



Ref: CESR /06-025

**CESR's CONSULTATION PAPER ON POSSIBLE IMPLEMENTING MEASURES
CONCERNING THE TRANSPARENCY DIRECTIVE**

**STORAGE OF REGULATED INFORMATION AND FILING OF REGULATED
INFORMATION**

CONSULTATION PAPER

January 2006

INTRODUCTION

Background

On 30 March 2004, the EU Parliament approved the Commission's proposal for the Level 1 Directive on the harmonisation of transparency requirements for securities issuers (the Transparency Directive), subject to a number of amendments.

Following on the Parliament's decision, the European Council reached a political agreement on the Draft Directive on 11 May 2004 and agreed with the amendments adopted by the Parliament. Formal adoption of the Directive took place on the 15 December 2004.

According to the Lamfalussy Process, the Commission may adopt implementing measures, so-called "Level 2 measures", with respect to a large number of provisions of the Directive. Before the Commission presents a proposal for implementing measures to the European Securities Committee, it seeks the technical advice on these measures from the Committee of European Securities Regulators ("CESR"). To this aim, the Commission gives a formal mandate or sends a request to CESR for technical advice.

Areas covered

In July 2005, CESR received from the Commission a mandate for technical advice on implementing measures concerning the transparency directive as regards Officially Appointed Mechanisms (hereinafter called the "mandate"). The mandate was annexed to a letter from the Commission, which gave important comfort for interim solutions in the transposition by January 2007 of the Directive requirements regarding OAM, in the expectation of further developed implementing measures.

The mandate contains three (3) elements and invites CESR to provide:

- a. By **June 2006, an opinion** for possible implementing measures on two preliminary issues relating to **the architecture** for the EU storage network: (a) the agreement on interoperability of the national Officially Appointed Mechanisms i.e. how an agreement on technical requirements could allow technical interoperability of the national OAMs and (b) the **cost and funding implications** for the member states arising out of the creation of the EU network.
- b. By **June 2006, a technical advice** on the role of the OAM for the central storage mechanism and on the role of the competent authority. More particularly, CESR is invited to determine the **minimum quality standards** the OAM will have to comply with, such as standards of security, of certainty as to the information source (authenticity), of time recording and of easy access by end users. In respect to **the role of the competent authorities**, CESR is invited to examine the power of the competent authorities in supervising the OAMs as well as their role in adapting the standards in case of technical developments.
Moreover, in the same technical advice, CESR is invited to explore the issue of **filing** of regulated information with the competent authorities. More specifically CESR is invited to determine minimum quality standards to be complied by the competent authorities in particular in terms of security, of certainty as to the information source and of time recording and to determine whether the procedure of filing with the competent authority can be aligned with the procedure of filing with the OAM in order to avoid duplicate submission of the same information.
- c. By **April 2006, an interim report** regarding **the cost** of setting up and operating an OAM that meet the quality standards.

This mandate represents an important challenge for CESR in relation to the highly technical IT issues and to the difficulty of making relevant cost analysis for a system, which could have several variations.

The Call for Evidence

On July 28th, CESR launched a Call for Evidence on this new Mandate (Ref: CESR/05-493) which lasted until 31.8.2005. CESR received seventeen (17) responses to this Call for Evidence, from various sectors of the market such as stock exchanges, media and information service providers, IT companies, the banking sector, a Ministry and the issuers. These responses, which have been published on CESR's website (www.cesr-eu.org), formed a very helpful source in preparation of the first consultation papers.

The present consultation

The present document constitutes CESR's consultation paper on the issues of storage and filing of regulated information. It was prepared by the CESR Transparency Expert Group (TEG) consisting of experts of CESR members, including IT experts under the chairmanship and supervision of Mr Andres Trink (Finantsinspeksioon- Finland) until the end of 2005 and Mr Carlos Tavares (CMVM- Portugal) from the beginning of 2006.

In the course of the meetings CESR has sought clarifications from the Commission on a number of areas regarding the understanding of the mandate given to CESR and on the possible reading of the level 1 text. CESR was also assisted by the Consultative Working Group consisting of market participants from stock exchanges, the financial information sector, an IT consortium and the issuers.

With the objective of streamlining the various issues dealt in the mandate, the draft Consultation Paper is structured as follows:

- Introduction
- Role of the Officially Appointed Mechanism for the central storage of regulated information and related Costs and Funding, which corresponds to points 3.2 (1,2,3,4) and 3.3 of the mandate
- Preliminary issues: (I) Agreement on interoperability and (II) Costs and Funding, which corresponds to point 3.1 of the mandate
- Role of the Competent Authority, which corresponds to points 3.2 (5) of the mandate and
- The filing of regulated information by electronic means with the competent authority, which corresponds to point 3.4 of the mandate
- Annex

In the present document CESR is posing a number of questions on all the subjects on which CESR is mandated to deliver technical advice. The answers given and the reasons behind the answers will provide great help to CESR in its work.

Responses

This document has been released on 23 January for public consultation.

Responses to this consultation are expected to reach CESR at the latest on 23 March 2006 in order for CESR to have time to take them into consideration. Responses to consultation should be sent via CESR's website (www.cesr-eu.org) in the section consultation.

An open hearing will take place at CESR's offices in Paris during the consultation period. A separate notice will be posted on CESR's website on the time and date.



The Transparency Directive is published on European Commission website (http://europa.eu.int/comm/internal_market/securities/transparency/index_en.htm) and is also posted on CESR's website (under Documents – EU Legislation).

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I. BACKGROUND

1. In June 2004 CESR received from the Commission a letter inviting it to provide a report on the role of the Officially Appointed Mechanism (OAM) referred to in Articles 21 and 22 of the Transparency Directive. CESR delivered its report to the Commission on 30 March 2005¹.
2. In July 2005, CESR received from the Commission a mandate for technical advice on implementing measures concerning the Transparency Directive as regards OAMs. The mandate was annexed to a letter from the EC, which gave important comfort for interim solutions in the transposition by January 2007 of the Directive requirements regarding OAMs, in the expectation of further developed implementing measures on which CESR is requested to advise by June 2006, under this new mandate.
3. Discussions held at the European Securities Committee have shown that Member States prefer a network model to a centralized system for the storage of regulated information. This important political decision forms the basis upon which CESR is preparing the consultation paper and the future advice to the Commission.
4. The mandate requires CESR to discuss the following areas:

Preliminary issues: Governance/ Cost and Funding of the Central Storage Mechanism

5. In respect of the preliminary issues, CESR is required to provide the Commission with an opinion and not technical advice. The issues of governance/cost and funding are directly linked to the general issue of the possible architecture of an electronic network of storage mechanisms.
6. With respect to costs as such, a distinction could be made between the costs for the setting-up of the network (architecture definition, hardware, software, documentation etc.) and the running costs (maintenance, hardware and software upgrades, licenses, support staff). On funding, different solutions can be developed (public funding, issuers, national OAMs, users).

Storage Standards and role of the competent authority

7. Some of the technical standards were partly discussed in the CESR Progress Report of March 2005, but they might need further elaboration. In respect of other technical standards CESR started from scratch. The progress report and the level of detail therewith are considered an adequate basis for CESR to develop its thinking on these issues. The mandate also asks CESR to elaborate on costs and funding of setting up and operating an OAM.
8. Some links are identified along the paper between the issues dealt under the storage standards and the interoperability part of the paper. CESR considers that one needs to bear in mind that the structure of the network to be set up under article 22 may have an impact on the standards that are imposed on national OAMs under article 21. Therefore CESR suggests that an articulation of the timeframes for implementation of national OAMs under article 21 and that of the network under article 22.

The filing of regulated information by electronic means with the competent authorities

9. The mandate requires CESR to define minimum quality standards that the filing systems of competent authorities must comply with. In addition, CESR is required to consider how to align the filing process with the storage of regulated information.

II. STRUCTURE OF THE CONSULTATION PAPER

¹ CESR's Progress Report regarding possible implementing measures of the Transparency Directive on the role of the Officially Appointed Mechanism (Article 21.2) and the setting up of a European Electronic Network of information about Issuers (Article 22) and Electronic Filing (Article 19.4a), March 2005 (CESR 05/150b)

10. The consultation paper is structured as follows: discussion on the standards applicable to national OAMs and funding for such national OAMs; interoperability of the national OAMs and funding of such interoperability; role of the competent authority; filing with the competent authority. The discussion of the various parts of the mandate is preceded by an introduction where CESR explains some of the basic concepts and assumptions of the paper.
11. This consultation paper does not present CESR thinking in relation to cost issues of both national OAMs and the interoperability. These will be dealt in a separate paper as CESR needed additional time to reflect upon this issue.
12. CESR also presents in an annex the summary of the conclusions of a questionnaire made among its members to detect the features of existing storage mechanisms. One can conclude from this exercise that there are several storage mechanisms already implemented and these have different characteristics.

III. INTRODUCTORY CONCEPTS

13. The Transparency Directive was preceded by two public consultations of the Commission services to gather some guidance on the fundamentals of the proposal to be presented.
14. The modernization and simplification of the methods by which information is made available was one of the topics of concern. In the existing directives the disclosure of information by issuers was essentially paper-based.
15. In the 2001 consultation, the Commission proposed a system by which the information would be made available on the issuer's websites and filed in electronic format with the competent authorities. These would then make the information available freely without delay and, ideally, competent authorities should establish hyperlinks among themselves to enable investors to have access to information concerning all issuers on a pan-European basis.
16. In the 2002 consultation, these ideas were developed further and the Commission proposed electronic disclosure on the website of the issuer as an additional means of disclosing information, alongside the power to further develop the means of disclosing information by level 2 measures. These measures were supported by the assumption that Member States should not be able to impede issuers from freely choosing the means for disclosing information and that electronic disclosure should increase. In addition, competent authorities were called upon to have a repository function based on the filing requirements imposed on issuers, an idea that was subsequently dropped.
17. In March 2003 the Commission presented its initial proposal of a Transparency Directive. The proposal requested issuers to disclose information using media that could ensure proper dissemination. This was complemented by a proposal to establish a network of regulated information to create a "one stop shop" for investors throughout Europe. The third leg of the system was the repository function of the competent authorities, based on filing by issuers, which should ensure not only that these have the means to properly perform their supervisory duties but which could also serve as an additional means of disclosing information.
18. The ideas of a storage mechanism and of a network of storage mechanisms and the concept of enabling filing by electronic means with the competent authority was carefully considered in the early discussions of the Transparency Directive. All of this formed part of the Cesar's progress report and is the basis of its current thinking on the mandate given by the Commission.
19. Following discussions in different groups, namely the Consultative Working Group (CWG) and the results of the call for evidence, CESR considers that there is a need to clarify some of the concepts that will be used throughout the paper. Therefore, consulters will find below a description of some of the underlying concepts and concerns set out in the consultation paper.
20. First of all, CESR considered both the purpose and who could be the end user of the storage mechanism (OAM). The system will function as a repository of all regulated information that is disseminated by issuers and can be viewed as the official source of that information. This is not unique to the Transparency Directive as, in fact, Community requirements on company law already require a centralized access point for certain types of information produced by companies. The characteristics of these storage mechanisms include the nature of the

information stored, the companies subject to such a requirement and the potential users of such a system. The national OAMs will function as a central repository of the information produced by issuers in the relevant home member states. Investors, instead of looking around several sources of information, will find the information produced by all companies in a single place. This will increase the awareness of investors to information, as it is more easily accessible, and will allow more informed decisions to be made on the securities markets. The Directive assumes that there is a need to have centralized access to regulated information, as it allows issuers to use several, different and non harmonized means to make information available. This assumption is also made on the basis of Cesar's work.

21. The Directive states that the storage mechanism will serve its "end users". This is not a defined concept under the Directive, although some guidance is given in recital 25. CESR considered additionally whether there might be a need to differentiate among the users of the system, as they will have different needs and will use the system differently.
22. CESR assumes, bearing in mind the purpose of the storage, that the primary end users of the systems will be the investors seeking information on issuers. For these, CESR envisages a system of storage that is easy to use, affordable and not unnecessarily complex or technical. Its specifications do not need to be too detailed, as this could increase the costs of maintaining and accessing it.
23. Therefore, CESR considers that the "end user" will be anyone with an interest in having access to the stored information, including retail investors, institutional investors or professional users of the information stored. The different needs of the various categories of users can be addressed by the OAM itself; by offering-differentiated services in addition to the basic level of service, such as information prepared in specific formats, summaries of information translated to other languages or aggregated information.

Q1: Do you agree that, taking into consideration the main purposes of the Directive in relation to the OAM, end users of the OAM will be investors seeking information on issuers and that the specific needs of particular investors or users should be tackled by the OAM itself and not require further and more burdensome requirements on issuers or on the OAM itself? Please provide reasons for your answer.

24. Bearing in mind the above and the fact that the Directive requires only "regulated information" to be stored, CESR considers that what needs to be stored in the OAM is the *regulated information* (and the prospectuses, as indicated in the mandate by the Commission) *that was prepared and disseminated by the issuers or by those that applied to the admission of securities to trading on a regulated market without the issuers' consent* (article 19/1 of the Directive). Therefore, the users of the system will find in the OAM what CESR called "naked regulated information", which is exactly what the issuer has disseminated, in the format and in the language that the issuer has used, without further intervention.
25. Therefore, what the issuers need to input into the OAM is information such as:
 - Annual and semi- annual reports;
 - Other interim reports such as quarterly information or interim management statements;
 - Major holdings notifications;
 - Inside information.
26. As a result, these are the types of information that will be available for end users in all the OAMs and, additionally, will be accessible on the network of OAMs. So, OAMs will have a minimum harmonized content of information types. This should constitute for end users of a centralized source of information and be set up taking into account a proper analysis of the costs and benefits involved.
27. Obviously the OAM will be able to provide to its users additional services, such as formatting regulated information or supplying additional information, such as analysis or aggregated data. If this is the case, then the OAM should clearly identify what is regulated information and what is not.

Q2: Do you agree that, taking into consideration the main purposes of the Directive in relation to the OAM, what needs to be stored and to be accessed in the OAM is just the regulated information,

as produced and disseminated by the issuer or more than that? If so, please provide reasons for your answer and indicate what kind of facilities you would expect taking into account the costs of such value added facilities..

28. As a consequence of what is said above, CESR considers that the Directive does not allow the OAM to require the translation of the information provided by the issuer into another language. Therefore, information will be stored and retrieved from the OAM in the language it was originally produced². If the OAM so decides, it can also provide the information in a different language, but the translated information will need to be clearly separated from the regulated information and the responsibility for the translation lies with the OAM, not the issuer. It should also be considered the fact that issuers may want to provide directly translated information to increase the visibility of their financial instruments.
29. CESR considers that when the Directive refers to “easy access” to regulated information from the OAM it cannot be interpreted as requiring the translation of regulated information by the OAM. This would imply a burdensome requirement for the OAM and, if put on the issuers, would imply a contradiction with the level 1 language regime.
30. CESR has given additional thoughts to what “easy access” can mean in the context of the Directive and what are the consequences one can derive from that concept. The Directive states that the OAM shall ensure “easy access” to the regulated information. This can mean a wide range of things, from a limited technical concept (allowing technical means by which stored information can be accessible) to more complex devices and structures, such as the translation of all regulated information or the transformation of the data received from issuers into a user friendly format that can be managed by users.
31. Bearing in mind the objectives of the Directive and a proper balance between investors’ needs on the one hand and the costs of imposing burdensome requirements on OAMs on the other, CESR considers easy access to mean that information can be viewed, downloaded and printed from the OAM, as explained later on in this paper. Considering that the OAM will store large amounts of information, CESR considers additionally that information needs to be found, so the OAM will need to have in place searching capabilities that allow investors to find the relevant pieces of information. The concept of easy access is further detailed in the paper.

Q3: Do you agree with the views above or do you envisage a more ambitious approach to “easy access”? If so, please indicate what facilities you would like to see in place and detail the additional estimated costs of implementing them, if possible, explaining the advantages of such an approach.

32. Additionally, the Directive foresees the setting up of a network between national OAMs. When CESR presented its progress report, several options to ensure a “one stop shop” for investors were presented. The one that merited the strongest support from the European Securities Committee members was the network model, which the mandate refers to as “an integrated network of national databases allowing for sufficient flexibility and scalability, with the final objective of offering a one-stop-shop for end users”. The final objective is to ensure that all regulated information, at least in naked format, be accessible to investors, irrespective of where the information or the investors are located. This network of regulated information could then, following the Directive, be linked with other pools of information.
33. A network is basically a set of computers connected in order to share data. The level of complexity of the network can vary and the objective of sharing information or of making it available easily can also vary. In this paper CESR presents four possible models by which investors can access information located in national OAMs in order to respond to the mandate requesting that CESR provides an opinion on how interoperability of national OAMs can be achieved. To that end, CESR needed to consider the various network models that can be set up and how their structure impacts the possible agreements. This implies an analysis of the benefits and disadvantages of each model. In relation to how the interoperability could be achieved, CESR presents a preferred approach and two alternative approaches described further below.

