filing relates to	Name of issuer in all languages used by issuer	Unique issuer identifier or code	Country of incorporation	Home Member State of issuer	Regulated markets where issuer's securities are admitted to trading	Industry code of the issuer's principal activities	ISIN codes for the issuer's securities	Reporting period to which a specific filing relates (e.g. Q4/2010)	ISIN codes for the securities covered by the individual filing	Additional Comments by OAM
AUSTRIA	Issuer	Issuer	Issuer	Issuer	Issuer	Issuer	Issuer	OAM	Issuer	Issuer	Issuer		Issuer			Issuer id is provided by the Austrian Central Bank. Industry code is awaiting agreement on which code is to be used at European level ISIN codes are available in other OAM databases – the OAM acts as the national numbering agency
BELGIUM	Issuer	Issuer	Issuer	Issuer	Issuer	Issuer			OAM	OAM	OAM					
BULGARIA	Issuer	Issuer	OAM	OAM		Issuer	Issuer	Issuer	Issuer	Issuer		Issuer	Issuer	Issuer	Issuer	
CYPRUS	OAM	OAM	Issuer	OAM	Issuer	Issuer	OAM		OAM	OAM	OAM	OAM	OAM	Issuer	Issuer	
CZECH REPUBLIC	OAM	OAM	Issuer	OAM	Issuer	Issuer	OAM	OAM	Issuer	Issuer	Issuer	OAM	Issuer	Issuer	Issuer	
DENMARK	Issuer	Issuer	Issuer	Issuer	Issuer	Issuer		Issuer								The issuer Id consists of 8 digits; allocated by the Danish Company house
ESTONIA	OAM	Issuer	Issuer	OAM	Issuer	Issuer							OAM			

Member State	Regulated information indicator	Name of issuer	Title of the filed document	Time and date information was disseminated	Language of filed document	Type of regulated information that filing relates to	Name of issuer in all languages used by issuer	Unique issuer identifier or code	Country of incorporation	Home Member State of issuer	Regulated markets where issuer's securities are admitted to trading	Industry code of the issuer's principal activities	ISIN codes for the issuer's securities	Reporting period to which a specific filing relates (e.g. Q4/2010)	ISIN codes for the securities covered by the individual filing	Additional Comments by OAM
FINLAND, ICELAND and LITHUANIA (all operated by NASDAQ)	OAM	OAM	Issuer	Issuer	Issuer	Issuer	OAM	OAM	OAM	OAM	OAM	OAM	OAM	Issuer	OAM	ISIN and internal Id number used to identify issuer
FRANCE	Yes	Yes	Yes	Yes	Yes	Yes				Yes			Yes			All metadata are provided by issuers or competent authority. There is no direct filing to the OAM
GERMANY	Issuer	Issuer	Issuer	OAM	Issuer	Issuer	Issuer	OAM	Issuer	Issuer	Issuer		Issuer	Issuer	Issuer	
HUNGARY	Issuer	Issuer	Issuer	OAM	Issuer	Issuer		OAM								Unique issuer identifier/code is the EU VAT number without HU prefix. There is only one regulated market in Hungary: BSE
IRELAND		Issuer	Issuer	OAM												No company identifier used at present. To be included in planned developments in the future.
LUXEMBOURG	OAM	Issuer	Issuer	OAM	Issuer	Issuer		OAM	OAM				Issuer	Issuer		Internally generated unique issuer identifier given by CSSF (sequential numbering)
MALTA		Issuer	Issuer	Issuer	Issuer	Issuer								Issuer		Most other information is available within the Malta Stock Exchange, which is also the OAM, and can be retrieved easily.

Member State	Regulated information indicator	Name of issuer	Title of the filed document	Time and date information was disseminated	Language of filed document	Type of regulated information that filing relates to	Name of issuer in all languages used by issuer	Unique issuer identifier or code	Country of incorporation	Home Member State of issuer	Regulated markets where issuer's securities are admitted to trading	Industry code of the issuer's principal activities	ISIN codes for the issuer's securities	Reporting period to which a specific filing relates (e.g. Q4/2010)	ISIN codes for the securities covered by the individual filing	Additional Comments by OAM
POLAND	Issuer	OAM	Issuer	OAM	OAM	Issuer			Issuer	Issuer	Issuer	Issuer	Issuer	Issuer	Issuer	
PORTUGAL	OAM	OAM	Issuer	OAM	Issuer	OAM		OAM								
ROMANIA	N/A	OAM	Issuer	OAM	Issuer	Issuer	OAM	OAM	OAM	OAM	OAM	OAM	OAM	Issuer		VAT number is used as unique issuer code.
SLOVAK REPUBLIC	Issuer	OAM	Issuer	OAM	Issuer	Issuer		OAM						Issuer		
SLOVENIA	Issuer	OAM	Issuer	OAM	Issuer	Issuer	OAM	OAM	OAM	OAM			OAM			
SPAIN	OAM	Issuer	OAM	OAM	Issuer	OAM	Issuer	Issuer	OAM	OAM	Issuer	OAM	Issuer	Issuer	Issuer	Issuer identifier is a tax identifier assigned by the Business Register in Spain to all companies. It is a nine character code consisting of a letter followed by seven numbers and a control digit.
SWEDEN		Yes	Yes	Yes	Yes								Yes	Yes		No details provided on source of metadata
THE NETHERLANDS	Issuer	Issuer	Issuer	OAM	Issuer	Issuer	Issuer	OAM	Issuer	Issuer	Issuer	OAM	OAM	Issuer	Issuer	Industry & ISIN codes sourced from Euronext

Member State	Regulated information indicator	Name of issuer	Title of the filed document	Time and date information was disseminated	Language of filed document	Type of regulated information that filing relates to	Name of issuer in all languages used by issuer	Unique issuer identifier or code	Country of incorporation	Home Member State of issuer	Regulated markets where issuer's securities are admitted to trading	Industry code of the issuer's principal activities	ISIN codes for the issuer's securities	Reporting period to which a specific filing relates (e.g. Q4/2010)	ISIN codes for the securities covered by the individual filing	Additional Comments by OAM
UNITED KINGDOM	Issuer	Issuer	Issuer	OAM	Issuer	Issuer		OAM	OAM	OAM	OAM	OAM	Issuer	OAM		The service presently deployed is specifically intended to serve the UK and the user interface does not expose fields such as home member state - however the database which acts as the underlying repository is global and can support multiple regions.

