EUROPEAN SECURITIES
MARKET AUTHORITY
Mr Marc Labat
103, Rue de Grenelle
75007 Paris, France

24 July 2014

Subject: XBRL Q&A

Dear Mr Labat

Please find attached our answers to the questions posed to us in your recent correspondence.

We would suggest that this document might usefully be supported by a presentation to relevant ESMA officials and would be delighted to arrange this at a time that suits you.

Yours sincerely

John Turner
CEO XBRL International

Gilles Maguet
Secretary General XBRL Europe

Answers to questions raised by ESMA on

eXtensible Business Reporting Language (XBRL)

Prepared by XBRL International and XBRL Europe

Table of contents

GLOSSARY

As Is - In data provider terms, data presented in the same, or substantially similar manner to that published by an Issuer. *cf Normalised data.*

Closed reporting – XBRL based filing environments that require the preparation of data purely in terms of a pre-prepared template, without any filer-specific variants. *cf* Open reporting. Typically used by financial regulators that require information about risk and performance in a strictly standardized manner, including multi-dimensional data.

Comparable – the process of examining facts from two or more performance reports using either harmonized or normalized definitions.

Data Point – it is equivalent to a cell in a spreadsheet, as the reported fact for a particular intersection of dimensions. *cf Dimensions.*

Dimensions – an hierarchical disaggregation of reporting facts along pre-defined categories used by a business to organise its information. Several dimensions would be combined (multi-dimensionality) creating complex structures required in some reporting frameworks, as EBA or EIOPA. Used in segment reporting, financial instrument and derivative reporting, risk reporting and geographic reporting.

Face financials – The primary financial statements contained in a set of accounts – generally the Statement of Financial Position or Balance Sheet, Statement of Comprehensive Income, or Income Statement, Statement of Changes in Equity; and Statement of Cash Flows. These statements provide a financial overview of an organisation's performance, although without the detail and nuance contained in the Notes to the Accounts.

Filing system - A system in which XBRL formatted data are filed, received, analysed and redistributed.

Formula – Within XBRL taxonomies, formulae can be used to describe business rules for creating new XBRL facts and for describing consistency checks for filed data.

Harmonisation – consistent definition for a reporting concept, generally across territories. Harmonized data is prepared by different issuers using the same rules for preparation. *cf* Normalisation.

IFRS Taxonomy – the Taxonomy developed by the IFRS Foundation; it is the XBRL representation of the IFRSs, including International Accounting Standards (IASs) and Interpretations, as issued by the IASB in the form of the IFRS Bound Volume. Physically, the Taxonomy consists of a set of XBRL files.

Instance document – a business report in XBRL format; it contains tagged business facts (whose definitions can be found in the taxonomy (ies) that the instance document refers to), together with the context in which they appear and unit description.

Issuer – (in these circumstances) a company or firm that issues public securities through a legally recognized exchange or market. Also known as a listed company and sometimes referred to as "firm" or "filer".

iXBRL – inline XBRL; a standard for embedding XBRL fragments into an HTML document. This mechanism provides documents which can be formatted according to the preparers preferences, viewed in a browser, while simultaneously making XBRL tags available to consuming applications.

Metadata – metadata is data about data (literally, since it is composed of the Greek word *meta* and the Latin term *data*, together meaning information); in XBRL it means computerised information about business concepts.

Normalisation – The process of asserting comparability between reporting concepts, even though they are not identical or harmonised. Normalisation involves judgement by users or their proxies (such as a data provider).

Normalised data – Data that has been through a process of adjustment by way of normalisation, so as to allow the comparison of otherwise diverse financial disclosures.

Open Reporting – XBRL based filing environments that allows flexibility in terms of scope and level of aggregation, being their accounts much more variable, with different institutions structuring their disclosures in very different ways. *cf Closed reporting*. The classical example is the SEC reporting framework.

Preparer – an issuer itself (ie: the company), or sometimes, the employee or service provider to the issuer concerned with the preparation of public financial statements.

Render *or* **rendering** - To process a computer readable instance document into a layout that facilitates human readability and understanding of its contents.

Semantics – the *meaning* of the collection of machine usable definitions that underpin an instance document. The meaning contained within the Metadata.