² In accordance with the language regime of article 20 of the Directive, or additionally, if the issuer is presented with the possibility of using more than one language, in all the languages in which the issuer disseminate the information.

34. As for national OAMs, CESR envisages that the users of this network will be those interested in collecting information on issuers. Instead of looking at each national OAM, the network would enable them to search the entire set of data available in all national OAMs and to retrieve results from any of these systems. As a starting point, this network could offer very simple services and searching capabilities, being upgraded as a result of demands from its users. The “easy access” concept would require here a certain level of searching capabilities and accessibility, to be refined further and detailed in the consultation paper, that meets the demands of its users, is useful and takes into consideration the costs and benefits of the facilities.

Q4: Do you agree with the views above or do you envisage a more ambitious approach for the network? If so, please detail your ideas and, if possible, provide your opinion on the implications of setting up such a system.

35. For the purposes of this consultation paper and when the duty to comply with an obligation is referred to, “issuer” refers both to the issuer of the securities and to the person that has applied for the admission of the securities to trading on a regulated market without the issuer’s consent. Depending on the context, this can also refer to someone appointed by the issuer to act on his behalf.

**ROLE OF THE OFFICIALLY APPOINTED MECHANISM FOR THE CENTRAL STORAGE OF REGULATED INFORMATION
(ARTICLE 21(2) OF THE TRANSPARENCY DIRECTIVE)**

Extract of the Commission's mandate

Role of the officially appointed mechanism for the central storage of regulated information (Article 21(2) of the Transparency Directive)

DG Internal Market requests CESR to provide technical advice on possible implementing measures on the Role of the OAM for the central storage of regulated information (Article 21(2) of the Transparency Directive). The technical advice should concentrate on the following issues:

(1) **Minimum quality standards of security** to be complied with by the OAM. This issue should at least address the following points:

(a) which should be the security standards should regulated information be sent to the storage mechanism only in electronic form and should regulated information be stored only in electronic form?

(b) whether special or additional security standards should be in place if an electronic network of national OAMs at EU level is created?

(2) **Minimum quality standards of certainty as to the information source** to be complied with by the OAM, taking into consideration how the filing procedure with the OAM could take place. This issue should at least address the following points:

(a) Whether it would appropriate to require issuers to file regulated information through electronic means only, types of electronic means that could be suitable taking into consideration the need to achieve certainty as to the source of information and the need to ensure integrity of content of regulated information

(b) In this connection, how best to ensure authenticity of origin, in particular (but not only) if the information is to be filed with the OAM by an agent or representative of the issuer or other indirect methods;

(3) **Minimum quality standards of time recording** to be complied with by the OAM, taking into consideration the organization of the filing procedure with the OAM. This issue should at least address the following points:

(a) Whether it would be desirable in order to facilitate automatic processing of the regulated information, including the time recording procedure, to require issuers to use input standards (such as XBRL or similar formats) and templates (such as standard forms) for regulated information as a condition for the filing of information with the OAM;

(b) The implications of any "content checking" procedure especially potential resulting delays.

(4) **Minimum quality standards of easy access by end users** to be complied with by the OAM, taking into consideration the organization structure of OAM and the filing procedure. This issue should at least address the following points:

(a) whether there should be different minimum standards depending on the type of information to be accessed (e.g. regulated information under Directive 2003/6/EC and the Transparency Directive, and possibly additional information, such as the one to be disclosed under Directive 2003/71/EC, to the extent this non regulated information would be stored in the OAM) that may be obtained from an OAM;

(b) minimum standards regarding the language regime of the access points for end users of interconnected OAMs at EU level in order to move towards a "one stop shop" for end users;

(c) minimum standards in terms of technical accessibility to the OAM, including the type of technology used in the interface with end users (e.g. it should possibly be an easily accessible technology), the operational hours, the service support etc;

(d) minimum standards in terms of the format of the information that can be accessed by end users, including in particular whether end users may be entitled to require receiving from the

OAM a printed version of regulated information or may be entitled to obtain an electronic version only;

- (e) whether, in this regard, it would be appropriate to require issuers to use input standards (such as XBRL or similar formats) and templates (such as standard forms) for regulated information as a condition for the filing of information with the OAM to the extent that this would facilitate the searching of information, its subsequent manipulation by end users or by added value service providers.
- (f) minimum standards in terms of timely access to the regulated information, in particular whether the easy access principle requires that stored information, including price sensitive information, should be made accessible to end users without delay after reception by the OAM (see also paragraph 3(b));
- (g) minimum standards in terms of cost of access to regulated information for end users;

(5) **Role of Competent Authorities** in supervising OAMs' compliance with quality standards, for instance in the cases where two or more Member States would decide to officially appoint a joint mechanism for the central storage of regulated information. The technical advice could also give consideration as to whether competent authorities should have any role in adapting standards over time in case of technical developments and similarly.

3.3 Costs and funding

DG Internal Market requests CESR to provide an assessment of the costs of setting up and operating OAMs that meet the standards listed in paragraphs 3.2.(1) to (4), and to deliver an interim report on this issue in April 2006.

Relevant Level 1 text

Article 21: Access to regulated information

1. The home Member State shall ensure that the issuer, or the person who has applied for admission to trading on a regulated market without the issuer's consent, discloses regulated information in a manner ensuring fast access to such information on a non discriminatory basis and makes it available to the officially appointed mechanism referred to in paragraph 2. The issuer, or the person who has applied for admission to trading on a regulated market without the issuer's consent, may not charge investors any specific cost for providing the information. The home Member State shall require the issuer to use such media as may reasonably be relied upon for effective dissemination of information to the public throughout the Community. The home Member State may not impose an obligation to use only media whose operators are established on its territory.
2. The home Member State shall ensure that there is at least one officially appointed mechanism for the central storage of regulated information. These mechanisms should comply with minimum quality standards of security, certainty as to the information source, time recording and easy access by end users and shall be aligned with the filing procedure under Article 19(1).
3. Where securities are admitted to trading on a regulated market in only one host Member State and not in the home Member State, the host Member State shall ensure disclosure of regulated information in accordance with the requirements referred to in paragraph 1.
4. In order to take account of technical developments in information and communication technology and to ensure the uniform application of paragraphs 1, 2 and 3, the Commission shall adopt implementing measures in accordance with the procedure referred to in Article 27(2).

The Commission shall in particular specify:

- (a) minimum standards for the dissemination of regulated information, as referred to in paragraph 1;
- (b) minimum standards for the central storage mechanism as referred to in paragraph 2.

The Commission may also specify and update the list of media for the dissemination of information to the public.

Introduction

36. CESR has been mandated to provide the Commission with minimum quality standards for OAMs. CESR considers that the technical advice should contain high-level principles and not detailed and specific rules. This has been called for by respondents in the call for evidence and is also the best way to deal with matters that may evolve quite rapidly.
37. In giving its advice to the Commission, CESR considered, among other various sources of information, the following:
- the progress report CESR had already presented to the Commission, which was used as the basis to further develop its thinking;
 - the results to the call for evidence on the mandate, conducted from the 28th of July 2005 until the 31st of August 2005.
 - the results of a survey among its members on existing storage structures, a summary of which is annexed to this consultation paper.
38. This part of the paper deals with the minimum standards national OAMs should comply with. As much as possible, the structure of this part of the paper follows closely the various points of the mandate, but some of them were aggregated to ensure consistency on the treatment of the issues presented.
39. For the purposes of this paper, “issuer” is used to define the issuer or the person who has applied for admission to trading on a regulated market without the issuer’s consent or third party acting on behalf of the issuer as the case may be.

(1) Minimum quality standards of security to be complied with by the OAM

Security standards

40. Security is an important concern for any system as the OAM. In fact, a storage mechanism that will have the functions ascribed to the OAM (namely, acting as the official source of regulated information disseminated by issuers) needs to ensure a certain level of security in what concerns access to the system and the storage in itself.
41. The survey of existing storage mechanisms has shown that a variety of security mechanisms are used at present. In all the systems there are security mechanisms and procedures designed to ensure the authenticity of the information source, in most of the systems there are mechanisms to detect unauthorized access to data (such as log of the user’s action - data, time, terminal-, a limited number of unauthorized attempts to access the system and a limited access time), in some systems the information integrity is guaranteed by back-ups and data replication on a duplicated site. Other ways employed for guaranteeing information integrity are business continuity mechanisms and contingency plans. In most of the systems, safe storage and physical data access are ensured by the restriction of the access to the computer room, to the server components and to the network rack rooms (for further information on the existing mechanism, please see the Annex to this consultation paper).
42. CESR considers that the OAM should have in place sound security mechanisms that will ensure the security of the means of communication used to link the filers to the system, minimizes the risks of data corruption and unauthorized access and provides certainty as to the source of the information being filed. CESR considers that it is not necessary to be too prescriptive about what particular systems should be in place, as this would allow flexibility to the OAMs to adapt its systems over time and to address the specific risks faced, taking into account the possible particularities of each OAM. Therefore, CESR proposes below some high level standards on security that each OAM will have to implement to the adequate extent of its particular circumstances.
43. CESR considers that, as a minimum, OAMs should comply with the standards of security detailed below (see paragraphs 58 to 69):

Electronic filing with the OAM and electronic storage as prerequisites for the quality standards

44. The Commission requested CESR to consider whether specific standards of security should be in place if information were to be sent to the OAM only in electronic form and if information were to be stored only in electronic format.
45. CESR believes that the issue of electronic filing with the OAM and electronic storage should be addressed before the examination of the particular quality standards because most of the standards that are analyzed below are based on the assumption (presuppose) that electronic filing and storage are in place. Therefore, CESR considers that electronic filing with the OAM and electronic storage are prerequisites for the establishment of the specific quality standards OAMs will have to comply with.
46. CESR has already considered this issue in the progress report and has come to the following conclusions:
 - the systems by which information should be received by the OAM should be electronic and that an internet based storage mechanism would be needed (paragraph 102);
 - that the system should hold the information in a format that would allow end-users to view, download and print, in a straightforward manner, the full content of information. Therefore, information should be converted into a electronic format (paragraphs 112 and 113);
 - that the issue of imposing a specific standard would require a careful analysis as it is a fundamental decision (paragraph 105).
47. Below are presented the thoughts of CESR in relation to the issues of electronic filing with the OAM and electronic storage of the regulated information.
48. An electronic filing mechanism presents benefits both for persons obliged to file information as well as for the OAM itself. Electronic filing can be used to generate an automated workflow that will reduce the processing cycle and enhance data integrity. An as-filed document facilitates incorporating the text-based information directly into the Oak's databases without further processing. This will minimize or eliminate complex workflow processes and result in cost savings. Issuers will use standard computers and computer-based software.
49. An electronic filing mechanism ensures that regulated information gets to the OAM as quickly as possible and reduces the scope for error. Manual processes take longer and are prone to human error resulting in reduced confidence in the OAM.
50. An electronic filing mechanism would promote uniform validations and would allow diverse e-filing methods.
51. Issuers will use standard computers and computer-based software programs to generate the documents, required to be filed with the OAMs. Allowing issuers to use computer output, generated with these characteristics, will decrease operational costs such as printing, copying, mailing, and delivery service associated with filing paper documents. Therefore, the filing by electronic means should be the standard and should be promoted. Notwithstanding, the OAM should be capable of receiving paper based filings on very limited and exceptional circumstances and should be able to convert the information into an electronic format (digitalize the information).
52. The types of electronic means to be used should be easily accessible, commonly used, and widely available at a low cost. Straight through processing allows for the collection and validation of regulated information in electronic format in an efficient and timely manner. It ensures quality, accuracy and reliability of information as it enters the OAM, but also requires input standards to be set up. Notwithstanding, straight through processing has particular costs and should not be imposed as a standard for all national OAMs across Europe. Each OAM will have to decide, bearing in mind its cost and financing structure, whether straight through processing is an acceptable standard or whether alternative methods can achieve comparable results.
53. Storing regulated information in electronic form allows end users to access it from any computer anywhere.
54. In addition to that, setting input standards improves the quality, accuracy and reliability of information as it enters the storage mechanism and enhances the information that can be included within analysis and reports on a routine basis. Notwithstanding, setting input

standards may imply that issuers and filers with the OAM in general will have to adapt themselves to the filing processes and forms. This will generate costs and may be in contradiction with the fact that what needs to be stored is the regulated information as it was disseminated by the issuers (see Introduction to this paper, where this concept is dealt in greater detail).

55. Bearing in mind the above, CESR considers that:

- OAMs should have a system accessible through internet to end users and issuers;
- OAMs should be able to receive electronic filings;
- OAMs should store the information in electronic format. Therefore, information that was, on exceptional cases, received in paper should be converted into an electronic format.

Q5: Do you agree with the above? If not, please provide reasons for your answer.

File Format standards

56. Issuers should rely on a flexible filing mechanism that is user-friendly without incurring in excessive costs. The open e-filing architecture should support several format standards, without overburdening the filers with the requirement to adopt a prescribed format. The mechanism should support standard file formats that are not proprietary and that obviate single vendor software applications.

57. In certain situations, however, the OAM could provide that information be structured into a specific prescribed templates text for the purpose of fast processing. In those cases, the forms should be easily accessible.

Q6: Do you agree with the above? Please provide reasons for your answer.

Security standards

Integrity of stored regulated information

58. In order to uphold the veracity of regulated information available to a user, the content of regulated information held by an OAM should be complete and unedited as originally sent by issuers. An OAM should be under an obligation to ensure the completeness of the regulated information it holds and to ensure that regulated information is not editable while stored.

59. Where service providers are involved, it is necessary to ensure that the content of the regulated information they send to central storage mechanisms is complete and unedited as received from an issuer or an issuer's representatives.

60. However, in practice, there might be cases where information needs to be corrected, either because it is found to be incomplete or misleading or because it was erroneously sent to the storage mechanism.

61. CESR considers that information that has been sent to the storage mechanism and displayed should not be taken out. If an addition or correction is necessary, then the correcting or additional piece of information should identify the item it corrects or adds to and should be identified as a correction or addendum.

Validation

62. The mechanism must be able to validate regulated information filed. The mechanism should enable automatically inspection of the filed documents for technical adherence to standards required, completeness and accuracy of their formats.

63. The mechanism should have systems in place to detect breaks in the electronic feed and to request the re-transmission of any data that it fails to receive from the sender.

Availability of the stored information

64. The mechanism must have security systems so as to ensure that the information, which is already stored, is available to end-users, without disruption, 24 hours per day, 7 days per week.

65. Notwithstanding, CESR acknowledges that the storage mechanism may need to prevent access to its systems for brief periods in order to perform essential maintenance or in order to upgrade its services. Where possible, such interruptions should be announced in advance.

Acceptance of waivers and recovery

66. The mechanism must have an evaluation process for reviewing and accepting or denying waivers for late filings due to IT issues and non-standard submissions. The mechanism should also provide recovery tools that allow the issuer to use other mechanisms of filing in place of the prescribed one when this is out of order. However, there should be an obligation on the issuer to refile the information through the main mechanism when restored.

Back-up systems

67. An OAM should be technologically independent and have sufficient back-up facilities in place in order to maintain and to re-establish its services in a reasonable timeframe. The nature of these back ups systems will need to be evaluated by each OAM taking into consideration the specific characteristics of the systems in place.

Q7: Do you agree with the above minimum standards of security?

Q8: Are there any additional standards on security CESR should consider?

68. CESR was also requested to consider whether special or additional security standards should be in place if an electronic network of national OAMs is set up.

69. CESR has considered this issue carefully and does not envisage the need for special or additional security standards to be in place if an electronic network of national OAMs at EU level is created. CESR is of the opinion that the security standards applied at national level will be sufficient. As the OAMs will be required to meet the minimum security standards outlined in paragraphs 58 to 68 above, it is not considered necessary to require the OAMs to put in place any additional security standards. Each OAM will be responsible for ensuring the security of the data in its database and other OAMs can rely on this, when receiving information from that database.

Q9: Do you agree that there is no need for special or additional security standards if an electronic network of national OAMs at EU level is created?

(2) Minimum quality standards of certainty as to the information source to be complied with by the OAM

70. CESR has been requested to specify minimum standards relating to certainty of the information source to be complied by OAMs. To that end, the Commission has requested CESR to take account the means of filing and, additionally, to reflect upon the following:

- whether it would be appropriate to require issuers to use only electronic means, the type of electronic means to be used in order to ensure certainty as to the information source and the need to ensure integrity of the information;
- how to ensure authenticity of information source, especially when information is filed by an agent of the issuer.