Table 6-21: Source of metadata held for filed documents

6.12 Connectivity and flexibility of systems

	Does the OAM connect with other systems to transfer or share information	Ability to accommodate additions to the types of regulated information (i.e. documents or datasets) filed and stored by the OAM.	Ability to accommodate changes or extensions to the metadata (reference data) stored about issuers and filings.
AUSTRIA	Filings are transferred in batch to Stock Exchange and Supervisory Authority	System Admin function: Uploading and making new information types available is straightforward	Development function: Would require detailed specification of changes required
BELGIUM	No.	System Admin function: The IT solution allows new types of regulated information to be set up by user administrators. Flexible deployment is possible.	Development function: Feasible based on current development and database environment. Flexible deployment is possible.
BULGARIA	No	N/R	N/R
CYPRUS	The OAM Service will connect to the Stock Exchange publication system and to selected data vendors via web services.	System Admin function: New types of regulated information are added to the OAM service in the form of new filing templates. Content based on new templates is immediately accessible by end users.	System Admin function: The reference data is also based on a template thus allowing creation of extensions.
CZECH REPUBLIC	No	System Admin function: Easy to adopt new types of regulated information. - If the new information is similar to present information obligation, it is possible to add without modification of the application code	Development function: Easy to add new metadata by adding field(s) to database (but implies the migration of all present records). Adding new data item to search criteria is much more complicated process. (Estimate approximately 50 mandays to provide this.)

	Does the OAM connect with other systems to transfer or share information	Ability to accommodate additions to the types of regulated information (i.e. documents or datasets) filed and stored by the OAM.	Ability to accommodate changes or extensions to the metadata (reference data) stored about issuers and filings.
DENMARK	<p>Web-service both for import or export of data.</p> <p>Import: Over the last year 94% of all filings were provided via web services by two service providers (the stock exchange and a commercial provider)</p> <p>Export: Internally the web-service is used for daily extracting of data and use as an important data source in Market Surveillance</p>	<p>Not defined: Response does not indicate complexity of integrating other logical types of filings to the system.</p> <p>Note: The system is very flexible and it accepts attached files in all technical formats (Excel, JPEG, PDF, PowerPoint, RTF, Text, Word etc.). It would already now be possible to upload an XBRL document for example, but the system would only store and not use the ability to extract data included in the instance document for alternative presentations, analysis etc.</p>	<p>Development function: Operator has, during the system's lifetime experience of adding new metadata types and has changed the data model accordingly.</p>
ESTONIA	<p>Links to regulated market's company announcement system so that issuers can file to regulated market and also to OAM using only one system for input. Issuers can authorise regulated market to forward regulated information to OAM.</p> <p>The connection is over HTTPS using SOAP protocol.</p>	<p>Implied flexibility/system admin function: Response notes that new document types can be added quite easily because the system allows attaching almost any type of file to the plain text format company announcement.</p>	<p>System Admin function: The classificatory list (metadata) for issuers and for the announcements is open and can be easily modified.</p>
FINLAND	<p>Through Internet via FTP and web services.</p>	<p>No relevant information provided</p>	<p>No relevant information provided</p>
FRANCE	<p>All filings are provided via the AMF system via FTP transfer or email.</p>	<p>No relevant information provided</p>	<p>No relevant information provided</p>

	Does the OAM connect with other systems to transfer or share information	Ability to accommodate additions to the types of regulated information (i.e. documents or datasets) filed and stored by the OAM.	Ability to accommodate changes or extensions to the metadata (reference data) stored about issuers and filings.
GERMANY	OAM is connected to all commercial registers in Germany. The connection is established via webservice and VPN	OAM is extremely flexible. According to German law and the OAM authority, modifications of the infrastructure is immediately realized.	OAM is extremely flexible. According to German law and the OAM authority, modifications of the infrastructure is immediately realized.
HUNGARY	No	System Admin/Development (minor):The IT solution is flexible enough to easily accommodate additions of new types. Adding search capability would be at a relatively low cost	Development function (major):These types of changes require relatively major developments.
ICELAND	Through Internet via FTP and web services.	No relevant information provided	No relevant information provided
IRELAND	Other Irish Stock Exchange systems via secure web connections	Development function	Development function
LATVIA	No other systems; Public RSS feed;	No relevant information provided	No relevant information provided
LITHUANIA	Through Internet via FTP and unencrypted/encrypted web services.	No relevant information provided	No relevant information provided
LUXEMBOURG	Yes, Part of data model	Development function (minor): Update of data model and screens by internal development team for new data types, for new document types it is a simple parameterization.	Development function: Update of data model and screens by internal development team for new data types.