Structured Data - granular facts that are highly organized and well defined, expressed in a manner that desperate conformant systems can utilize. *Cf* Unstructured Data.

Tag (noun) - Identifying information that describes a unit of data in an instance document and encloses it in angle brackets (< and >). All facts in an instance document are enclosed by tags that identify the element of the fact.

Tag (verb) - To apply tags to an instance document.

Taxonomy – taxonomy in general means a catalogue or set of rules for classification; in XBRL, a taxonomy is an electronic dictionary of business reporting elements used to report business data, containing computer-readable definitions of business reporting terms as well relationships between them and links connecting them to resources (metadata);

An XBRL taxonomy can also be defined as an electronic description and classification system for the contents of financial statements and other business reporting documents. Taxonomies may represent hundreds or even thousands of individual business reporting concepts, mathematical and definitional relationships among them, along with text labels in multiple languages, references to authoritative literature, and information about how to display each concept to a user.

Taxonomy extension – adds concepts and modifies the relationships between the concepts in the taxonomies that they extend; they are created to support specialised reporting requirements in specific accounting jurisdictions, in specific industries, or for specific companies; taxonomy extensions allow users to add to a published taxonomy in order to define new elements or change element relationships and attributes (presentation, calculation, labels, and so forth) without altering the original.

Unstructured Data - information contained in a format that can't be unambiguously, easily and automatically broken down into consistent facts that reference supporting metadata and reused. The opposite of Structured Data.

User – The consumer of performance information published or filed by an Issuer, that utilizes that data to support decision-making or recommendation.

W3C – The World Wide Web Consortium. The not for profit global consortium concerned with the development and management of standards that support the internet.

XBRL – eXtensible Business Reporting Language. The standard for expressing business reporting concepts, developed and supported by the XBRL consortium, a global community working to enhance reporting in the public good.

XBRL Dimension – Mechanism inside the XBRL specifications to allow the organization of XBRL data into dimensional and multi-dimensional hierarchies.

XBRL GL – XBRL Global Ledger. A framework for expressing transactional data using XBRL syntax, in a system independent manner, and in a way that allows the aggregation of filtered transactions into discrete financial reporting facts.

XML – eXtensible Markup Language. The base standards for expressing complex structured data, developed and maintained by the W3C. XML metadata is not generally machine readable.

0 Important Background Information

0.1 INTRODUCTION

ESMA is concerned with analyzing the costs and benefits associated with switching from the (usually PDF or HTML based) disclosure of financial information to XBRL based disclosures. This document provides the views of the XBRL community, through XBRL International and XBRL Europe, on this subject, specifically by answering a set of questions posed by ESMA officials.

Prior to considering those questions, this section provides some background information about the way that securities regulators, issuers and market participants have historically dealt with accounting based disclosures.

0.2 ISSUERS AND USERS

Securities regulators around the world require securities issuers *("issuers")* to disclose information based on relevant accounting standards in order to inform market participants *("users")* about their financial performance. Securities regulators themselves are typically involved in post-hoc review of these disclosures, both to ensure compliance with disclosure rules and in analyzing market conduct.

In the majority of environments (including in Europe) these disclosures involve the preparation of consolidated financial statements that conform to the principles and disclosure rules set out by the IFRS standards. In addition, in Europe, wherever the Issuer has a relatively simple operation that does not involve a consolidated or group entity, there is often an option or a mandate to utilize national GAAP rules instead of the international standards. Importantly, the norms and needs of issuers and users have historically been very different.

0.3 PAPER PARADIGM

Accounting standards provide businesses and market participants with an agreed way to measure economic transfers: they are designed to provide a rule book for measuring economic activity and in particular, value creation. They underpin our economies by providing formal rules for the agreed transfer of financial stocks and flows from entity to entity.

They are also designed to provide a consistent, full and fair set of disclosures to allow independent analysis of financial performance. This allows, among much else, investment decisions to be made and supported.

Financial statements play a crucial role in both of these functions. However, different issuers are quite different economic actors and they therefore organize themselves in different ways, have very different operations (often governed by specialized accounting rules), and offer different products and services. They also make different decisions, governed by a wide range of factors, about the optimum way that they can make their disclosures while remaining within the accounting rules, all the while providing a fair overall picture of performance.