71. CESR has reflected on the use of electronic means in paragraphs 44 to 55 above. CESR sets out below its thinking in relation to the remaining points.

Certainty as to source of information and authenticity of origin

72. The survey CESR has made in relation to existing systems of storage has shown that in most of the systems, the information source is verified by pre-authorized personnel, which may be:

- an employee of the storage system operator
- an employee of the issuer or of a third person (operator) that sends information to the system.

73. On the technical level, pre-authorized persons are often vested with appropriate software applications, which generate private and public keys (that allow issuers to send encrypted and electronically signed information), password protected user- accounts and announcement validation numbers.
74. In other systems source verification is effected through the fax and/ or the e-mail. In some systems pre-authorized personnel use electronic identification certificates or devices such as smart cards and digital signatures.
75. Bearing in mind the above, CESR considers that an OAM should have certainty that the information it receives is from an authentic source. An OAM should verify that any regulated information it receives directly is from an issuer. Service providers that may be involved must ensure proper authentication.
76. The mechanism should be able to electronically acknowledge receipt of documents and either confirm validation of filing or reject submittal with explanation for rejection. It could also be useful that the mechanism has a “non-repudiation” function, which is the assurance that the recipient of data is provided with proof of delivery and of the sender’s identity, so that the sender cannot later deny having sent the data.

User Authentication

77. It is essential that security measures be designed to establish the validity of the originator, or a means of verifying an individual’s authorization to send specific information. These tools could be in the form of appropriate access codes that are assigned by the OAM or of Digital Signatures.
78. CESR considers that there is no specific need to define precisely which methods for user authentication to require, as it will be up to the each OAM to specify in its internal procedures the best ways to achieve certainty as to the information source.

Need to ensure integrity of content of regulated information.

79. The mechanism should be designed to assure that there is no significant risk of corruption or change of original information either accidentally or maliciously and to ascertain any alteration.

Q10: Do you agree with the above? Please provide reasons if you do not agree
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(3) Minimum quality standards of time recording to be complied with by the OAM

80. CESR has been requested to provide advice as to the minimum standards to be complied with by OAMs in relation to time recording. To that end, the Commission requests CESR to take into consideration the filing process and to reflect upon:
 - the need to use specific input standards and templates;
 - the implications of any “content checking” procedure, especially in what concerns resulting potential delays.
81. CESR has dealt with the first point in **paragraphs 56 and 57 above**. Below CESR discusses the second point and its implications.
82. Where the directive requires Member States to ensure that issuers are meeting their obligations under the directive, and these obligations relate to the specific content of information (for example accounts, major shareholding disclosures), the only way that this can be ensured is for the Competent Authority (or those it delegates under Article 24.2) to check and supervise the content of the regulated information.
83. However, the timing of content checking of the information and the ways by which the Competent Authority will exercise its supervisory powers under the transparency directive will depend on the implementation provisions adopted in each Member State.

84. CESR considers that, the information should be time stamped as it enters into the OAM, irrespective of whether the information is checked before (ex ante control) or will be checked after (ex post control) it enters in the OAM. Therefore, the timing of content checking by the Competent Authority will not affect the time recording procedure of the OAM.
85. In addition, CESR considers that the mechanism must be able to automatically docket electronic filings and add a timing stamp.

Q11: Do you agree with the above? Please provide reasons for your answer if you do not agree.

Q12: Are there any additional standards on time recording CESR should consider?

(4) Minimum quality standards of easy access by end users to be complied with by the OAM

86. CESR has been requested by the mandate to specify minimum standards applicable to OAMs to ensure that end users have “easy access” to the information stored in the OAM. To that end, CESR is asked to consider the filing process with the OAM and take into account the following:

- (a) whether there should be different minimum standards depending on the type of information to be accessed;
- (b) the language regime of the access points for end users of interconnected OAMs at EU level in order to move towards a “one stop shop” for end users;
- (c) minimum standards in terms of technical accessibility to the OAM, including the type of technology used in the interface with end users, the operational hours, the service support etc;
- (d) minimum standards in terms of the format of the information that can be accessed by end users, including in particular whether end users may be entitled to require receiving from the OAM a printed version of regulated information or may be entitled to obtain an electronic version only;
- (e) whether, in this regard, it would be appropriate to require issuers to use input standards and templates for filing information with the OAM;
- (f) minimum standards in terms of timely access to the regulated information, in particular whether the easy access principle requires that stored information, including price sensitive information, should be made accessible to end users without delay after reception by the OAM;
- (g) minimum standards in terms of cost of access to regulated information for end users.

87. CESR sets out below its thinking in relation to each of these issues.

(a) Different minimum standards depending on the type of information

88. CESR does not envisage different minimum standards depending on the type of regulated information to be accessed, under the different directives. However CESR expects that OAMs will distinguish between basic naked regulated information and information that is available with additional value-added services. End-users should be able to access naked regulated information on the OAM’s web-site and have the option of availing of additional value-added services if required. The naked regulated information should be presented in a structured format, which at least organizes and classifies the information.

Q13: Do you agree with the above? Please provide reasons for your answer.

(b) Language

89. The language in which the regulated information has to be disclosed is established under the provisions of Article 20 of the Directive. For the purposes of the OAM, no further translation

requirement exists. The language or languages in which the information was disseminated will also be the language in which it is accessible in the central storage mechanism.

90. However all users irrespective of where they are located should be able to access regulated information. Article 22 of the Directive envisages OAMs being used on a pan-European basis, consequently, OAMs will be used by users with many different native languages.
91. CESR examined the language issue in its Progress Report and concluded that in order to provide "easy access" to regulated information, the publicly available internet based services through which regulated information is accessed, should be available in all languages of the European Union. This language requirement would apply for example to instructions for navigation, search fields and basic search criteria. For example, to find an annual report of a listed company, a user should not be expected to know what "annual report" means in the home language of such a company. Rather, this search criterion should be available in his language or common codes could be used to identify different pieces of regulated information.
92. However, the above position was formulated at the time when CESR was treating the national OAMs as stand alone mechanisms and not as parts of an EU network. This position was based on the assumption that an EU investor who wants to have access to the regulated information of an issuer based in another member state will use the OAM of the issuer's home member-state and therefore would need searching capabilities available in different languages.
93. CESR is now envisaging models in which national OAMs are interconnected in a network and therefore the network would offer searching facilities in different languages. Therefore the need for the national OAMs to have searching capabilities on all the languages occurs only in the scenario where the searching capabilities are at the level of the national OAM and not at the pan-EU network.
94. This requirement is costly for the national OAMs, so CESR is considering to revise its approach and to simply recommend that the search mechanism in a national OAM should be made available in the official local language and in the language customary in the field of international finance. This would be less costly to the OAMs to implement than to have the searching fields available in all languages of the European Union.

Q14: Would you require searching capabilities in the language of international finance to be able to have "easy access" to the information stored?

(c) Technical accessibility (interoperability, operational hours, service support)

95. Depending on the envisaged model for the network, all OAMs might need to be able to communicate with all other OAMs. The agreement of technical interoperability between OAMs will have to specify in detail the interface requirements that each OAM should have in place to enable communication between them (please see paragraphs 216 to 253). This will include the specification of particular technologies, communication protocols and hardware configurations.
96. Once both the classification of content and communication interfaces have been standardized and agreed, all OAMs must follow this agreement strictly if the OAM network is to provide a "one stop shop" to pan-European regulated information as envisaged by the Commission.
97. In order for end users to access regulated information, the system must also be available to issuers to allow them to submit regulated information to the system. Therefore, CESR considers that an additional standard needs to be envisaged to ensure easy access for issuers, described in the "availability for issuers", section below.

Availability for issuers

98. The design of the mechanism should assure fast processing without the risk that issuers are denied service.

99. The methods by which the OAMs will ensure access to its systems by issuers will depend on the structure of the particular OAM. In the existing storage systems information is mainly transferred to the system by e-mail, internet-based system, secure web-servers and/or a file transfer protocol.
100. CESR considers that issuers should, ideally, have access to the OAM on a continuous basis, 24 hours a day 7 days of a week. Therefore, an electronic environment would be the most appropriate. This would also ensure faster processing of the information received, thus enabling information to be made available to the end users of the OAM more rapidly. Where the processing of regulated information is on a straight through processing (STP) basis, this should also happen 24/7. Where processing is manual, normal business hours should apply.
101. CESR acknowledges that it will be necessary for a central storage mechanism to prevent access to its systems for brief periods in order to perform essential maintenance or in order to upgrade its services. Where possible, such interruptions should be announced in advance.

Time between receipt and publication of regulated information

102. Information needs to be accessed in the system within a reasonable timeframe from its receipt by the storage system. The adequacy of this timeframe will be under the control of the competent authority and will depend upon the structures in place in the OAM.

Type of technology used in the interface with end users

103. A system accessible through the internet is the only way in which CESR envisages that all regulated information will be available to all end-users on a pan European basis. It facilitates access to all regulated information about a particular issuer irrespective of where the user or the issuer is located.

Operational hours

104. End users should have access to all stored regulated information on a continuous basis, 24 hours a day 7 days of a week. This can only be achieved by using a system accessible through the internet which allows users to access all regulated information at any time and from any location. An internet based OAM would ensure that investors could gain access to all regulated information easily on both a national and pan-European basis.
105. However, CESR acknowledges that it will be necessary for an OAM to prevent access to its systems for brief periods in order to perform essential maintenance or in order to upgrade its services. Where possible, such interruptions should be announced in advance.

Service support

106. CESR acknowledges that it is important that end users receive adequate support when accessing and interrogating regulated information. It is likely that users will at some time have technical difficulties when accessing an OAM's systems or will not always be able to locate the regulated information they want.
107. In the progress report CESR concluded that OAMs should be obliged to offer support and advice to users regarding the use of their systems, to offer support on technological matters and customer care as well as support regarding the use of its services.
108. Upon reflection on this issue, and considering that the system needs to be user friendly to ensure "easy access" to its end users, CERS considers that the level of support that each OAM decides to provide needs to be left to its discretion, as it may have important cost impact.

Q15: Do you agree with the above standards in relation to technical accessibility? Please provide reasons for your answer if you do not agree.
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(d) Minimum standards in terms of the format of the information that can be accessed by end users

109. CESR considers format to be fundamental to the purpose of the OAM. "Easy access" is not a defined term and is therefore open for interpretation. CESR considers this term to mean that regulated information held by an OAM must be held in a format that enables users to view, download and print, in a straightforward manner, the full content of regulated information from wherever the user is located.

110. It is therefore envisaged that, irrespective of the format in which regulated information is received by a central storage mechanism, it has to be converted into a format that can meet the above requirement. Consequently, CESR believes that only a document held by the OAM in electronic format would meet the standard of "easy access".

Organisation and categorisation of regulated information

111. CESR believes the term "easy access" to regulated information includes the provision of the ability to search, order and interrogate regulated information.

112. CESR believes that an OAM should be required to record sufficient reference information relating to the regulated information it receives. Such reference information should include such items as:

- identify the information as regulated information;
- the name of the issuer from which the regulated information originated;
- the time and date on which the regulated information was disseminated;
- the type of regulated information (e.g. annual report & accounts).

113. An OAM should be able to use reference information such as that mentioned above, to organise and categorise regulated information. The purpose of this management of regulated information should be to enable a user to easily identify the existence of regulated information. In addition, the categorization of information will also allow information to be searchable in the context of the integrated network of national OAMs envisaged in next **part of this paper**.

Printed version of regulated information

114. CESR considers that there should be no additional requirement on OAMs to provide printed copies of regulated information, in addition to the electronic version, which can be downloaded and printed.

Q16: Do you agree with the above in relation to the format of information to be accessed by end users? Please provide reasons for your answer.

(e) Input standards

115. CESR has dealt with this issue below in paragraphs **56 and 57 above**.

(f) Minimum standards in terms of timely access to the regulated information

116. CESR has dealt with this issue in **paragraph 64** above.

(g) Minimum standards in terms of cost of access to regulated information for end users.

117. Recital 25 of the Directive states that the :

“information which has been disseminated should be available in the Home Member State in a centralised way allowing a European network to be built up, accessible at affordable prices for retail investors.”

118. CESR considers this to mean that access for end users to the information that is stored in the OAM does not need to be free of charge. In any event, users must expect to pay unspecific cost, such as, the price of an internet connection to access information online.
119. CESR considered the possibility of requiring free access to the naked regulated information for a certain period of time after being available in the storage mechanism. This would be advantageous to the end users and would probably increase the awareness to regulated information and the use of the storage system. It would also be an advantage to the system itself. Notwithstanding, CESR has also considered that the OAM needs to finance itself, and users are sometimes a source of funding of some existing systems. Therefore, CESR considers that this issue should be dealt by each OAM in particular, taking into consideration its specific features and structure.
120. CESR considers that the costs should, in the light of the Directive, be affordable.

Costs and funding

Costs

121. CESR is required to provide the Commission with an assessment of the costs of setting up and operating OAMs that meet the standards, in an interim report in April 2006.
122. CESR has discussed this issue, namely the drivers of costs, the need to have an harmonized approach and understanding of what types of costs will be considered in this evaluation, the various caveats that this evaluation would have to include, as it is difficult to evaluate a system whose characteristics are still open and under consultation, and came to the conclusion that more time would be necessary to present some meaningful figures to the Commission. Therefore, it was decided that the evaluation of the costs will be dealt in a different paper.

Funding

123. As to the sources of funding, CESR considers that it mainly will depend on the national implementing rules of the Transparency Directive and the option each Member State will follow in appointing an OAM.
124. In theory, the following sources of funding are available:
- users of the system;
 - public funding;
 - private funding.
125. The questionnaire CESR made regarding existing systems has shown that all this sources of funding are used nowadays and the funding structure is mainly dependent upon the nature of the OAM itself. When the OAM is privately owned, it is usual to have a mixed of fees charged to users and private financing (through advertising or additional value added services). When the OAM is managed by the competent authority, information is usually made available for free, but then the system is usually financed through the competent authority budget where fees charged to issuers and financial intermediaries may be main sources of funding.

Q17: Do you agree with the above? Please provide reasons if you do not agree.

PRELIMINARY ISSUES: (I) AGREEMENT ON INTEROPERABILITY AND (II) COSTS AND FUNDING

Extract of the Commission's mandate

3.1 Preliminary issues

In the light of the discussions held at the European Securities Committee (ESC) meeting of 26 May 2005, the Commission considers that the future European architecture for the storage of regulated information is likely to consist of a type of integrated network³ of national databases allowing for sufficient flexibility and scalability, with the final objective of offering a one-stop-shop for end users. On this basis, CESR is invited to provide an opinion on two preliminary issues related to possible implementing measures for the setting up of a storage mechanism.

(1) Agreement on interoperability

CESR should examine how an agreement on technical requirements to allow technical interoperability of Officially Appointed Mechanisms (OAMs) could be obtained and how to conduct ongoing control/supervision over such a joint project;

(2) Cost and funding

CESR should in particular make an analysis of the cost and funding implications for the Member States at the initial stages of the creation of such an EU-wide network.

Relevant Level 1 text

21(4) of the Transparency Directive:

The home Member State shall ensure that there is at least one officially appointed mechanism for the central storage of regulated information. These mechanisms should comply with the minimum quality standards of security, certainty as to the information source, time recording and easy access by end users and shall be aligned with the filing procedure under Article 19(1).

Article 22(1) of the Transparency Directive:

The competent authorities of the Member States shall draw up appropriate guidelines with a view to further facilitating public access to information to be disclosed under Directive 2003/6/EC, Directive 2003/71/EC and this Directive. The aim of those guidelines shall be the creation of: ...

... (b) a single electronic network, or a platform of electronic networks across Member States.

Article 22(2) of the Transparency Directive:

The Commission shall review the results achieved under paragraph 1 by 31 December 2006 and may, in accordance with the procedure referred to in Article 27(2), adopt implementation measures to facilitate compliance with Articles 19 and 21.

HOW TO REACH AN AGREEMENT ON INTEROPERABILITY

³ A first sketch of such an architecture is presented in CESR's Progress Report of April 2005 (§159 and seq.).