	Does the OAM connect with other systems to transfer or share information	Ability to accommodate additions to the types of regulated information (i.e. documents or datasets) filed and stored by the OAM.	Ability to accommodate changes or extensions to the metadata (reference data) stored about issuers and filings.
MALTA	Not applicable	Development function: Alterations have to be made to the database and web design however the level of responsiveness depends on the level of the complexity of the change. Some changes may require minor adjustments whilst in other cases more time is required.	Development function: Alterations have to be made to the database and web design.
POLAND	No external connections - OAM shares files with reporting system.	No changes required: OAM is independent of types of stored information.	Development function/feeder system dependent: If the metadata are processed by the reporting system, they can be easily made available to OAM. It is hard to add metadata items to the OAM that are not available in reporting system.
PORTUGAL	No	System Admin function: Each document is identified by a code regarding its type. Technically it is only needed to add these codes to the tables that control the filing from issuers and the queries from users.	N/R
ROMANIA	No.	No relevant information provided	Development function: Changes or extensions to metadata requires software supplier intervention. A maintenance contract is necessary for that and this option is currently under analysis.
SLOVAK REPUBLIC	No	Development function implied: System design is quite flexible, effort necessary would depend on the nature of changes	Development function implied: System design is quite flexible, effort necessary would depend on the nature of changes
SLOVENIA	Interfaces with internal LJSE systems	Systems admin function: Types of documents are stored in tables and according to particular document type different rights are granted to end users. New types/rights should be just added to tables. Some details about where to display them are implemented in source code.	System admin function: Application is written in a way that some new reference data should make no additional actions in implementing/changing source, mostly just by adding new values into tables. However, we cannot guarantee that additional changes will not require application source code changes as some special features are implemented in code.

	Does the OAM connect with other systems to transfer or share information	Ability to accommodate additions to the types of regulated information (i.e. documents or datasets) filed and stored by the OAM.	Ability to accommodate changes or extensions to the metadata (reference data) stored about issuers and filings.
SPAIN	Data dissemination service, fully oriented to Data Vendors, where part of the regulated information can be accessed. This service is based on FTP server.	N/R	N/R
SWEDEN	Major shareholder notifications are made public via another system. The system is also connected with the company register and issuers have to be registered there before they can insert financial information in OAM.	N/R	N/R
THE NETHERLANDS	No	Not defined: Response indicates it is feasible but gives no other details	Not defined: Response indicates it is feasible but gives no other details
UNITED KINGDOM	Yes	System Admin function: additional types of information can be added easily.	System Admin function: change of metadata can be implemented easily

Table 6-22: Connectivity and flexibility of systems

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A Responses received to each survey

Member State	OAM Basic	OAM Process	Technical Details	Follow up interview
AUSTRIA	Yes	Offline response	Offline response	
BELGIUM	Yes	Yes	Yes	Yes
BULGARIA	Yes	Yes	Yes	
CYPRUS	Yes	Yes	Yes	
CZECH REPUBLIC	Yes	Yes	Yes	
DENMARK	Yes	Yes	Yes	
ESTONIA	Yes	Yes	Yes	Yes
FINLAND	Yes	Yes	Yes	Yes (NASDAQ)
FRANCE	Yes	Post survey	Post survey	
GERMANY	Yes	Yes	Yes	Yes
GREECE	No response	No response	No response	
HUNGARY	Yes	Yes	Yes	
ICELAND	2 responses – FSA & NASDAQ	As Finland	Same platform as Finland	Yes (NASDAQ)
IRELAND	Yes	Yes	Yes	Yes
ITALY	Declined	Declined	Declined	
LATVIA	No response	No response	Yes	
LITHUANIA	Yes	As Finland	Same platform as Finland	Yes
LUXEMBOURG	Yes	Offline response	Offline response	Yes
MALTA	Yes	Yes	Yes	
NORWAY	Yes	Yes	Blank response	
POLAND	Yes	Yes	Yes	
PORTUGAL	Yes	Yes	Yes	
ROMANIA	Yes	Yes	Yes	
SLOVAK REPUBLIC	Yes	Yes	Yes	
SLOVENIA	Yes	Yes	Yes	Yes
SPAIN	Yes	Yes	Yes	
SWEDEN	Yes	Post survey	Post survey	
THE NETHERLANDS	Post survey	Yes	Post survey	
UNITED KINGDOM	Yes	Yes	Partial	Yes

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B Copies of survey questionnaires

B.1 The surveys are also provided as separate PDF documents.

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OAM Basic Data

This initial survey aims to collect some basic information about the operation of the current OAM. It should not take longer than 20 minutes to complete.

The responses to this first survey will help us structure further information gathering later in the study during March and April.

Only questions marked with * must have a response entered.

If you do not have the information to respond to any other question please leave your answer blank and move on to the next question.

You can use the "Prev" button at the bottom of each page to go back to change or add to your answers on previous pages.

You can exit the survey at any time and re-enter it later to complete or edit your responses, even after you have submitted the survey using the "Done" button on the final screen. Just click on the link in your email invitation and you will be presented with your submission for editing.

If you have problems completing the survey or have any other questions please contact us by email at surveys@actica.co.uk.

The Actica Survey Team

* 1. Please enter your details:

Name:

Organisation:

Email Address:

* 2. Which Member State OAM is this response for?

OAM Basic Data

In this section we want to obtain an overview of the service as it is currently provided.

If you have additional information you wish to provide contained in other documents please include links to their published location on the internet in the "Further Information" response boxes, or email them separately to the team at surveys@actica.co.uk

3. What is the name of the organisation that operates the current OAM service?

4. How is the operator best described? (Select One)

Competent Authority

National Stock Exchange

Official Journal

Company Register

Commercial Operator

Private Entity

Other (please specify)

5. What is the name of the organisation which supervises the operation of the OAM?

6. Please enter any further details you wish to provide on the operation of the supervisory arrangements (Optional)

5

6

OAM Basic Data

7. When did the OAM service begin operation?

First year of operation (YYYY)