In other words, different issuers, even close peers, have very different needs for financial statements, notwithstanding the common use of IFRS. Depending on questions of materiality and approach, different firms can:

- Aggregate disclosure items in different ways.
- Disaggregate disclosure items in different ways.
- Decide whether or not to disclose specific factors in the "face" financials or in the notes to the accounts.
- Incorporate unique, or apparently unique disclosures, in order to fully or best describe their operations.

- Voluntarily early adopt certain types of new accounting rules, altering their disclosure patterns.

This flexibility, as well as the fact that many required disclosures in financial statements are not held in corporate ERP or consolidation systems, means that it is very convenient for issuers to provide their financial statements in *unstructured documents*. Indeed, almost universally for large companies, consolidated financial statements have been traditionally prepared using Word and Excel as the tools used in the complex "last mile" of reporting.

Document based or *paper paradigm* reporting dominates many aspects of thinking associated with the preparation and disclosure of financial statements. Company officials and accountants think of the financial statements as a compliance and management tool that needs to be prepared *as a document* in order to conform to the accounting rules. Example accounts provided by accounting firms are *documents*. And the audit opinion is prepared with the strict proviso that the auditors *only assert* that reading the accounts *as a whole* gives a true and fair picture of the operation of the organization. Their thinking is very much in terms of a document, and not of data.

All companies seek to attract and retain investment and the "fundamental" data contained in the financial statements are an important facet of this process. Historically, however, very little, if anything, has been done by companies to facilitate the far more granular, data-driven fundamental analysis that supports the majority of traditional investment decisions, for both equity and debt.

Importantly, note that other than faster transport speeds, the possibility of manual copy+paste and certain kinds of automated text analysis, there is no functional difference between PDF or HTML based financial statements, and paper ones. If you want to determine whether there are any extraordinary items contained in a Statement of Financial Performance, you need to read that

statement, and understand the specifics set out there. If you want to reuse that information you need to rekey it. If you want the same information from many companies you need to rekey it from each individual financial statement.

0.4 DATA NEEDS OF USERS

Many users do exactly that. "Users" fall into a very wide category of market participants. They can be analysts on the sell or buy side. They can be investment bankers. They can be credit providers, suppliers or customers. They can be part of a supply chain. They can be investors of many kinds and of many sizes, from institutional equity and debt holders, to retail investors, to speculators of many different classes, with many different objectives.

In contrast to issuers and their advisors working in the *preparation* of financial statements, users are not very interested in documents. They are interested in the *data* contained in those documents.

A very large number of users are concerned only with a limited number of data points. A smaller, but also extremely significant number of users are concerned with much more than a superficial data set. Often it is the analysis of the latter group that influences the rest of the market. How do they obtain the data needed ?

0.5 HISTORIC DATA FULFILLMENT PROCESSES

Historically, users draw their data from many different sources, including (multiple) commercial data providers, who:

- Obtain financial statements from official sources

- Parse, or key in the data contained in those financial statements (sometimes in multiples rounds, starting very quickly with the "headline" numbers, and adding additional detail over the next hours or days)
- Error check
- Translate, where necessary, data that is in the form of text
- *Normalize* the data in order to maximize the comparability of their data set
- *Add value* to the data by calculating and incorporating a range of ratios.
- Publishing the data, generally in proprietary ways, in two different series – "As Is" and "Normalized".

"As Is" captures the data in financial statements as prepared by the issuers themselves. Users draw on it to allow time series analysis of trends in a single firm, as well as a way to construct their own, specialized normalized data models. "Normalized" feeds are designed to allow comparison between companies, by altering the structure, aggregation decisions and disclosure decisions of companies themselves in order to get them to line up across an industry or industries. This normalization is proprietary and very valuable. Necessarily, most normalized data sets cover only a small proportion of the data contained in a financial statement. Similarly, "As Is" data sets typically contain the face financials and a small number of notes to the accounts.

For a number of reasons, many users are of the view that the data available to them from the commercial data providers is either limited (i.e.: it only contains face financial information and limited coverage of notes), inaccurate, or that the normalization carried out doesn't meet their needs.