I. INTRODUCTION

134. The Directive Level 1 text states that guidelines should be drawn up whose aim is the creation of "a single electronic network, or a platform of electronic networks across Member States".
135. In CESR's "Progress Report on the Role of the Officially Appointed Mechanism and the Setting up of a European Electronic Network of Information about Issuers and Electronic Filing" dated October 2004 ("Progress Report") CESR considered the aim of the Level 1 text to be the creation of a "one stop shop" for the European investor. This means that an investor should be able to access all regulated information generated by all issuers admitted trading on all regulated markets throughout Europe ("pan-European regulated information"), from one place.
136. In its Progress Report, CESR asked how a "one stop shop" could be achieved. The Progress Report presented two options: A) the creation of a single database for all Member States; and B) the creation of a network of national databases.
137. Under option A, one database holds all pan-European regulated information. A "one stop shop" to this information is provided to the investor through access to this single EU database.
138. Under option B, each Member State appoints one or more databases (OAMs) that hold all national regulated information for that Member State. A "one shop stop" to all EU regulated information is provided to the investor by linking national OAMs together into a network. This network gives an investor access to pan-European regulated information no matter which individual Member State OAM holds that information.
139. The Commission has indicated in its mandate that "the future European architecture for the storage of regulated information is likely to consist of a type of integrated network of national databases ... with the final objective of offering a "one-stop-shop" for end users."
140. So, the Commission's mandate indicates that option B is preferred. Each Member State should appoint at least one OAM under Article 21(2) of the Directive and these national databases should be linked to provide an integrated network of national databases. The remainder of this section deals with the opinion CESR is requested to provide on how to achieve interoperability among the national OAMs.
141. An integrated network of national OAMs should provide access to pan-European regulated information in a way that ensures that the internal machinery of the network is not visible to the user. CESR interprets the concept of a "one stop shop" of pan-European regulated information to mean that users of the network should benefit of seamless searching and accessing capabilities.
142. The network model presents important technical challenges, as seamless search and access capabilities across OAMs necessitates extensive harmonization of common reference data items and interface capabilities. An agreement on these technical standards of interoperability between OAMs ("interoperability standards") will need to be reached.
143. The creation of a network of national OAMs also presents challenging governance issues, namely in relation to management and upgrading of the systems; enforcement and dispute resolution. Different entities may be involved in the process, such as Member State bodies, competent authorities and commercial entities and those involved will be required to agree on interoperability standards and ensure that OAMs adhere to them on a continuous basis. In addition, the options in relation to the specific structures to be set up need to ensure the necessary flexibility to encompass changes in technology. In fact, if the system is too rigid, inefficiencies could appear in the network if out of date technology was forced upon OAMs by an unrevised interoperability agreement. These inefficiencies would lead to a comparative loss in performance for an investor (compared against industry standards). OAMs themselves would also suffer an increasing cost burden to support and maintain any out of date technological elements on interoperability.
144. The Commission by its mandate asked CESR to provide it with an opinion on the agreement on interoperability and on cost and funding implications the EU network will incur for Member States. Moreover, the Level 1 text (art. 22) empowers competent authorities to draw up guidelines in view of the creation of a single electronic network. In light of the above, CESR presents below:

- A. Its opinion on how to achieve interoperability between the various national OAMs. CESR presents a preferred solution and alternatives (see below under I) . The preferred solution is based in a combination of measures, some of which should have binding character.
 - B. Proposals for future guidelines, in line with article 22 of the Directive that would cover the possible models of the network among OAMs and the content of the interoperability agreement (see below under II). In fact, CESR considers these two elements as prerequisites to define what needs to be considered for the purpose of defining how an agreement can be reached (see above under a).
 - C. Its opinion on the funding of the implications that will arise for the Member States out of the creation of an EU-wide network of OAMs (see below under III).
145. The Commission's mandate states that the network should allow for sufficient flexibility and scalability. Consequently, a procedure will also need to be agreed to revise interoperability standards, as necessary, to adapt to future technological advancements and any requests for enhancement of the network. For example, these interoperability standards should be flexible enough to allow other OAMs to join the network if additional countries become members of the EU, or Member States choose to appoint other OAMs.
146. The levels of integration of OAMs can vary widely within the context of an integrated network. Therefore, CESR presents four different models of integrated network to illustrate how interoperability of national OAMs could occur. Below, CESR describes the structure of the alternative models and in addition the interface the user would have with the models. CESR notes, however, that these models, and the indications on the content of such an interoperability agreement, are being presented as a pre-requisite to understand what it means to be interoperable. For the sake of consistency and completeness, CESR is presenting these issues as possible proposals for further guidelines to be developed under article 22. Only the discussion in relation to how to reach interoperability agreement and the discussion on costs and funding should be considered as a response to the Commission's request to CESR to issue an opinion.

DISCUSSION

I. Possible approaches on how to reach interoperability

CESR sets out below its preferred approach as well as alternative non- exhaustive approaches on how interoperability could be achieved.

Preferred approach

147. CESR considers it appropriate to have a binding provision by which :
- a. Member States shall be required to ensure that OAMs to be appointed abide by an interoperability agreement.
 - b. A model of network is defined, as it is necessary to understand what needs to be interlinked and to understand which interoperability requirements are necessary.
 - c. Some sort of coordination needs to be in place to ensure that the interoperability agreement is abided by the OAMs.
148. This approach would have the advantage of legally obliging national competent authorities to enforce OAM(s) to comply with the interoperability agreement and competent authorities would be empowered to better define the content of such an agreement.
149. If the technological standards necessary to achieve the aim set by the directive were to outpace the technical details of the interoperability agreement because of the comparative slowness of the text revision process, inefficiencies could appear in the OAM communication process. This could have a detrimental effect on the performance of the electronic network for investors and burden OAMs with the ever increasing cost of maintaining out of date technology.
150. According to Level 1 text, competent authorities would retain the power to supervise national OAMs and would coordinate among themselves, at the level of CESR, the supervision

of the network. This need as well as the extent of this supervisory coordination among competent authorities will largely depend on the chosen network model. The more this model is centralised the more need there would be for a coordinated supervision between the competent authorities.

151. In addition, as competent authorities are already directly empowered by the level 1 text to establish guidelines under article 22 of the Directive, this consultation paper also sets out some of the issues CESR has considered could form part of these guidelines. These relate to the content of the interoperability agreement and to possible models that would fulfill the objective of the Directive to achieve a “one stop shop”. These guidelines could then serve as the basis for CESR’s possible work on the design of the network system as well as on the coordination and establishment of the interoperability agreement.

Alternative possible approaches on how to reach interoperability

152. CESR sets out below two alternative approaches to resolve interoperability governance issues and analyses the benefits and disadvantages of each proposed alternative approach.

Agreements among Member States

153. All Member States could reach agreement on the technical standards for OAM interoperability outside of the established Directive implementation process. Member States will be free to decide the modalities and the content of such agreements.
154. It will be necessary for the OAM interoperability agreement to specify to a high degree of technical detail, the techniques, formats and configurations that should be commonly used by OAMs to allow them to communicate with each other.
155. An interoperability agreement between Member States could allow a technical review to be conducted by CESR of the technologies and communication formats currently used/preferred by each national OAM.
156. A review of existing/preferred technical approaches to interoperability would mean that CESR could then make an informed judgment as to which common approach gives maximum efficiency for least cost. A single common technical approach to the task of standardizing the communication between OAMs could subsequently be proposed by CESR.
157. The primary disadvantage of this approach is that an agreement among Member States may take time to achieve and additionally may not be flexible enough to encompass new standards in order to better ensure the achievement of the objectives set by the Directive.

Agreement amongst OAMs

158. This approach proposes that technical interoperability could be left to OAMs to agree amongst themselves. However CESR considers that this approach presents the following disadvantages.
159. The primary disadvantage of this approach is that the appointment of an OAM by a member state should be subject to a global agreement on interoperability. This approach could make more difficult the implementation of the directive.
160. Common agreement on one interoperability solution may not be possible amongst all OAMs. OAMs will inevitably prefer particular technological solutions that can be accommodated for least cost within their existing network infrastructures. Any OAM would have the power to insist upon an interoperability solution that incurred the least cost to its own operations.
161. Consequently, OAMs may be forced to agree upon multiple interoperability standards that all OAMs are willing to accommodate. In fact, all OAMs should communicate on equal footing and should not be able to force their own particular standards upon other OAMs. An agreement that includes multiple interoperability standards would be less efficient than one commonly agreed standard. The cost of implementing and maintaining multiple standards would be higher, as a whole, than a single standard. Future enhancements to the interoperability of OAMs would also be more costly as any enhancement would need to be implemented across multiple interoperability solutions.

162. For these reasons, this approach would require the implementation of a governance mechanism through which decisions could be taken in order to avoid the above mentioned problems.

II. POSSIBLE NETWORK MODELS AND CONTENT OF THE INTEROPERABILITY AGREEMENT

163. CESR sets out below its thinking in relation to possible and non-exhaustive networks models and the possible content of an interoperability agreement among national OAMs. As outlined above, CESR considers that these reflections could form a basis of future guidelines to be implemented under article 22(1) of the Directive.

A. POSSIBLE NETWORK MODELS

164. After examining the possible architecture of the EU network of OAMs, CESR identified the following possible (but non-exhaustive) network models:

Model A proposes that there is a "Central Access Point" ("CAP") application that is used by investors to search the OAM network. The CAP is an application that sits on a central server outside all OAMs that allows investors to search the OAM network.

Model B proposes that the investors use the software application of any one OAM to search the entire OAM network. An investor may choose to use the OAM that he or she prefers, to search the network.

Model C proposes that there is a central server hosting an application, containing a complete list of Issuers and the links to each OAM holding information on that issuer. The list is used by investors to access the OAMs that store information related to the selected issuer.

Model D proposes that each national OAM carry a list of links to all the other national OAMs on its website. An investor must then select the appropriate OAM and access it directly through the weblink.

165. CESR examines below in detail the characteristics of each of the models and presents their advantages and disadvantages in terms of governance, technical capabilities and facilities they provide to the end-users.

Model A: "Central Access Point" network model

166. In relation to structure, Model A is based on a central application server which collects the search requests coming from a web page available to the users and dispatches these requests to the OAM(s) of each Member State. The OAMs elaborate the searches and send back all results to the central application server as a list of document links. The server then formats the results and displays them in a web page to the user.
167. The "Central Access Point" (CAP) model proposes that apparatus be established separately from all Member State OAMs that hosts a software application that allows investors to search the OAM network.
168. The CAP would hold only a set of search rules (no data is stored centrally). Searches will be performed using a combination of parameters identified and listed under paragraphs 230 to 250 below. The parameters entered into a search by an end-user would be transferred to and understood by all OAM software. All OAMs would also be required to classify the regulated information they hold using the common reference data in order to be able to process requests from the CAP.
169. An end-user would access the CAP via a standard internet connection from their local personal computer.
170. A search request made by an end-user would be sent by the CAP to all OAMs simultaneously via the internet.

171. All OAMs on the network would return results to the CAP application. These results would be in the form of hyperlinks to the relevant regulated information held on OAM databases. The regulated information itself would not be passed to the CAP.
172. The CAP application would present the end-user with an aggregated list of OAM result hyperlinks.
173. Once presented with an aggregated list of hyperlink results, the end-user could click on a specific hyperlink to view the regulated information required. By clicking on a hyperlink on a list of results the investor is connected to the system of the OAM where that information is stored. The relevant item of regulated information would be pulled from the relevant OAM database and displayed to the investor.
174. The CAP would not store any regulated information itself. The CAP would serve only as a central conduit for managing investors' requests for regulated information and aggregating the lists of results from those requests.
175. The CAP provides a real central one-stop shop for all investors around Europe.
176. The primary challenge for the CAP model relates to governance. The CAP apparatus would sit outside of the jurisdiction of any one Member State or national competent authority. Therefore, the implementation and maintenance of the CAP would be the joint responsibility of all Member States. The costs associated with building and running the CAP would also be borne jointly by all Member States.
177. Nevertheless, future enhancements to the CAP, for instance to provide improved functionality or to introduce new technologies, would have to be managed and funded centrally.
178. The CAP model is simpler in design than the de-centralised model B (see below). This is because under the CAP model, all OAMs have to receive requests and submit results to one place, the CAP.
179. So, the CAP model would, theoretically, be flexible and enable any future enhancements to be implemented reasonably easily.
180. As in Models A and B the search facilities will be symmetrical, these models, in comparison with models C and D, would potentially allow for better and harmonised searching devices, such as the usage of all the different languages in Europe. As this is costly to implement, it is not envisaged that national OAMs will implement and maintain searching capabilities in all European languages.