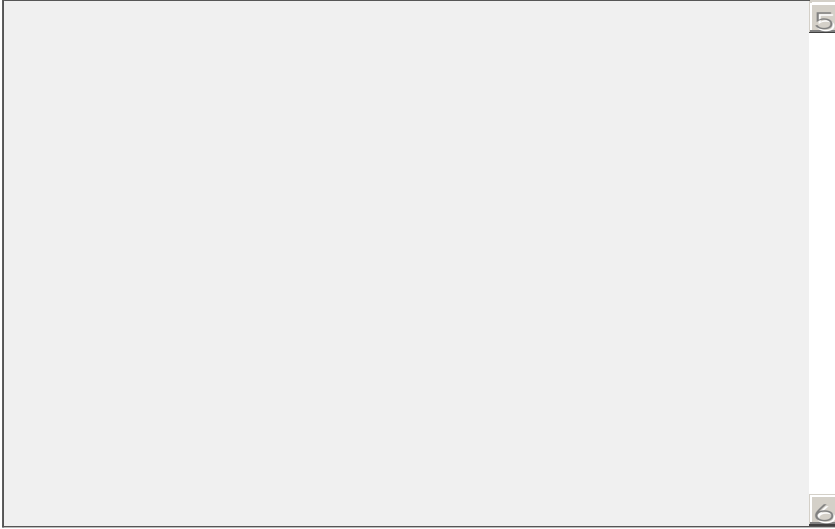
* 8. Is the current service an interim solution?

OAM Basic Data

These questions only apply if the current OAM service is an interim solution.

9. When is the full solution planned to be implemented?

10. Provide a brief description of the features of the planned service



Please now continue with the survey providing details of the CURRENT INTERIM service

OAM Basic Data

Please provide data for the most recent period for which information is available.

Estimates or interim figures are acceptable.

11. Number of issuers for which information is held

Total number of issuers

12. Approximate split of total between "Large" and "Small" issuers

Large (%)

Small (%)

13. Current storage and transactions

Total number of individual documents or filings held

Number of new documents or filings added per year

Number of user searches per year

14. Which types of securities are covered by the documents stored by the OAM? (Select all that apply)

- Stocks and Shares
- Bonds
- Derivatives
- Other types of securities (please list)

OAM Basic Data

15. Which types of information does the OAM store on issuers of these securities? (Select all that apply)

- Price Sensitive Information
- Annual Financial Reports
- Interim Financial Reports - Half Yearly
- Interim Financial Reports - Quarterly (if available)
- Interim Management Statements (if available)
- Corporate Governance Statements
- Major Shareholding Notifications
- Trading on Own Shares (Acquisition/Disposal)
- Total number of voting rights and capital
- Changes in rights attaching to shares or securities
- New Loan issues
- Choice of Home Member State
- Take over bid announcements
- Prospectuses
- Other (please list)

5

6

16. Which formats can filings be made in? (Select all that apply)

	Accepted Format	Required Format
Plain Text (Electronic document)	j	j
HTML	j	j
PDF	j	j
XBRL	j	j
Other electronic formats (e.g. MS Word)	j	j
Paper	j	j

Others (please specify)

5

6

OAM Basic Data

17. Is information required to be filed in additional languages other than that of the Home Member State?

Yes

No

If answer is "Yes" please list the languages required

	5
	6

OAM Basic Data

18. What are the approximate costs of providing the OAM service (in Euros)?

All one off (non recurring) set up costs to date

Annual operating costs

19. Please enter any additional information you wish to provide to further describe the OAM service (Optional)

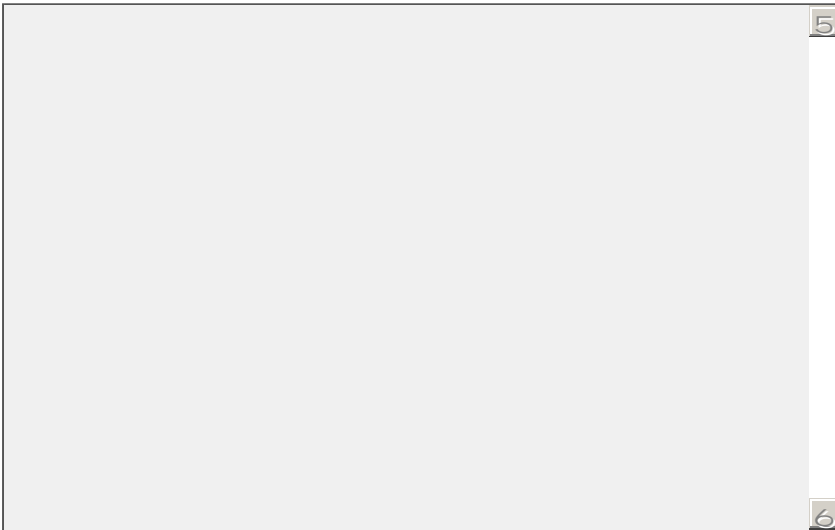
For example:

A brief description of the filing process

Details of the computer technology used to support the service

Service levels and performance

Additional services offered



OAM Process Survey

This survey consists of questions regarding how the information held by national OAMs is collected, managed and used to provide services to national and international users.

The responses to this survey will help us assess the technical feasibility of various options for the development of the pan-European network.

The survey consists of a number of sections. Each section contains questions relating to a specific area as follows:

1. Supervisory and operational arrangements for the OAM
2. Degree of compliance with Commission recommendations on quality standards, including
 - Filing processes and identification of filers
 - Search capabilities

General Guidance

Some questions deal with areas also covered by questions in the OAM Basic Data Survey issued in February. Please provide further relevant information where requested.

As you complete the survey, if you have additional information you wish to provide contained in other documents please include links to their published location on the internet in the "Further Information" response boxes, or email them separately to the team at surveys@actica.co.uk

You can use the "Prev" button at the bottom of each page to go back to change or add to your answers on previous pages.

You can exit the survey at any time and re-enter it later to complete or edit your responses, even after you have submitted the survey using the "Done" button on the final screen. Just click on the link in your email invitation and you will be presented with your submission for editing.

If you have problems completing the survey or have any other questions please contact us by email at surveys@actica.co.uk.

The Actica Survey Team

Your details

* 1. Please enter your details:

Name:

Organisation:

Email Address:

* 2. Which Member State OAM is this response for?

Supervisory and Operational Arrangements

This section aims to obtain details of how current supervisory and operational arrangements in place for OAMs may affect the development of a pan-European network.

The questioning is deliberately open-ended to allow you to highlight any particular issues we should consider - for example local regulatory, legal or commercial factors.

3. How was the storage mechanism appointed?

By law

By government

By the supervisor

By other means

Additional Comments

5

6

4. If the national competent authority does not also operate the mechanism, how does the national competent authority supervise the OAM?

Please provide a brief overview of the arrangements including, for example, details of:

The basis of the relationship between the bodies (e.g. regulatory, commercial)

The supervisory and reporting processes in place

Whether there are published performance levels

Whether there are penalties or sanctions enforceable for sub-standard performance

5

6

5. What legal liability and enforcement arrangements underpin the service?

What are the responsibilities of the supervisor, competent authority, OAM operator and other entities?

How are the OAM service standards monitored?

	5
	6

6. What legal liability and enforcement arrangements apply to issuers to ensure timely submission of required regulated information?

How is the submission process monitored and policed?

	5
	6

7. Please provide details of any long-term (longer than 1 year) contractual or other arrangements or commitments regarding the operation of the OAM which might impact the development of a pan-European network.

	5
	6

8. Are you aware of any other legal, regulatory or operational issues which might affect the development of a pan-European service?

If so, please provide details below

	5
	6

9. In particular, would you consider there to be any such barriers to the following 3 scenarios:

Scenario 1: Storage of a copy of the regulated data held by the national OAM in a second location outside the Member State?

Scenario 2: Replacement of the national OAM storage by a central mechanism holding regulated data for all Member States?

Scenario 3: The searching and indexing of documents held within the national OAM by a central service operating from outside the Member State?

	No	Yes
Scenario 1: Storage in a second location	jñ	jñ
Scenario 2: Replacement by a central mechanism	jñ	jñ
Scenario 3: Searching and indexing of documents	jñ	jñ

Further Comments

EC Quality Standards

This section aims to collect information concerning the degree to which the current OAM services comply with the quality standards in the Commission Recommendations of 11 October 2007.

The questions address the following 5 sections of the recommendations

1. General Standards
2. Security
3. Certainty as to information source
4. Time recording
5. Easy access by end users

The responses will help us assess the current degree of harmonization of national OAM services and the technical challenges of various options for the development of the pan-European network.

The full text of the Recommendations can be found under "Storage of Regulated Information" at http://www.ec.europa.eu/securities/internal_market/transparency/index_en.htm

The relevant paragraph in the Recommendations relating to each question is indicated throughout the survey.

4. General Standards

Questions in this section refer to the General Standards set out in Paragraphs 5 and 6 of the Recommendations

10. Overall, what is your assessment of the level to which the storage mechanism complies with standards equivalent to the model standards laid down in each section of Chapter III of the EC Recommendation?

	Very Low - does not comply	Low - Non-compliant in most areas	Medium	High - Compliant in most areas	Very High - Fully compliant in all areas
Section 2 - Security	jn	jn	jn	jn	jn
Section 3 - Certainty as to the information source	jn	jn	jn	jn	jn
Section 4 - Time recording	jn	jn	jn	jn	jn
Section 5 - Easy access by end users	jn	jn	jn	jn	jn

11. How do governance arrangements ensure that the body appointed to manage or operate the OAM platform on a daily basis complies with the Security and Certainty as to Information Source standards (Sections 2 and 3)?

12. What arrangements are in place to ensure the standards apply not just to issuers, but also to "persons who have applied for admission to trading", as set out in Paragraph 6 of the Recommendation?

13. Please enter any further details you wish to provide on the application of the quality standards in this area (Optional)

5. Security

The questions in this section refer to the Security standards in Paragraphs 7 to 12 of the Recommendations

14. Which methods of receiving electronic filings are supported?

(Select all that apply)

- email submission
- Upload via extranet or other online submission portal
- Batch or mass transfer from issuers
- Automatic transfer from other filing system (e.g. Stock Exchange)
- Other (please provide details)

15. To what degree, for the issuers and other filers covered by the OAM, are these communications mechanisms considered easily accessible, commonly used and widely available at low cost?

	Very Low	Low	Neither high or low	High	Very high
Level of accessibility and availability	j0	j0	j0	j0	j0

16. Please provide a description of the security arrangements in place within the OAM to deal with:

1. Data corruption
2. Attempted unauthorised access
3. 24 by 7 availability to end users and issuers
4. Continuity of service (backup and business continuity)

Now, considering specific aspects of the security arrangements above referred to in the Recommendations.

17. Integrity (Paragraph 8)

How do you ensure information received is complete and cannot be edited once stored?

18. Integrity (Paragraph 8)

If the OAM converts non-electronic filings into electronic form how is it ensured that the converted document is complete and unedited as originally sent by the issuer?

- Not applicable
- Tested, automated facilities used with no checking of individual conversion
- Manual checking against original
- Automated checking against original

Other (please specify)

19. Integrity (Paragraph 8)

How is the identification and application of corrections or additions to a stored document managed in order to retain the integrity of the original filing?

20. Validation (Paragraph 9)

How is inspection of filed documents for adherence to standards, completeness and accuracy managed?

No inspection

Manual inspection of a sample of filings

Manual inspection of all filings

Automated inspection

Other (please specify)

21. Acceptance of waivers and recovery (Paragraph 11)

What evaluation processes are in place for reviewing and accepting or denying waivers for late filings, and what recovery tools are available for use when the prescribed filing mechanism is out of order?

22. Please enter any further details you wish to provide on the application of the quality standards in this area (Optional)

6. Certainty as to information source

The questions in this section refer to specific parts of the Certainty of Information Source standards in Paragraphs 13 to 16 of the Recommendations.

The standards for User Authentication and Integrity of Content are addressed by the questions regarding Security on the previous page.