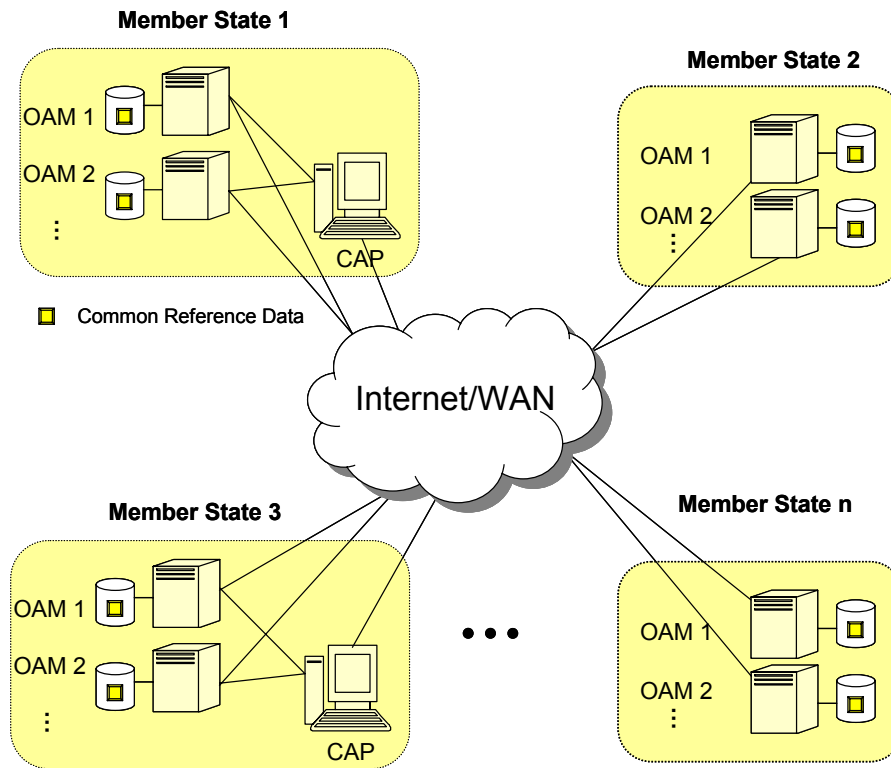


Figure 1: "Central Access Point" Data Location diagram

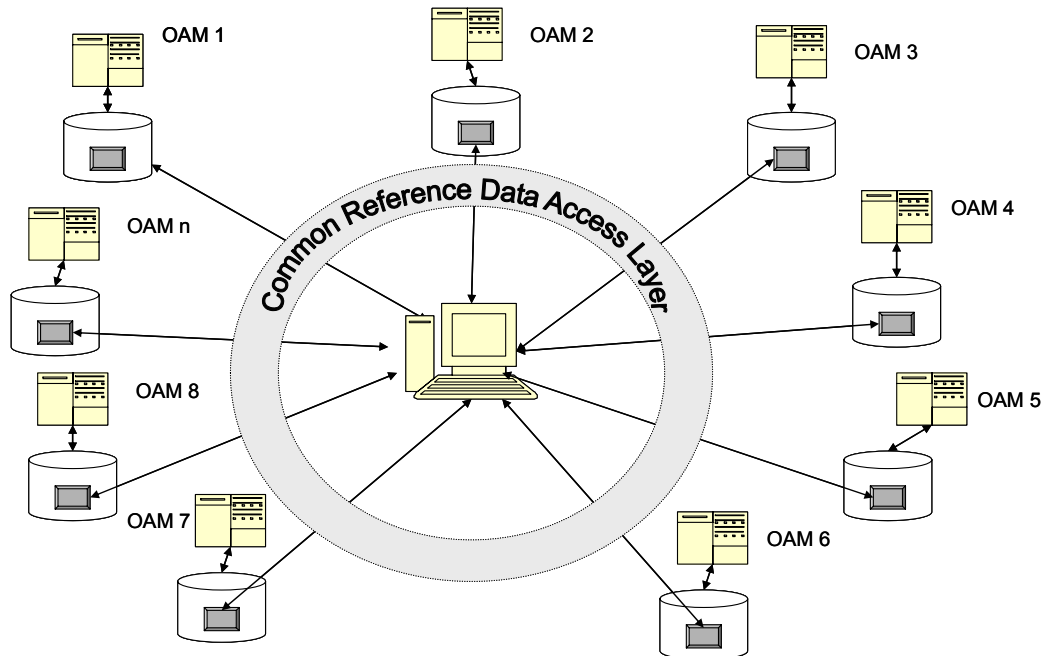


Figure 2: "Central Access Point" logical network diagram

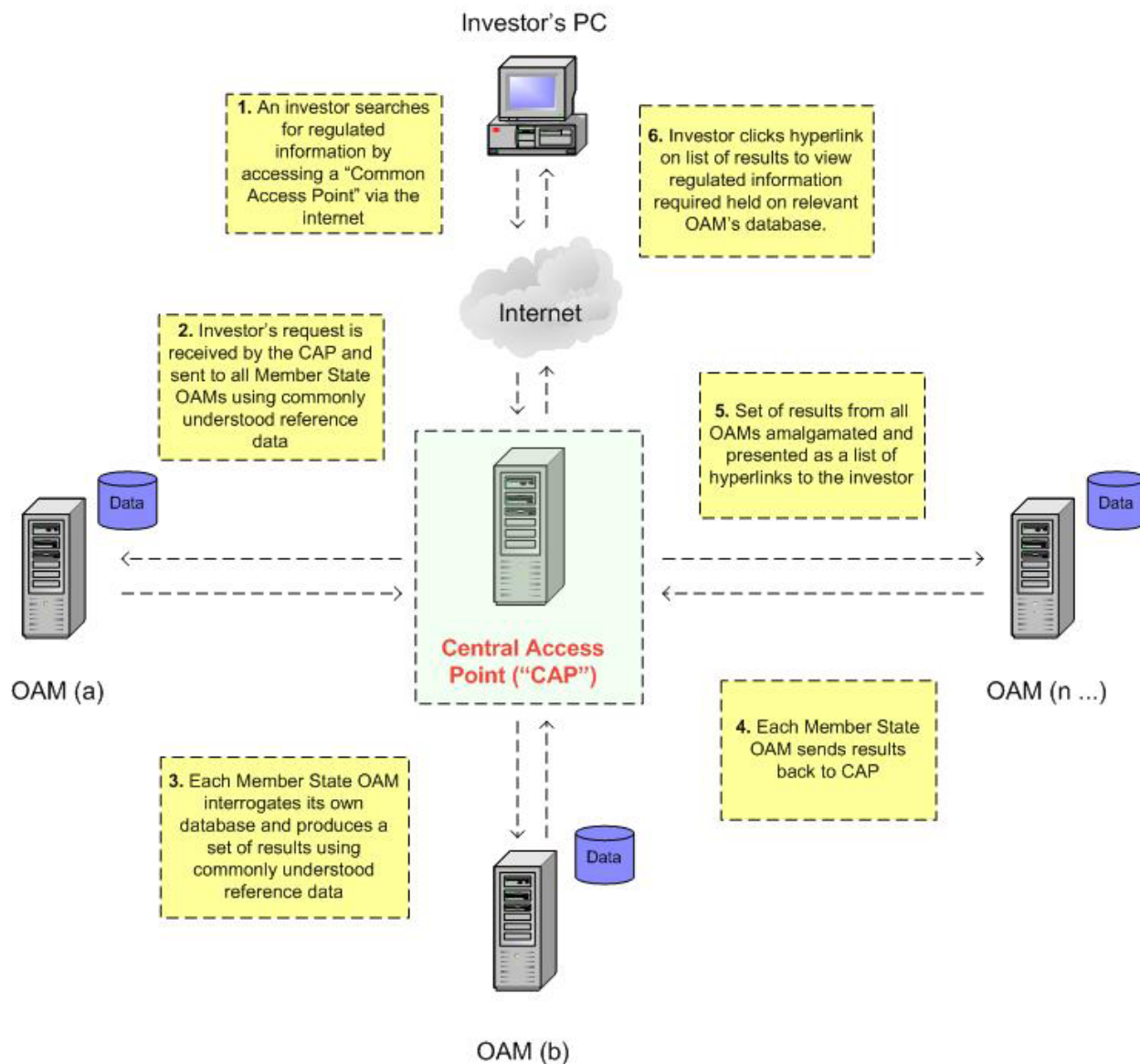


Figure 3: "Central Access Point" process flow diagram

Figure 3: "Central Access Point" process flow diagram

Model B: De-centralised network model

181. Structurally, under Model B an application server is located in each OAM. Each server makes a web page available to the investor that allows the investor to input search criteria and dispatches these requests to every OAM. Each OAM elaborates the search and sends back all results to the specific OAM application server that sends out the request as a list of document links. The OAM's server then formats the results and displays them in the web page to the user.

182. The de-centralised network model proposes that investors use the software application of a particular OAM to search the entire OAM network.
183. An investor would access the OAM via a standard internet connection from their local personal computer.
184. All OAMs would hold common reference data such as the standardized lists mentioned further below in this paper.
185. A search request by an investor from one OAM software application would be transferred to all other OAMs simultaneously.
186. All OAMs on the network would return results to the OAM application that was the source of the search request ("source OAM"). These results would be in the form of hyperlinks to the relevant regulated information held on OAM databases. Regulated information itself would not be passed to the source OAM.
187. The source OAM's software application would present the investor with an aggregated list of OAM result hyperlinks.
188. Once presented with an aggregated list of hyperlink results, the investor would click on a hyperlink to view the regulated information required. Clicking on a hyperlink on a list of results connects the investor to the database of the OAM where that information is stored. The relevant item of regulated information would be pulled from the relevant OAM database and displayed to the investor.
189. The main difference between Models A and B is that Model B is not based on the physical existence of a central webpage.
190. The de-centralised model is relatively straight-forward. Member States would be solely responsible for their own OAMs and their own OAM(s) inbuilt search capabilities.
191. The de-centralised model is expected to be more costly to implement and maintain overall than the CAP model. This is because the software changes to enable investors to search the OAM network would have to be made by every OAM. In the CAP model this cost is incurred by one system only. In the worst case this model requires 26 different interfaces at each OAM to create the interoperable network. In the best case scenario, if all OAMs agree to use the same interface system, then this model will not raise the issue of the governance of physical location and physical maintenance of the CAP that model A raises and will have all the advantages of model A.
192. The cost of implementation and maintenance of functionalities would be borne relatively equally by all OAMs depending upon the ease by which OAMs could incorporate this functionality into their existing systems.
193. The cost of future enhancements in search functionality would also be duplicated by the number of existing OAMs. This is due to the fact that these enhancements should be implemented by every OAM.
194. Both models A and B may have the disadvantage of not allowing to search directly on value added services if these are not visible in the network.

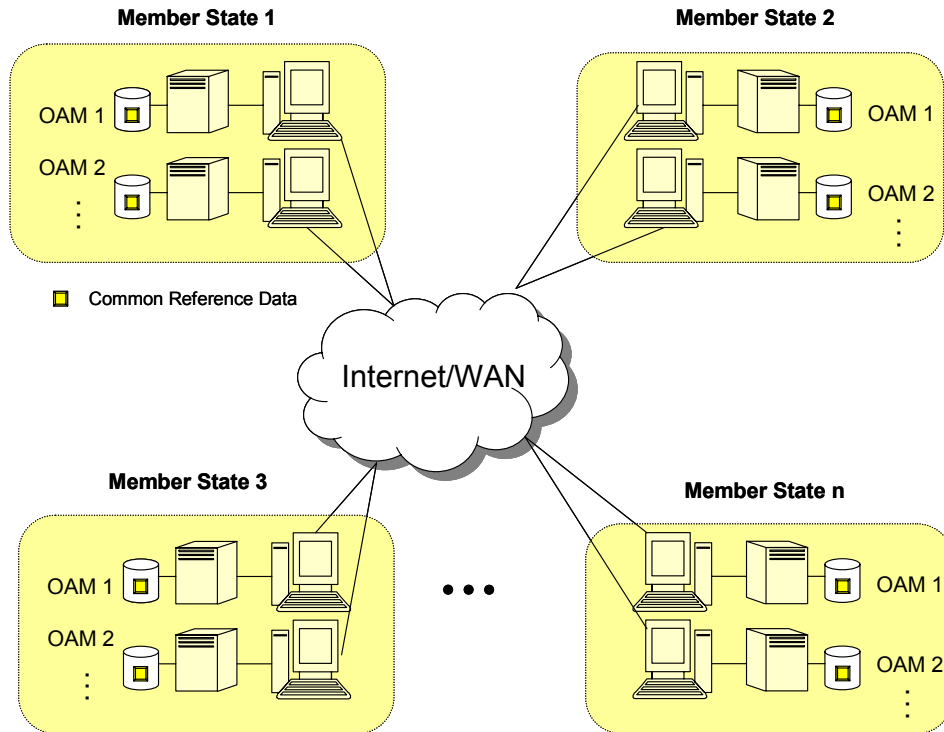


Figure 4: De-Centralised Model Data Location diagram

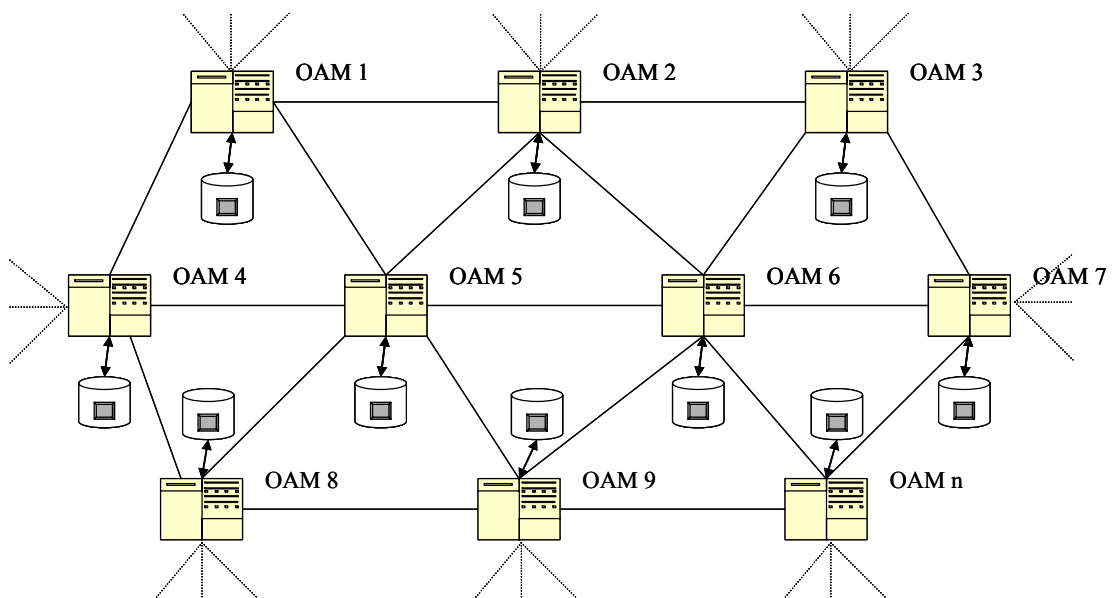


Figure 5: De-centralised Model logical network diagram

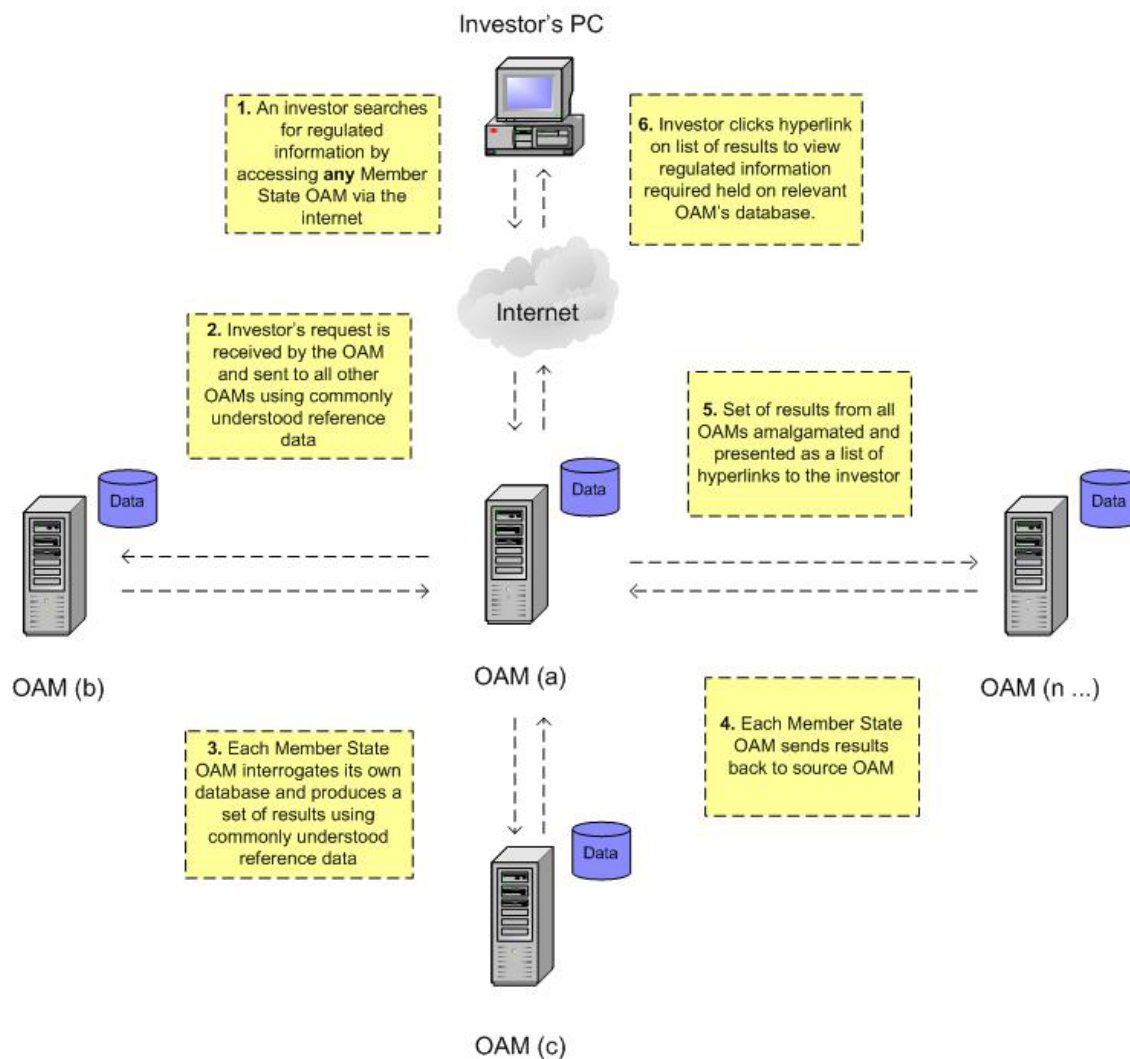


Figure 6: De-centralised Model network process flow diagram

Probable interoperability process between OAMs under Models A and B

195. Set out below is a brief description of the probable interoperability process that will occur when an investor requests regulatory information held by OAMs under the CAP or de-centralised models (models A or B).
196. The purpose of this description is to make clear why detailed common technical standards are needed to ensure interoperability between OAMs.
197. It is presumed that when an investor makes a request for regulated information held by OAMs, the investor will be required to enter parameters that define what information he is searching for. These parameters could include the name of the issuer who produced the regulated information required and the type (e.g. "annual accounts") of regulated information required.
198. Once the investor has finished entering the parameters for the regulated information he is searching for a request is submitted to all OAMs simultaneously for that information set. The request will include information as to what kind of request it is and how it should be processed by the recipient OAMs.
199. All OAMs must have in their system functionality that is capable of understanding and processing the request.

200. If a request is correctly recognized and processed, it triggers an automatic interrogation of an OAM's database by the OAM's software using the parameters entered by the investor held within the request. The OAM's software should be able to return a list of available documents as a result of this interrogation or, if the OAM storage system does not hold any document related to the search, it should indicate this fact.
201. The OAM's software will be required to prepare the result in a form compliant with the interoperability standard as a set of links to the documents satisfying the search criteria. The information received from all OAMs should be grouped into one combined list of results.
202. Once the list of aggregated results links is presented to the investor, he should be able to click on a link on the list to view the regulated information required that is located remotely from the investor in an OAM's storage system.
203. This process requires common technical standards to be established within an interoperability agreement which all OAMs must follow. Otherwise, communication of information to and from OAMs will fail.
204. If the network model follows Models A, B or C above there will need to be minimum requirements put in place, referred to as the "interoperability agreement", to ensure communication between the various national systems or a central point.