23. What systems and other arrangements are in place to ensure certainty as to the source of filings?

(Select all that apply)

- Electronic signatures
- Use of access codes, usernames or passwords
- Encryption
- Automated or manual checking of filings received
- Security certificates (e.g. SSL)
- Links to trusted system(s)(e.g. Stock Exchange filing) which manage this
- Other (please provide details)

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24. Does the storage mechanism electronically acknowledge receipt of documents?

Yes

No

Additional Comments

25. Do acknowledgements confirm validation or reject a submission with reasons for rejection

Yes

No

Not applicable

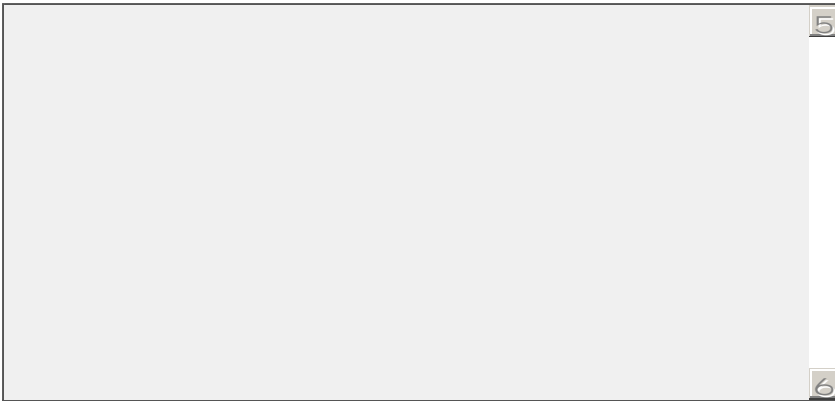
Additional Comments

26. How is 'non-repudiation" managed in the OAM?

(That is, how is it guaranteed that the sender of a message cannot later deny having sent the message and that the recipient cannot deny having received the message.)



27. Please enter any further details you wish to provide on the application of the quality standards in this area (Optional)



7. Time recording

The questions in this section refer to the Time Recording standards in Paragraph 16 of the Recommendations

28. Electronic docketing

Does the OAM have the ability to automatically docket electronic filings and add a data and time stamp as they enter the mechanism - irrespective of whether they are checked before or after entering the storage mechanism?

Yes

No

Additional Comments

29. Does the OAM provide facilities for "straight through" automated processing of filings using pre-determined formats and templates?

Yes

No

If Yes - please provide details of templates used

30. If particular templates or formats are imposed, are they aligned to those used for filing the same information with the competent authority?

Yes

No

Not applicable

If Yes - please provide details

31. Please enter any further details you wish to provide on the application of the quality standards in this area (Optional)



8. Easy access by end users

The questions in this section refer to the Easy Access by End Users standards in Paragraphs 17 to 20 of the Recommendations

32. Presentation of information (Paragraph 17)

Does the presentation to end users distinguish between regulated financial information and any value added service provided by the storage mechanism?

Yes

No

Not applicable (No value-added services)

Additional Comments

33. Language regime (Paragraph 18)

Does the OAM store and facilitate access to ALL linguistic versions of the information as submitted by the issuer (even if submission of such additional language versions is not a legal requirement)?

Yes

No

34. Language regime (Paragraph 18)

Specifically - are filings stored in English if provided?

Yes

No

If Yes - approximately what percentage (%) of filings are available in English

35. Language regime (Paragraph 18)

**Which languages are the OAM search facilities available in?
(Select all which apply)**

Language accepted by competent authority

English

Other (please specify)

36. Accessibility (Paragraph 19)

On average, what is the time between initial receipt and docketing of a filing by the OAM and it being accessible to end users?

Information is available as soon as docketed

Less than 1 minute

1 minute to 1 hour

Up to 4 hours

Same working day

Next working day

Longer (please provide details below)

Additional Comments

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37. Accessibility (Paragraph 19)

What user service support arrangements are provided for users of the OAM and what are their service hours?

(For example - online help and FAQ, email support, telephone help desk etc.)

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38. Format of information accessed by end users (Paragraph 20)

Please describe the capability of the OAM to enable users, wherever they are located, to search, order and interrogate, view, download and print the full content of regulated information held.

	5
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39. Format of information accessed by end users (Paragraph 20)

Which of the following reference information (metadata) is stored and used to organize and categorize filings of regulated information? Is it provided by the issuer or added by the OAM?

(Select all that apply)

	Supplied by issuer	Added by OAM
Regulated information indicator	<input type="checkbox"/>	<input type="checkbox"/>
Name of issuer	<input type="checkbox"/>	<input type="checkbox"/>
Title of the filed document	<input type="checkbox"/>	<input type="checkbox"/>
Time and date information was disseminated	<input type="checkbox"/>	<input type="checkbox"/>
Language of filed document	<input type="checkbox"/>	<input type="checkbox"/>
Type of regulated information that filing relates to	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments	<div style="border: 1px solid gray; height: 30px; width: 100%;"></div> <div style="border: 1px solid gray; height: 20px; width: 100%;"></div>	

40. Format of information accessed by end users (Paragraph 20)

Supplementary questions

Which of the following additional reference information (metadata) proposed by CESR in their report of 22 December 2010 "Development of Pan-European access to financial information disclosed by listed companies" is also currently stored and used to organize and categorize filings of regulated information? Is it provided by the issuer or added by the OAM?

(Select all that apply)

	Supplied by issuer	Added by OAM
Name of issuer in all languages used by issuer	<input type="checkbox"/>	<input type="checkbox"/>
Unique issuer identifier or code (please provide details of id structure below)	<input type="checkbox"/>	<input type="checkbox"/>
Country of incorporation	<input type="checkbox"/>	<input type="checkbox"/>
Home Member State of issuer	<input type="checkbox"/>	<input type="checkbox"/>
Regulated markets where issuer's securities are admitted to trading	<input type="checkbox"/>	<input type="checkbox"/>
Industry code of the issuer's principal activities	<input type="checkbox"/>	<input type="checkbox"/>
ISIN codes for the issuer's securities	<input type="checkbox"/>	<input type="checkbox"/>
Reporting period to which a specific filing relates (e.g. Q4/2010)	<input type="checkbox"/>	<input type="checkbox"/>
ISIN codes for the securities covered by the individual filing	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments	<div style="border: 1px solid gray; height: 30px; width: 100%;"></div> <div style="border: 1px solid gray; height: 20px; width: 100%;"></div>	

41. Does the information held enable the following types of issuer to be distinguished?

Issuers of shares

Issuers of debts

Issuers of other securities

Yes

No

42. If it is possible to distinguish the different types of issuer, is all the metadata specified above held for each type of issuer?

Yes

No

43. If different reference information (metadata) is held for each type of issuer, please indicate which items are held for each type of issuer

	Issuers of shares	Issuers of debts	Issuers of other securities
Regulated information indicator	€	€	€
Name of issuer	€	€	€
Title of filed document	€	€	€
Time and date information was disseminated	€	€	€
Language of filed document	€	€	€
Type of regulated information that filing relates to	€	€	€
Name of issuer in all languages used by issuer	€	€	€
Unique issuer identifier or code	€	€	€
Country of incorporation	€	€	€
Home Member State of issuer	€	€	€
Regulated markets where issuer's securities are traded	€	€	€
Industry code	€	€	€
ISIN codes for the issuer's securities	€	€	€
Reporting period of filing	€	€	€
ISIN codes for the securities covered	€	€	€

9. Easy access by end users

44. Format of information accessed by end users (Paragraph 20)

Are the categories of reference data aligned with other storage mechanisms? (If so please indicate to which they are aligned.)

Yes

No

If Yes - please provide details

45. Please enter any further details you wish to provide on the application of the quality standards in this area (Optional)

Thank you for completing the survey

The Actica Survey Team

OAM Technical Details

This survey consists of questions about the computer systems, telecommunications networks and other ITC facilities which support the operation of the national OAM services .

The responses to this survey will help us to assess the technical feasibility of various options for the development of a pan-European OAM network.

The technical nature of some of the questioning means this survey may best be answered by someone with detailed knowledge of the development, implementation or support of the OAM IT infrastructure.

The survey consists of a number of sections. Each section contains questions relating to a specific area as follows:

1. IT infrastructure and sizing
2. Service assurance and user support
3. Connectivity
4. Flexibility

General Guidance

Given the range of technical solutions in place across the OAM network, many of the questions in this survey have deliberately been made open-ended to allow you to highlight the particular features and characteristics of your OAM. Please use the free-text response boxes to expand on specific points that may be relevant to the development of the pan-European OAM network.

The input boxes will automatically scroll to accept longer responses.

As you complete the survey, if you have additional information you wish to provide contained in other documents please include links to their published location on the internet in the final "Further Information" question response box, or email them separately to the team at surveys@actica.co.uk

Some respondents to the OAM Basic Data Survey issued in February have already provided information on some aspects of their OAM IT systems. If all or part of the answer to any question is covered by your responses to the earlier survey please indicate this in the answer box and provide additional information as appropriate.

You can use the "Prev" button at the bottom of each page to go back to change or add to your answers on previous pages.

You can exit the survey at any time and re-enter it later to complete or edit your responses, even after you have submitted the survey using the "Done" button on the final screen. Just click on the link in your email invitation and you will be presented with your submission for editing.

If you have problems completing the survey or have any other questions please contact us by email at surveys@actica.co.uk.

The Actica Survey Team

2. IT Infrastructure and sizing

* **1. Please enter your details:**

Name:

Organisation:

Email Address:

* **2. Which Member State OAM is this response for?**

IT infrastructure and sizing

These questions are about the hardware and software used to deliver the OAM service, current data and user volumetrics and maximum volumes that the service is designed to support.

3. What software is used as

i. The repository (database store) for documents filed by issuers (e.g. Documentum, Lotus Notes, Oracle database)

ii. The web user interface (i.e. web portal or content management system)

i. Document repository

ii. Web user interface

4. Please provide full details of all other elements of the technical infrastructure used to deliver the OAM service.

For example web and database server hardware and software, any other COTS packages used, and communications services in place to support filing and user inquiries.

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5. Please provide details of the sizing of the current OAM infrastructure.

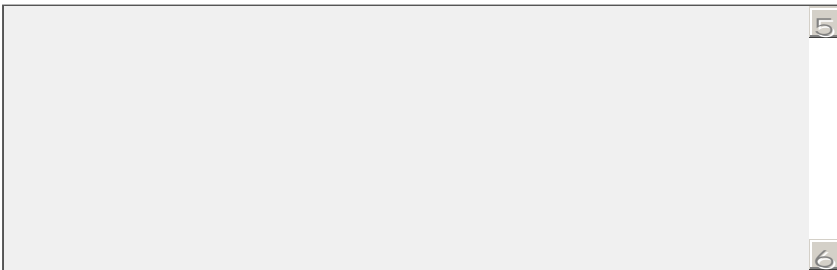
In particular:

- i. Current size (MB) and projected annual growth (MB) of OAM database (including filed documents, reference and system data)**
- ii. Maximum disk storage capacity currently available (MB)**
- iii. Network bandwidth available for online communications to**
 - a) Issuers and other filers**
 - b) End users (for search and query)**
 - c) Other services (for example to transfer copies of filings to a central storage facility)**

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6. What are the daily average and peak filing data volumes for your OAM (in MB)?

When do the peak(s) occur (e.g. 1st day of financial year; Between 7am and 8am every Monday etc.)

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7. What is the maximum capacity that the current OAM solution has been designed to support?