Model : C- Central List of Issuers model

205. Model C utilises a central application server and a central database containing a list of all issuers and, for each issuer, links to the OAMs who hold regulated information for that issuer.
206. An end user who wants to search for regulated information, can connect to the central site's home page via a standard internet connection and select an issuer from the centrally maintained list.
207. In response to the end user's selection, the application server interrogates the database and retrieves the link, or set of links, to the OAM(s) holding regulated information for that issuer. If multiple OAMs hold regulated information for the relevant issuer, a list of links is displayed to the end user who can then access each of the listed OAM websites in turn. Otherwise one link is presented that directs the end user to the only OAM website that holds regulated information for that issuer.
208. Model C requires that hardware and software equipment, including the database of issuers, be installed in one central site. The database of issuers would be updated, on a daily basis, with information sent from all OAMs. The quality of data must be assured through procedures centrally managed by dedicated personnel.
209. Such a solution requires the central allocation of several resources to manage and maintain the whole system. The most resource intensive and costly task would be the maintenance of the list of issuers.
210. Model C would place less of an infrastructure burden upon small Member States as requests for regulated information from end users would be directed only to OAMs that hold regulated information for particular issuers instead of to all OAMs as in models A and B.
211. One additional advantage of model C is that it would direct investors to the OAM where information on a said issuer could be found, in addition allowing to retrieve information on value-added services available.

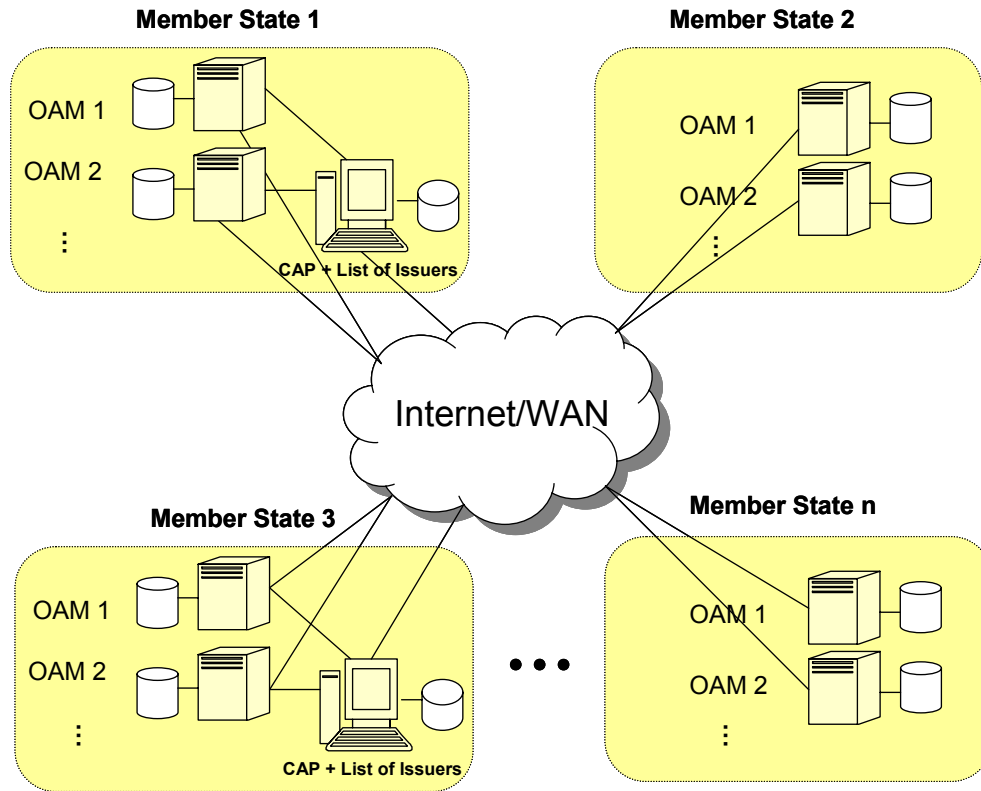


Figure 9: Model C data location diagram (List of Issuers' Data)

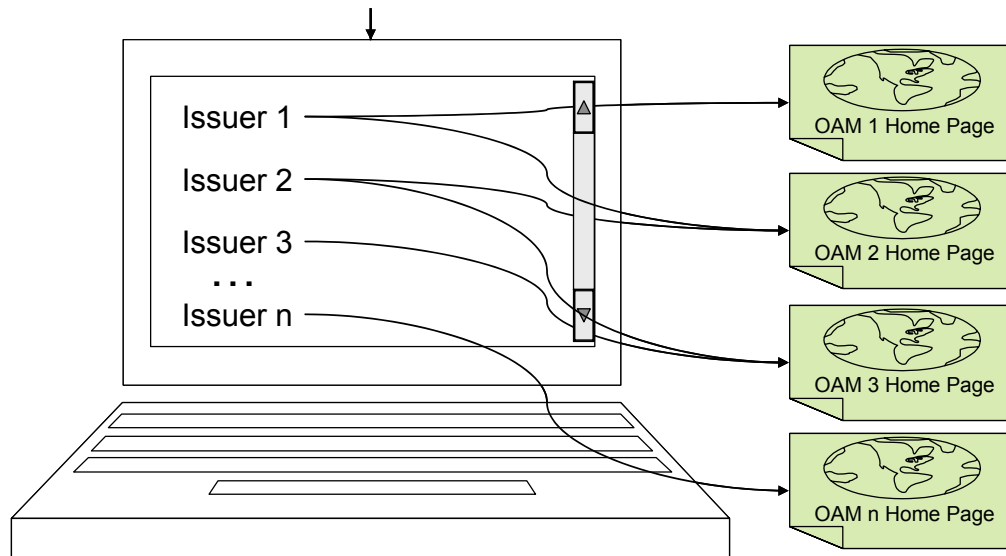


Figure 10: Model C logical network diagram

Model D: Basic Access Model

212. CESR considers that if the models described above are found to be undesirable or unrealistic in their design, a very simple network of links on competent authority websites could be established as a solution that would provide basic access to all OAMs for the EU investor.
213. This model would require every national competent authority to publish on its website a list of hyperlinks to every OAM in the EU. An investor would be required to use the hyperlinks to access each OAM individually in order to find the regulated information the investor required.
214. Whilst this model has the advantage that implementation costs would be negligible, CESR does not believe that this model fully satisfies the concept of a "one stop shop" for pan-European regulated information that is envisaged above. To make best use of this type of "network", an investor would be required to have prior knowledge as to which Member State OAM held the regulated information the investor required. If the investor did not have this knowledge, the investor would be required to search every OAM one by one until he or she found the relevant item of regulated information required.

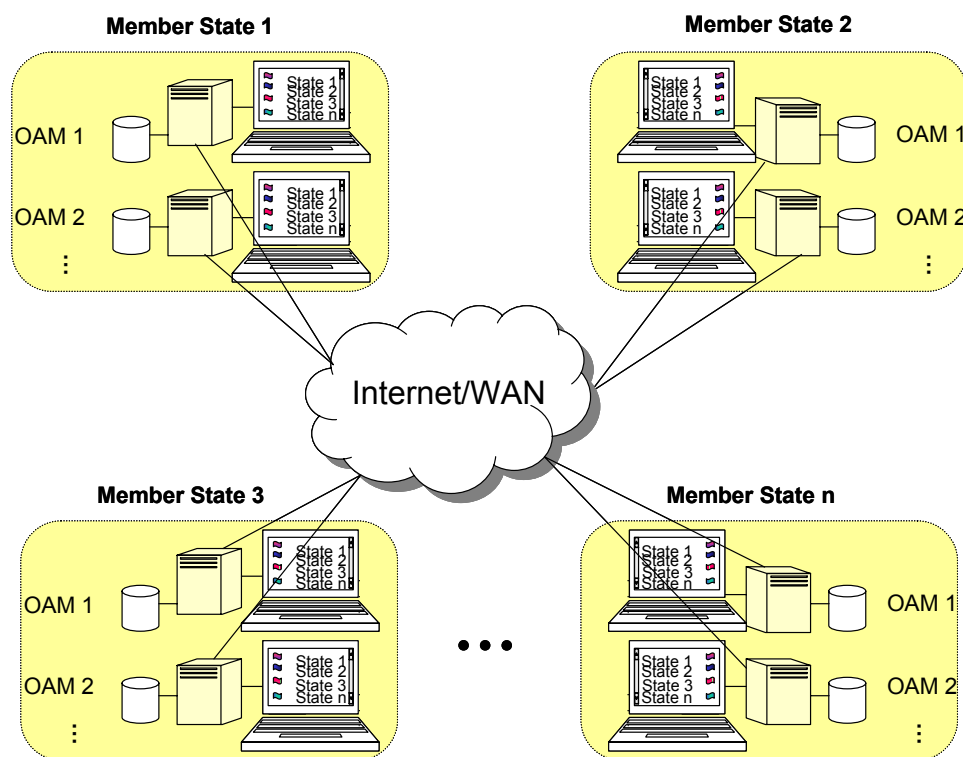


Figure 7: Model D Data Location diagram (no Common Reference Data)

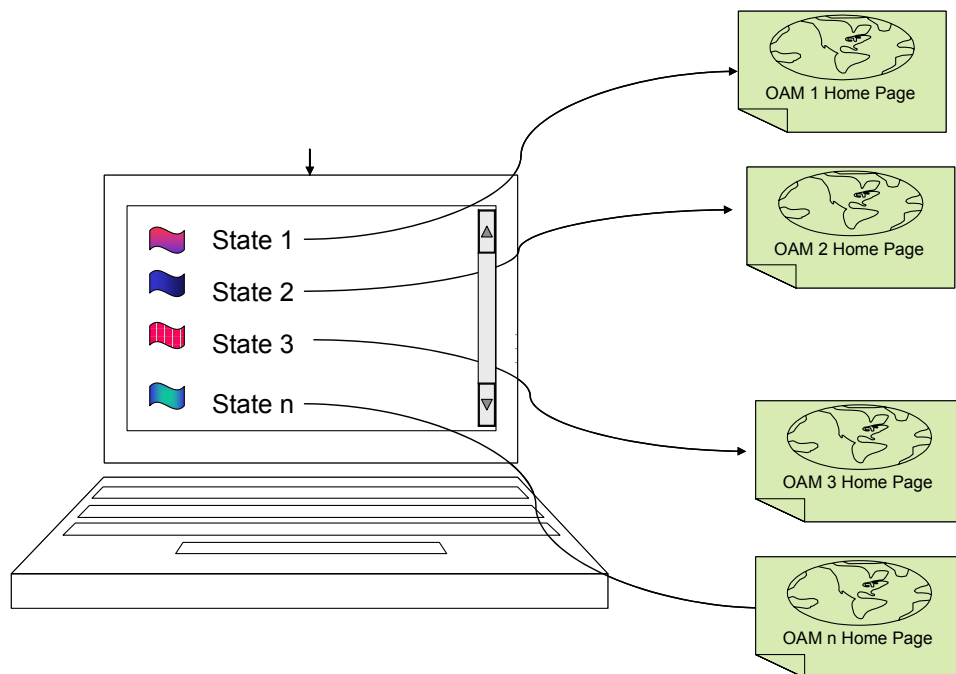


Figure 8: Model D Logical Network Diagram

B. Possible content of interoperability agreement

215. The following paragraphs outline the content of an interoperability agreement for models A, B and C. Considering the structure of model D, there is no need to have an interoperability agreement because the national OAMs will not need to communicate with each other or with a central point. The content of the interoperability agreement is also limited in model C, as outlined below.

Content of the interoperability agreement in models A and B

216. CESR considers that the interoperability agreement will need to cover at least the following:

- "common reference data items";
- common interface and communication standards;
- common search keys;
- administrative issues (such as how to collect fees cross-border).

Common reference data

217. The agreement of technical interoperability standards should include harmonization of methods by which OAMs classify and identify regulated information.

218. When an investor searches the OAM network for regulated information, OAMs will be required to return consistent results to the investor based upon a common understanding of the parameters the investor has entered. For example if an investor searches for the "annual financial reports" belonging to the issuer "EADS NV", the network should be capable of displaying the relevant information irrespective of the conventions used in a particular nationality to classify that information, or the language in which the information is presented.

219. In the example above, an investor could reasonably expect results returned that include documents classified under versions of the issuer's name. Similarly an investor could reasonably expect to gain access to all annual financial reports relating to that company

whatever the convention for classifying the "annual financial report" within a particular jurisdiction.

220. Set out below are some of the possible names used for the issuer EADS NV:

- EUROPEAN AERONAUTIC DEFENCE AND SPACE COMPANY
- EADS

221. Set out below are some of the translations used in the EU for an "annual financial report":

Netherlands	JAARVERSLAG
Finland	Vuosittilinpäätös
France	rapport financier annuel
Germany	JAHRESFINANZBERICHT
Italy	BILANCIO ANNUALE
Portugal	relatório financeiro anual
Spain	INFORME ANUAL
United Kingdom	ANNUAL REPORT & ACCOUNTS; or ANNUAL REPORT
Greece	ΕΤΗΣΙΑ ΧΡΗΜΑΤΟΟΙΚΟΝΟΜΙΚΗ ΕΚΘΕΣΗ

222. The above examples attempt to illustrate the importance of Member State OAMs identifying and classifying information in a common manner. Without the harmonization of this "common reference data", the results returned to an investor searching on an OAM network will be inconsistent and incomplete. The harmonization of these standards should form one part of an interoperability agreement

223. "Common reference data" in this context is used to refer to the minimum common set of data needed to allow searches through the OAM network. Common reference data could include:

- a unique issuer identification code;
- code and name of document types
- date of publication;
- ISO country code to define the issuer's home member state;
- code to represent the document's language.

224. The codes that make up this "common reference data" will not be visible to the investor. Common reference data will be used by the systems holding regulated information to enable those systems to uniquely identify a document according to the document's main characteristics. This uniqueness allows the document to be located by the system in response to the search keys entered by an investor.

225. This common reference data will also have to be held in particular standardized formats. For instance, the date of publication will need to be held in a common recognized format such as "DD/MM/YYYY". The codes that represent the document's language and type will have to be of a set length and commonly agreed alphanumeric format (e.g. "UK" to represent "United Kingdom").

Common interface standards

226. The interoperability agreement will also have to specify in detail the interface requirements that each OAM should have in place to enable communication between them.

227. In order to achieve seamless access to all stored information, and allow users to perceive OAM's systems as a "one stop shop" (as described in Models A and B), it is required that an

interoperability agreement exists. This agreement specifies how all OAMs' systems behave to allow access to stored information and present a unified result to users.

228. The content of the agreement specifies in detail the common reference data format, layout and access techniques.
229. The sections above attempt to identify the need for common ways of identifying regulated information within networked systems ("common reference data") and the need for agreement of the method and form of communication between systems on the network ("common interface standards"). Both these areas will have to form part of the interoperability agreement. All OAMs must follow an interoperability agreement strictly if the OAM network is to provide a "one stop shop" to pan-European regulated information as envisaged by the Commission.

Common Search Keys

230. CESR has identified the following parameters or "search keys" that an investor might expect to be able to use when searching for regulated information on the OAM network. An investor would be required to input a reasonable level of detail into these search parameters so that a sensible number of results can be returned from the network. Examples of appropriate parameters include:

- Issuer name;
- Document type;
- Date of publication / date range of publication;
- Issuer's home Member State; and
- Language of document.

231. If the OAM network is to be required to return results based upon the above search parameters, all regulated information documents will need to be classified by every OAM according to every one of these categories. However, the values that are held as these common reference data items need to be standardized so they were common to all OAMs.

232. Standardizing these values for these categories is discussed below. These categories are subdivided into those that belong to the issuer and those that belong to the regulated information itself.

Search keys belonging to an issuer:

233. The following categories can be viewed as attributes of the issuer of regulated information rather than attributes of the regulated information itself.

Issuer name

234. The issuer's current legal name might be used as a search key to retrieve the complete list of regulated information produced by the issuer. In this regard OAMs would need to maintain a link between each document stored and the appropriate issuer identification code, unique at Member State level.

235. The issuer's current legal name will be translated into the corresponding issuer identification code by the application server. As a consequence, all the documents linked to that specific code could be retrieved including those referenced to outdated company names.

Member State

236. CESR believes that an investor should be able to refine searches for regulated information by specifying the Member State that is most likely to hold that information. Of course, this Member State parameter should default to an "all" option to enable the investor to search all EU OAMs.

237. Under the Directive an issuer of equity or low denomination debt is required to send its regulated information to the OAM of the Member State where it is incorporated. An issuer of high denomination debt or a third country issuer has greater choice as to its home competent authority and consequently the OAM to which it must send its regulated information.
238. A common list of identifiers for Member States should be drawn up under the interoperability agreement for use by OAMs for classification purposes.
239. If the provision of a search by Member State was mandatory, the software used by/ available to an investor would be required to restrict electronic requests for regulated information to particular Member State OAM(s).

Search categories belonging to regulated information:

240. The following categories are attributes of items of regulated information themselves.

Date of publication / date range of publication

A record should be kept by every OAM of the date (and potentially time) at which the OAM receives regulated information from an issuer (or third party representing an issuer). This requirement is included in paragraphs 80 to 85 of this consultation paper.

241. However, a more useful date, for classification purposes, would be the date of publication as stated on the document or claimed by an issuer.
242. There may be circumstances where there is a delay in the receipt of regulated information by an OAM. So, the date as stated on the document may be earlier than the date on which it was received by the OAM.
243. However, the investor will have no knowledge (or interest) in when an item of regulated information has been received by an OAM and will assume that the item can be found using the date of publication as stated on the document. So, the most useful date that could be recorded by an OAM for the purposes of searches by date, would be the date of publication as stated on the item of regulated information.
244. An investor should be able to search by individual date and by a range of dates. However, there may be a need to restrict the date range within which documents can be searched in order for a reasonable number of results to be returned. A date range must be a mandatory field to avoid the above illustrated problem

Document type

245. As illustrated in the "annual financial report" example above, each Member State has its own way of describing equivalent types of regulated information.
246. A common list of document type identifiers should be drawn up under the interoperability agreement for use by all OAMs, for classification purposes.
247. An investor should be able to search according to a standardized finite list of document types.
248. However, under the Directive, not all document types are regarded as "regulated information". For example prospectus documents are not defined by the Directive as regulated information. Member States will often have discretion as to whether certain types of information are regarded as "regulated information" within their jurisdictions.
249. So, CESR believes that the standardized list of document types should be sub-divided into two lists. The first list should include document types that all Member States regarded as regulated information. The second list should include those document types that are not on the first common list, but are types that one or more Member States classify as regulated information.
250. An investor should be able to search the OAM network using both lists of document types. However, an OAM in a Member State that does not recognize a particular document type as "regulated information" would not be obliged to return results for a request for that information type by an investor. Alternatively, an OAM could return results for non-regulated information in response to an investor's search, but the investor may be required to access that

information from the OAM under a separate arrangement (for example, the investor may be required to pay for access to that information).

Language of document

251. Under Directive requirements, regulated information will be written mainly either in the language of the issuer's home Member State or in a language "common in the sphere of international finance".
252. CESR believes that an investor should be able to limit the search results returned from an OAM network to items of regulated information, which can be read and understood by that investor. For example, if the investor is not fluent in a language common in the sphere of international finance, the investor should be able to limit items of regulated information to documents written in languages in which the investor is fluent.
253. The language in which an item of regulated information is written should be recorded by an OAM for classification purposes. A common list of identifiers for languages should be drawn up under the interoperability agreement for use by OAMs for classification purposes.

Content of the interoperability agreement in model C

254. The content of the interoperability agreement for model C is more limited than in models A or B. In fact, the interoperability agreement will need to address the initial definition, maintenance and update of the list of issuers and the links to the national OAMs storing the regulated information of the said issuer.
255. In addition, the paragraphs on common interface standards for communication] and on common reference data format, layout and access techniques will also apply as in models A and B.

IV - COSTS AND FUNDING

Costs

256. The scale of costs for implementation of an OAM network will depend largely on which of the above models is chosen and whether a competent authority appoints an existing mechanism to fill the role of OAM or requires that a new mechanism be built to serve this purpose.
257. It is likely that, where possible, Member States will decide to appoint an existing storage mechanism as the OAM for their own country.
258. The Technical Experts Group ("TEG") for this Directive recently issued a survey to gather information from all Member State competent authorities as to the storage mechanisms that currently exist within the EU. For the purposes of the survey, a storage system was defined as a system that could serve as an OAM in the interim period after the implementation of the Directive but before full implementing measures are established by the Commission.
259. The results of the survey, unsurprisingly, found that a variety of storage mechanisms existed throughout Europe. Of the 23 Member States that responded to the questionnaire, in 22 there is at least one storage system in place.
260. These mechanisms use different storage and communication technologies. Consequently, the cost of networking these mechanisms is likely to be higher than if all OAMs were newly built to the same technical standards.
261. The ongoing running costs of the OAM network will depend upon whether one common interoperability standard can be agreed. If multiple interoperability standards are necessary, the ongoing running costs of the network will, of course, be higher.
262. Multiple interoperability standards may be necessary if OAMs are asked to draft an interoperability agreement amongst themselves and one or more OAMs are unwilling to conform to a single standard that was incompatible with their existing systems.

263. As for the cost evaluation for the national OAMs, CESR considers that, for the moment, a detailed analysis on the costs is not feasible, and will be presenting this issue later in a separate paper. However, preliminary evaluations indicate that broadly model B is more expensive than Model A. These very preliminary estimates also indicate that the costs for Model D are marginal and the costs for Model C will be somewhere in between the other models.



Funding

264. The funding of the OAM network will depend upon the model chosen above and whether an OAM is commercially or publicly operated.
265. In Model A (the CAP network), Member States would share the cost burden of implementing and maintaining a CAP. No data would be stored at the CAP. However, Member States would be responsible for funding any enhancements to the CAP that were necessary as a result of requests from issuers, additions to the OAM network or to accommodate advances in technology.
266. Also, in Model A, individual Member States would be responsible for ensuring that their OAMs adhered to interoperability standards and implementing any enhancements that were necessitated as a result of changes to the CAP. The funding of these costs would depend upon whether an OAM was run by the competent authority or a commercial entity.
267. In Model B (De-centralised network), individual Member States would only be responsible for ensuring that their OAM(s) adhered to the interoperability standards and implemented necessary ongoing enhancements. In Model B each OAM would bear the cost because it would be required to build and maintain a search facility to allow investors to interrogate all EU OAMs. In Model A this cost is borne solely at the CAP level.

Q18: What are your views in relation to the issues being discussed above?

ROLE OF THE COMPETENT AUTHORITY

Extract of the Commission's mandate

3.2 (5). Role of Competent Authorities in supervising OAM's compliance with quality standard, for instance in the cases where two or more Member States would decide to officially appoint a joint mechanism for the central storage of regulated information. The technical advice could also give consideration as to whether competent authorities should have a role in adapting standards over time in case of technical developments and similarly.

Relevant Level 1 provisions

Article 21 (2) of the TD. The home Member State shall ensure that there is at least one officially appointed mechanism for the central storage of regulated information. These mechanisms should comply with minimum standards of security, certainty as to the information source, time recording and easy access by end user and shall be aligned with the filing procedure under Article 19 (1).

Introduction.

268. According to Article 24.1 of the Transparency Directive (the "Directive"), the Officially Appointed Mechanisms (OAMs) are subject to supervision by the competent authority. The competent authority of the Member State in which the OAM has its registered office shall ensure the proper functioning of the OAM. It must particularly supervise the OAM's compliance with the minimum quality standards of security, certainty as to the information source, time recording and easy access by end users as set above. The competent authority must have unrestricted and free access to all regulated information stored in the OAM.

269. CESR has been mandated by the European Commission to explore the general role of the competent authorities in supervising the OAM's compliance with the minimum standards. CESR has been specifically required to analyse the role of the competent authorities in case more than one competent authorities decide to use the same OAM as well as to consider whether competent authorities should have a role in adapting over time the quality standards the OAMs will have to comply with. Finally, CESR examines the role of the competent authorities in supervising the future EU storage network, provided in Article 22 of the Directive.

The general role of the competent authorities in the supervision of the OAMs

270. The competent authority of each member state is responsible for ensuring that the OAM of this member state meets and complies with all the requirements provided for in Article 21.2 of the Directive such as minimum quality standards of security and certainty as to the information source. This should be the first regulatory role for the national CA.

271. It is obvious that the competent authorities that run the OAM have a direct supervision over the storage mechanism. Those competent authorities that do not run the OAM should be vested with the necessary regulatory and supervisory capabilities / powers to supervise the fulfillment of the requirements by the OAMs.

272. CESR considers that the supervision of the OAM needs to be effected by two different means:

(i) By involvement of the competent authority at the time the OAM is to be appointed.

273. The Transparency Directive states that Member States should appoint at least one OAM. However, there is no specific requirement in the level 1 text for competent authorities to be specifically involved in the appointment of the OAM.

274. CESR considers it appropriate to underline that supervisory authorities will have to play a role in the appointment of the OAM. CESR recommends that competent authorities be involved in the appointment of the OAM as far as this is consistent with the national jurisdiction. The level



of this involvement will depend on the implementation of the Transparency Directive in each Member State.

(ii) By ongoing periodical supervision, which could include also on site inspections.

275. Article 24.4 of the TD stated “each Member State shall designate the central authority referred to in article 21(1) of Directive 2003/71/EC as central competent administrative authority responsible for carrying out the obligations provided for in this Directive and for ensuring that the provisions adopted pursuant to this Directive are applied. (4) Each competent authority shall have all the powers necessary for the performance of its functions”.

276. Under the Directive, competent authorities will need to be granted with all the powers necessary to ensure compliance with the TD.

Q19: Do you agree with the above approach? Please provide reasons for your answer if you do not agree.

The role of the competent authorities in the event several Member States are sharing an OAM

277. Two or more member states may share a joint mechanism for the central storage of regulated information. CESR considers that for reasons of effective supervision, the joint OAM must have its registered office in the territory of one of the joining Member States.

278. When sharing an OAM, the participating member states must ensure an efficient functioning and supervision of the common OAM. Member states may choose some sort of cooperation in supervising the OAM or they may appoint the competent authority of one participating Member State to perform this function alone. CESR considers it important to point out that the above agreements need to ensure stability in the supervision of the OAM(s).

Q20: Do you agree with the above approach? Please provide reasons for your answer if you do not agree.

The role of the competent authorities in adapting the standards

279. The standards set out above should be adapted to technical developments. This is accomplished by new level 2 measures. CESR considers that within the limits of Level 1 and 2 provisions, competent authorities can update the standards of the OAMs depending on the new technological or other innovations.

280. Within the framework of standards given by the legislative measures, the competent authorities should cooperate in setting and implementing the technical requirements for OAMs and developing them further in order to take account of technological innovations or other changes in the market.

Q21: Do you consider that a competent authority can, within the limits set out above, change the standards over time in case new technological evolutions occur ?

Regulation and coordination of the operation of the future EU electronic network

281. Depending on the specific structure of the future network model to be implemented across Member States, in accordance with article 22.1. b of the Directive, CESR recognises that there might be a need to improve cooperation among competent authorities in relation to the supervision and the technical updating of the European network. So, for these purposes, the choice of a specific network model will also need to encompass the decision on how to supervise the network.

282. This coordination will be better effected at the level of CESR.



Q22: Do you agree with the above approach? Please provide reasons for your answer if you do not agree.



THE FILING OF REGULATED INFORMATION BY ELECTRONIC MEANS WITH THE COMPETENT AUTHORITIES (ARTICLE 19(1) OF THE TRANSPARENCY DIRECTIVE)

Extract of the Commission's mandate

3.4 The filing of regulated information by electronic means with the competent authorities (Article 19(1) of the Transparency Directive)

DG Internal Market requests CESR to provide technical advice on possible implementing measures on the filing of regulated information by electronic means with the competent authorities (Article 19(1) of the Transparency Directive). The technical advice should concentrate on the following issues:

(1) **Minimum quality standards** to be complied by the competent authorities, in particular in terms of security; of certainty as to the information source and of time recording. This issue should at least address the following points:

(a) whether it would be appropriate to require filers (issuers, holders of voting rights etc) to use electronic means only for filing regulated information with the competent authorities, types of electronic means that could be suitable taking into consideration the need to achieve certainty as to the source of information and the need to ensure integrity of content of regulated information;

(b) in this connection, how best to ensure authenticity of origin, in particular (but not only) if the information is to be filed with the competent authority by an agent (or similar) of the issuer or other indirect methods

(c) whether it would be appropriate to require filers to use input standards and templates for drafting regulated information.

(d) Implications of any validation procedure of regulated information on the recording of the filing.

(2) **Alignment of this procedure with the filing with the OAM.** This issue should at least address the following points:

(a) Possibility that the competent authorities act as interface for filing of regulated information with the OAM, whether the OAM is operated by the competent authority or not;

(b) Interaction between the powers of the competent authorities to examine regulated information and take appropriate measures (cf. Article 24(4)(h)) and the availability of information to end users (see also section 3.2, paragraph 3(b)).

Directive requirements

Article 19 of the Transparency Directive

1. Whenever the issuer, or any person having requested, without the issuer's consent, the admission of its securities to trading on a regulated market, discloses regulated information, it shall at the same time file that information with the competent authority of its home Member State. That competent authority may decide to publish such filed information on its Internet site.
(...)

2. The home Member State may exempt an issuer from the requirement under paragraph 1 in respect of information disclosed in accordance with Article 6 of Directive 2003/6/EC or Article 12(6) of this Directive.

3. Information to be notified to the issuer in accordance with Articles 9, 10, 12 and 13 shall at the same time be filed with the competent authority of the home Member State.

4. In order to ensure the uniform application of paragraphs 1, 2 and 3, the Commission shall, in accordance with the procedure referred to in Article 27(2), adopt implementing measures. The Commission shall, in particular, specify the procedure in accordance with which an issuer, a holder of shares or other financial instruments, or a person or entity referred to in Article 10, is to file information with the competent authority of the home Member State under paragraphs 1 or 3, respectively, in order to:

- (a) enable filing by electronic means in the home Member State;
- (b) coordinate the filing of the annual financial report referred to in Article 4 of this Directive with the filing of the annual information referred to in Article 10 of Directive 2003/71/ EC.

INTRODUCTION

283. According to article 24(1) of the Transparency Directive each Member State shall designate the authority responsible for ensuring that the provisions adopted pursuant to the Directive are applied. These provisions relate to the content of the regulated information, for example the annual financial reports and the half-yearly financial reports, as well as the manner the regulated information is disseminated and kept available. Enabling the competent authorities to carry out these regulatory duties, the Directive imposes some powers and supervisory means. For example, article 24(4) requires that each competent authority shall have all the powers necessary for the performance of its functions. A vital factor for realizing this performance is to have an on going access to regulated information. Hence, article 19(1) requires that whenever the issuer, or any person having requested, without the issuer's consent, the admission of its securities to trading on a regulated market, discloses regulated information, it shall at the same time file that information with the competent authority. The same applies to holders of shares, voting rights and other financial instruments.
284. Under the Directive each issuer whose securities are admitted to trading on a regulated market situated or operating within a Member State has a home member state and the Directive obliges each issuer to file the regulated information with the competent authority of its home member state. Depending on the role of the competent authority in question, the filed regulated information may be used for different supervisory purposes (e.g. annual financial reports in compliance with IFRS or disclosure of price sensitive information in compliance with market abuse directive provisions).
285. In the contrast with the other provisions in the Directive, CESR considers that the process by which the filing of the regulated information with the authority is done does not need to be harmonised across in detailed manner in order to meet the objectives of the Directive. The aim of filing is, as stated above, to provide adequate means for competent authorities to perform their duties under the Directive. Thus it is important that the filing process is reconciled in each member state for its supervisory environment and made compatible with the different supervisory tools in use. Moreover, the competent authority is an administrative authority and national laws governing administrative procedures may also set restrictions for example on the filing by electronic means with the authority. Therefore the standards concerning the filing obligation should be on general level and the factual implementation should be left at the national discretion as widely as possible.
286. CESR considered additionally, as suggested in the call for evidence whether the standards for the OAM's should be replicated for the filing with the competent authority. For that, CESR considered the purposes of both processes. Storage is intended to ensure at any time access to regulated information in a centralized spot, whereas the filing procedure is, as said above, established for the supervisory goals solely.
287. For the purpose of this mandate, CESR considers "filing" the process by which information is presented or made available to the competent authority in order for it to fulfill its duties in accordance with the Directive. Therefore, CESR considers that only when regulated information is available to the competent authority, with the appropriate and adequate content in the light of the Directive, the issuer's obligations are met in accordance with the Directive. In addition, for the purpose of this part of the consultation paper, "filer" is used to represent all of those that



will file information with the competent authority in accordance with Article 19 of the Directive.

Q23: Do you agree with the above interpretation of the purpose of filing and the conclusions made on basis of the interpretation? Please provide reasons for your answer.

288. Pursuant to Article 2(1)(l) of the Directive “electronic means” are means of electronic equipment for the processing (including digital compression), storage and transmission of data, employing wires, radio, optical technologies, or any other electromagnetic means. Thus, according to the Directive e.g. a fax can be considered being electronic means.