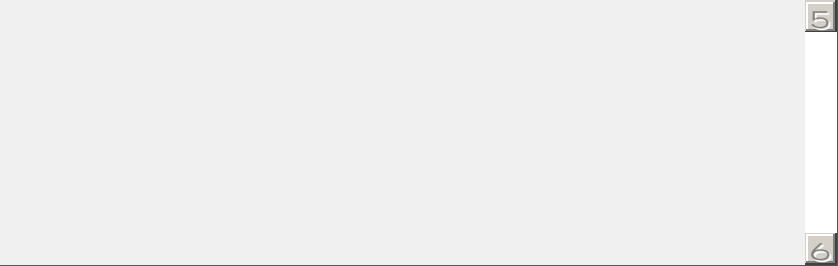
In particular:

Maximum number of issuers

Maximum number of filings (documents)

Peak throughput (No. of concurrent filings)

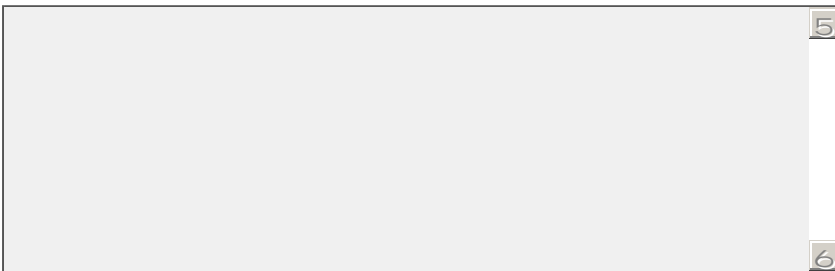
Maximum number of users (No. of concurrent end-user searches)



Service Assurance and Support

These questions are about the arrangements that are in place to assure the security, availability and support of the OAM systems.

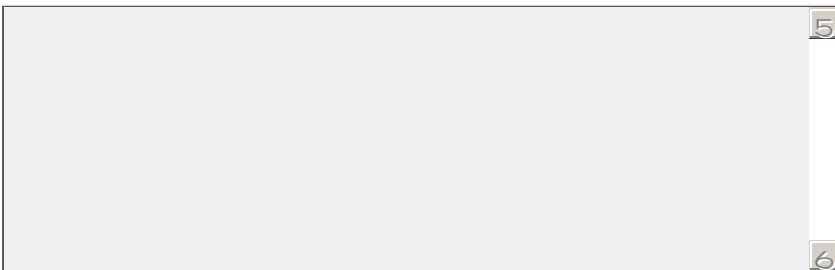
8. Please provide details of all current supplier and support contracts applying to the operation of the OAM - including their approximate value and remaining duration or termination date.

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9. What technical support services (e.g. Service Help Desk, 2nd and 3rd line technical support) are available to assist these groups of users:

1. Internal users
2. Issuers/filers
3. External end users

What service levels are offered?

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10. Please provide overviews and technical specifications of existing arrangements covering the security, backup, business continuity and disaster recovery of the OAM systems and data.

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11. What is your data retention policy?

Do filings remain permanently accessible for on-line inquiry or are they archived after a given time?

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Connectivity

These questions are about how the OAM service connects with other IT systems to share or transfer data.

12. Does the OAM connect with other systems to transfer or share information (e.g. with Stock Exchange filing systems or commercial data disseminators)?

If so what is the connectivity method (e.g. dedicated line, internet VPN) and the technical approach adopted (e.g. FTP, web service)

13. Does the OAM share or transfer information with any other Member State's OAM?

If so, please provide details of the technical approach adopted.

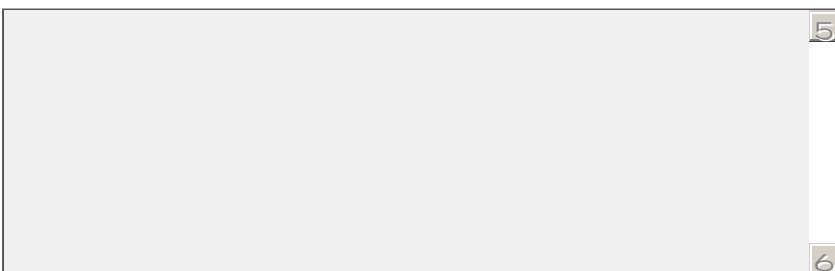
Flexibility

Here we are interested in how the IT might respond to requests for changes in the OAM services, and in particular how IT is positioned to flexibly and quickly respond to requests for change.

Depending on the OAM solution adopted, areas to consider here might be the capacity of the infrastructure, the design of the database, the development tools available and the system development/change services in place.

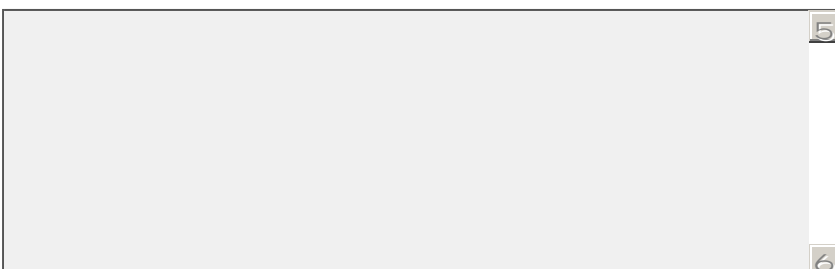
14. Please describe how the IT solution could accommodate additions to the types of regulated information (i.e. documents or datasets) filed and stored by the OAM.

How could these new documents then be made available to end users for searches and queries?



15. Please describe how the OAM solution could accommodate changes or extensions to the metadata (reference data) stored about issuers and filings.

How could this new data then be made available to end users for searches and queries?



16. Further Information

Please use the input box below to provide any further information you wish to make available concerning the ITC platform for the OAM.