289. Bearing this in mind, filing with the competent authority by electronic means may not necessarily enable completely electronic environment for reception, handling and storage of filed information as envisaged for filing with the OAM in paragraphs 44 to 55 above. In addition, electronic filing with the competent authority calls only for electronic reception of filings. The filed information may still be handled and stored as paper documents. However, CESR considers that the aims of timely availability of the regulated information and adequate control by the competent authority may be best served by a completely electronic environment. Therefore, CESR considers that some standards can be the same with the standards concerning OAM (especially those relating to security issues) but not all standards need to be identical because the issues that arise in one and the other processes are different. Where reception and handling of filings with the competent authority are fully automated, the standards for the OAM’s are more relevant than in other cases.

Q24: Do you agree with the above conclusion? Please provide reasons for your answer.

1 – MINIMUM QUALITY STANDARDS

290. The Commission has requested CESR to define minimum quality standards to be complied by competent authorities at least in relation to security, time recording and certainty to the information source. These issues are dealt more in detail below.

291. CESR considers that the architecture implemented by the competent authority for the electronic filing must be open for the usage of different hardware and software from competing vendors, i.e. the architecture should support standard file formats that are non-proprietary and obviate single vendor software applications. It also has to be configurable to support the required range of topologies, user community sizes and traffic requirements. In certain situations, however, competent authorities could provide that information be structured into a specific prescribed templates text for the purpose of fast processing.

1.1 FILING BY ELECTRONIC MEANS

292. The mandate requests CESR to consider whether it is appropriate to require filers to use only electronic means for filing regulated information. CESR is of the opinion that electronic means are the best to ensure proper filing and has expressed this view in paragraphs 179-184 of the progress report.

293. For the filer electronic filing is usually a fast and easy way to file regulated information with the competent authority. However, the actual benefits for the filer depend on the way it usually handles the information. E.g. an issuer handling regulated information in electronic form benefits from the possibility of electronic filing, but an individual shareholder may not have the necessary means of communication available for electronic filing.

294. For the competent authority electronic filing together with completely electronic environment enables faster and easier reception, handling and storage of filings as well as easier search and analysis of the filed regulated information.
295. Basically, there are three options on how electronic filing could be implemented:
- a) by requiring all competent authorities to implement electronic filing as the sole method of filing;
 - b) by requiring competent authorities to enable electronic filing as an alternative method of filing; or
 - c) by encouraging competent authorities to enable electronic filing (and preferably as the sole method of filing).
296. CESR considers that the ultimate goal is that electronic filing in completely electronic environment is used by all competent authorities as the sole method of filing (option a). In this case, CESR also considers that a person that is to file information with the competent authority should be required to use electronic means regardless whether the person is an issuer or a holder of shares, voting rights or other financial instruments, or a person or entity referred to in Article 10 of the Directive.
297. However, as said above, CESR considers that there is no need to harmonize the electronic filing of regulated information throughout Europe. When implementing the possibility for reception of electronic filings, competent authorities should take into account national needs and circumstances. In addition, depending on the systems in place and the size of markets in different Member States, it is likely that a requirement for a completely electronic environment for filing would impose significant costs upon the authorities, issuers and filers in those Member States. Therefore, the preferable option in the short term would be option b or c.
298. When the competent authority implements the possibility or requirement for electronic filing, it should also take into account the fundamental change the requirement of electronic filing may mean for some filers (infrequent filers, small issuers, shareholders). This may be done by allowing alternative methods of filing or by providing an adequate transition period. In the latter case, during the interim period the filing systems of the competent authority would need to be able to receive paper feeds as well as electronic feeds.

Q25: Do you agree with the above approach? Please provide reasons for your answer.

1.2 - MINIMUM STANDARDS IN RELATION TO SECURITY AND CERTAINTY AS TO THE INFORMATION SOURCE

299. CESR discussed this issue in detail in its progress report (paragraphs 193-202). In that paper, CESR concluded that the mechanism should provide validation of filings, receipt function, docketing of filings as well as an evaluation process for acceptance of waivers and tools for recovery. An appropriate level of security must be incorporated into the electronic filing mechanism. The mechanism should provide user authentication, confidentiality, data integrity and availability.
300. Filing requirements must achieve certainty as to the source of information and ensure integrity of content of regulated information. They shall be clear, simple and affordable. The levels of security need to be aligned with the ones required to send information to the media in the proposed level 2 measures for the Transparency Directive (article 13 of Working document ESC/34/2005) in order to prevent avoidance or disruption of the system.
301. The electronic filing mechanism must be able to validate the filing of the regulated information. The mechanism should be able to electronically acknowledge receipt of documents and either confirm validation of filing or reject submittal with adequate explanation for rejection.
302. Within the limitations set by national provisions regarding representation, filers need not send the information personally, but may use third parties. The filing mechanism needs to



encompass this filing on behalf of the filer. Nevertheless, the filer remains fully responsible until the regulated information is made available to the competent authority.

Q26: Do you agree with the above?

Q27: Is there a need for an additional level of detail? Please provide reasons for your answer.

1.3— MINIMUM STANDARDS IN RELATION TO TIME RECORDING

303. In paragraph 195 of the progress report CESR recommended that the filing system of a competent authority should add a date stamping to each filing. The date stamping may serve multiple purposes: to ensure that competent authorities know when the information was filed into the system, to help to search and identify each piece of information that is filed with the system.
304. The mandate requires CESR to take into consideration the implication of validation procedure of regulated information on the recording of filing.
305. Each piece of information that is filed with the system has to undergo a validation procedure and CESR explained in the progress report that the filing system should be able to report to the filer whether filing was complete (paragraphs 193 and 194). CESR reads the mandate as referring to this technical validation procedure (technical adherence to the standards, completeness and accuracy of the formats) and not to the validation of the substance of the regulated information. For the above purposes (proof of filing and identification of each piece of information) the validation process is completed as soon as the information is checked for technical adherence to the system standards. CESR considers that the content checking of the information is irrelevant for the purposes of date stamping the information. CESR also envisages that the checking for technical adherence to the standards will be done automatically by the system and will be brief, so irrelevant in what regards time stamping.

Q28: Do you agree with the above or do you envisage particular issues that need to be dealt in relation to the validation procedure and the time stamping of regulated information? Please provide reasons for your answer.

1.4— USE OF INPUT STANDARDS AND TEMPLATES TO FILE REGULATED INFORMATION

306. CESR addressed this issue in the progress report (paragraphs 190 and 191) and concluded that filers should be able to use various non proprietary formats to send the regulated information to the competent authorities. Notwithstanding, CESR acknowledged that competent authorities may need to impose certain file formats for faster processing.
307. Using input standards and file formats, especially if these would be harmonized throughout Europe would foster the interconnectivity of the filing systems and could better serve the objectives of sharing regulated information, if necessary, with other competent authorities. It would also facilitate the comparison by the competent authority of different pieces of regulated information of different issuers. If simple formats are used, this could also help filers in fulfilling their obligations. Notwithstanding, not all regulated information can be easily converted into a specific format, and especially, not to a simple form. In addition, it may be said that there is no need at European level to have standardized formats and standards by which regulated information is sent to the competent authorities. Therefore, requiring the use of specific forms and harmonizing them at European level may lead to unnecessary bureaucracy.
308. In addition, the proposed level 2 measures for the Transparency Directive do not require specific forms to be used, just recommend a standard form for notification of major shareholdings and financial instruments.



309. The same can be said in relation to requiring the use of specific input standards. If filers have to follow a very rigid protocol to file information with the competent authority, aligning that process with the storage could be more difficult, if not impossible, and would make the filing quite burdensome.
310. Bearing the above in mind, CESR considers that it should not require specific forms or standards to be used by filers to file information with the competent authorities. Therefore, each competent authority will define, in accordance with its own system, which standards and input mechanisms will need to be followed. Competent authorities should, notwithstanding, define clearly which standards must be followed and whether specific forms are to be used, make them available in their websites.

Q29: Do you consider that CESR should require specific forms to be used to file regulated information with the competent authority? Please provide reasons for your answer.

Q30: Do you consider that CESR should require specific input standards to be used to file regulated information with competent authorities? Please provide reasons for your answer.

2 - ALIGNMENT OF THE FILING WITH THE STORAGE

311. The mandate requires CESR to analyze whether the filing and storage systems can be aligned. In its progress report, CESR pointed out that the issuer should not be overburdened with different procedures by which to fulfill its obligations and referred to possible means of bundling the various obligations of issuers under the Directive.
312. In addressing this issue, the mandate suggests that two points be considered:
- the possibility for competent authorities to act as interface between issuers and the storage mechanisms, whether they operate the OAM or not;
 - the interaction between the competent authority's power to examine the filed information and take appropriate measures and the availability of information to end users.
313. CESR interprets this part of the mandate to require consideration of what alignment means. CESR considers that the aim of this alignment is to facilitate issuers in fulfilling their obligations under the Directive and not to overburden issuers with duplicate requirements.
314. CESR considers that an alignment of the electronic filing procedure with the procedure for sending regulated information to the OAM is not achievable as such. Indeed, the procedures will not be the same, unless the competent authority acts as an OAM and integrates completely the two procedures.
315. However, another understanding of the term alignment could be any procedure or option enabling issuers to meet the three obligations set forth by the directive for regulated information (dissemination, filing and sending to OAM). In that case, alignment would not be envisaged as an alignment of ex-ante procedures but as an alignment from the perspective of issuers.
316. That last concept of alignment could be achieved by the following possible options:
- a competent authorities also acting as an OAM; in that case, there would be an alignment of filing and storage, as the same entity would be performing both roles. However, the appointment of a storage mechanism is an obligation put on Member States, therefore it is not sure nor is it required by the Directive that competent authorities take on the role of OAM (although some of them are actually running storage mechanisms and will probably continue to do so in the future);
 - the use of a service provider to whom the issuer would send the regulated information, with a view to having it sent by the service provider to the media (for dissemination purposes), the competent authority (for filing purposes) and to the OAM (for storage purposes);



- the use of the competent authority as an interface to direct regulated information received from the issuer to the OAM.

317. The ways by which alignment will be achieved will depend on each competent authority.

Q31: Do you agree with the above concepts of “alignment”?

Q32: Are there additional ways of alignment CESR should consider?

318. The mandate requests CESR also to take into account the interaction between the powers of competent authorities to examine regulated information and take appropriate measures and the availability of information to end users. CESR considers that this part of the mandate is linking the storage (or the dissemination), which is, making information available (either when distributed, either in a searchable mechanism), with the filing of regulated information with the competent authority whose aim is not, necessarily, to make information available to end users.

319. CESR addresses this issue in the part of the paper relating to the standards on storage (paragraph 61 above), by referring that regulated information is made available in the storage system as prepared and sent by the issuer. If, at a latter stage, additional or corrective information is needed, the additional pieces of information will be again sent to the storage mechanism and made available together with the previous one. Therefore, CESR does not envisage a particular need to address this issue.

Q33 – Do you consider that CESR needs to expand this idea to properly address the mandate?

ANNEX

REPORT STORAGE QUESTIONNAIRE

INTRODUCTION

TEG decided to undertake a survey on existing storage mechanisms. The survey is intended both to allow a better bottom-up approach to the storage mandate and also to illustrate existing systems in order to understand whether there are similarities that will make them more easily interconnected.

The questionnaire is divided in four main parts: general information on the existing storage systems; technical characteristics of the systems in place, type of information and facilities available for users and operational hours of the system. The report follows this structure.

PRESENTATION OF THE RESPONSES TO THE QUESTIONNAIRE

I. GENERAL INFORMATION ON THE EXISTING STORAGE SYSTEMS

Several sorts of storage systems exist around Europe. Of the twenty three (23) countries that responded to the questionnaire, in twenty two (22) there is at least one storage system in place. For the purposes of the questionnaire, the storage system was defined as a system that could serve as storage after implementation of the TD although not fully compatible with the Directive requirements. Four (4) countries have more than one system in place.

The vast majority of the systems in place is electronic-based.

The majority of the systems is either run by competent authorities [11] or by the stock exchanges [14]. One (1) system is run by the companies registrar and another system is run by a commercial services provider.

If not run by them, competent authorities are called to perform different roles: licensing the system [2], supervision of compliance with standards [4]. In some countries, competent authorities have no role to play in what concerns the storage systems [11], especially when these are run by the stock exchanges [although competent authorities supervise the exchanges, their powers are not extended to the storage facilities provided by these entities].

There are almost split views with regards pre-approval or pre-checking of information, before being made available in the storage mechanism.

In most of the countries, information is provided to users for free. Some of the systems, where users pay to access information, charge users by information piece provided while in other systems charge is based on a retainer fee. In those cases that users do not pay to access information, the majority of the systems is funded by the entity that runs the system. In two countries, the system is publicly funded and in three countries the system is funded by issuers.

ii. Technical characteristics of the systems in place

All systems have security mechanisms and procedures. In most of the systems, the information source is verified by pre- authorised personnel, which may be: a) an employee of the storage system operator b) an employee of the issuer or of a third person (operator) that sends information to the system. On the technical level, pre-authorised persons are vested with appropriate software applications which generate private and public keys (that allow users to send encrypted and electronically signed information), password protected user- accounts and announcement validation numbers. In other systems source verification is effected through the fax and/ or the e-mail. In some systems pre-authorised personnel use electronic identification certificates or devices such as smart cards and digital signatures. However, in an equal number of systems pre-authorised



personnel does not use such certificates and devices. Only two systems do not use pre-authorised personnel for the source verification of the information.

In most of the systems, the information is transferred to the system by e-mail, an internet-based system and a secure web server and/ or file transfer protocol.

In most systems the data integrity during their transmission to the system is either FT-based or Transaction-based. Transaction-based with data integrity mechanism and Control Codes are also in use for ensuring information integrity.

The number of systems with an error detection mechanism equals the number of systems without such a mechanism.

In most of the systems, the information integrity is guaranteed by back-ups and data replication on a duplicated site. Other ways employed for guaranteeing information integrity are business continuity mechanisms and contingency plans.

In most of the systems, safe storage and physical data access are ensured by the restriction of the access to the computer room, to the server components and to the network rack rooms.

In responding to the question regarding the persons who may have access to the information received in the storage mechanism, most of the respondents indicated the issuer and the competent authority and a smaller number of respondents indicated the third party OAM. Other persons listed as eligible for accessing the information, were the commercial providers, the public, the personnel of the management entity, the listing agent, the data vendors, the members and the newspapers.

Most of the systems have mechanisms for the detection of unauthorised access to data such as log of the user's action (data, time, terminal), a limited number of unauthorised attempts to access the system and a limited access time.

In some of the cases, the system provides for unrestricted access to the information stored. An almost equal number of systems access is merely granted to approved, users who have been properly identified and authenticated.

Most of the systems use specific formats and forms for the transmission of the information into the system such as XML, HTML and PDF. Two of them are using XBRL. Seven systems have proprietary standards.

In most of the systems, the information provided is added to the databases of the entity that runs the system.

Many systems have connections with other systems such as service providers' systems, registers, stock exchanges, data vendors, the trading system, price information systems, central banks, surveillance systems and clearing houses. Some systems are connected to the filing system.

In most of the systems information is available immediately after its insertion in the system. In a smaller number of systems information is available after a certain time delay which is due to the verification procedure, supervisory control issues, workflow or technical reasons (manual transmission).

III. TYPE OF INFORMATION AND FACILITIES AVAILABLE FOR USERS

In most of the systems, the following information is available:

- Annual and semi- annual reports
- Other interim reports such as quarterly
- Major holding



- Transactions on own shares
- Calling of securities holders meeting
- Stock option plans
- Inside information
- Exercise of rights attached to securities or payments in connection to securities (such as subscription rights, dividends, interests)
- Agreements among shareholders (such as those relating to the exercise of voting rights)
- Share capital increase or decrease
- Change in the nominal value of securities (such as stock splits or reverse splits)
- Request or admission to trading on other markets (established or operating in the EU or in a third country)
- List of members of the board or other company's bodies and changes to this list
- Cancellation of securities
- Prospectuses. Some systems also store other information such as public offers, squeeze out and sell out procedures, number of employees and shareholders, investor alerts, disciplinary penalties, desisting of securities, trading halts, court or arbitration procedures, dividends, mergers and acquisitions, by-laws, general meeting minutes etc.

All the storage systems have searching facilities. However, different search criteria are used such as the issuer's name or registration/ identification number, the type of information, date of publication, sector and market, personal ID number, keyword, ticker code, heading, summary and heading and or the body text.

In terms of language used for search in the system and the language of the documents, all systems use the official/ local language and most of them use English as a second language. However, most of the systems can accept other/ non-mandatory languages

Users can have access to most of the systems through normal internet connection.

In most of the systems, information retrieved is downloadable mostly in PDF and Word forms and printable.

Most of the systems offer service support to users and in most cases during working hours and days.

IV. OPERATIONAL HOURS OF THE SYSTEM

In most systems, it is possible to insert information at any time though in some systems only during working hours and days. Moreover, in most systems information can be obtained at any time.