0.6 DOCUMENTS VS DATA: UNSTRUCTURED VS STRUCTURED

To sum up, the norms and needs of issuers and users are tangential and work, for historical reasons, in very different ways. Issuers operate in a paper paradigm, considering the financial statement as a whole. Users operate almost exclusively on data and consider the document an inefficient and error prone way of accessing the data contained within it, while (most) don't give much thought to the changes that might be needed to improve the information that they have to hand at present.

The problem, in short, is that documents are *unstructured* information, and data is inherently *structured* information. The norms of issuers and users are at odds with each other.

This represents a serious inefficiency in financial markets. In Europe, this problem is compounded by the different languages in use around the Union.

Utilising unstructured – essentially paper-based – data in the internet era is a lot like relying on paper street maps. They do the job, but are not nearly as efficient or provide as much utility and value-added innovation as their digital versions.

The XBRL consortium, together with well over 70 regulators around the world have taken the view that it is time to bring reporting into the digital age. In the short term the benefits accrue to regulators and forward thinking users. In the medium and long term, additional benefits arise for the remainder of the User population, and, as we shall see, issuers can modernize and enhance the information they disclose and use to run their businesses.

0.7 XBRL CAPABILITIES

Faced with inefficient paper-based reporting, the international XBRL consortium sought to develop the technical capability to reliably transmit performance data and the definitions associated with performance data. The XBRL standard was

itself built on the back of key W3C XML standards. Incubated within the US professional accounting body, the AICPA, and quickly spun out as an independent, international not-for-profit in 2001, the XBRL standard always set out to cater to the variability inherent in securities disclosures. It has thrived, and remains the single standard for business reporting, supported by a global community focused on improving reporting in the public good.

From the outset, the design goals of XBRL were to provide a way to define and transmit definitions, as well as data. This combination allows sophisticated data quality rules to greatly improve the data that arrives at the regulator and is an important reason for XBRL's global success. Regulators and the regulated alike can use a set of published quality rules, embedded in the XBRL taxonomy to constrain what information is permitted to be filed.

It is helpful to understand that XBRL, which is a framework, or language for reporting, rather than a fixed set of reporting concepts, is used in two very different ways. Closed reporting for environments without flexibility. Open reporting where preparers have options in what and how they present their information.

0.7.1 CLOSED REPORTING

The quality control and clear definition capabilities of the standard play an important part in performance reporting associated with financial and prudential regulation. In this environment, the disclosure rules are prescribed very narrowly, and typically as forms or templates, including multi-dimensional templates.

In other words, XBRL can, for example, be used for collecting information from banks about their exposures in the form of loans intended to be held to maturity, broken down by class of counterparty, country of counterparty, currency and by maturity. This kind of templated, matrix reporting is complex, but fixed. Reporting institutions don't have any of the flexibility that they have in preparing their IFRS financial statements. This type of application of XBRL is called "closed reporting" and is used at the EBA and will be used at EIOPA for their XBRL mandates.

0.7.2 OPEN REPORTING

In many cases, the same institutions are issuers and must report their financial statements to their securities regulator (or OAM). Their financial statements are very different to their regulatory filings in terms of scope and level of aggregation. But most importantly, their accounts are much more variable, with different institutions structuring their disclosures in very different ways. XBRL provides a mechanism called "extensions" to allow issuers to:

- Define and report against their internal organizational structure (segment reporting).
- Define and report against their own level of aggregation and disaggregation (i.e.: altering calculation and presentation structures to suit their needs)

- Create and report against entirely new concepts, to cater to their unique disclosure decisions.

This "extension" capability is arguably an essential part of structured data reporting for financial statements. It is powerful, flexible but can be complex. The XBRL consortium now has very considerable experience in how to best utilize these features. See below for a range of options and recommendations. XBRL environments that use extensions for reporting are termed "Open Reporting" implementations.

0.8 INTRODUCTION TO TAXONOMIES

The term "taxonomy" is a technical term used in XBRL and relates to the structured definitions, sometimes known as the *semantic* definitions that support XBRL documents.

Taxonomies are collections of definitions that back the production of "instance" or data documents that represent a single performance report.

You can think of taxonomies as being a bit like a dictionary. All of the words that will be used in reports relating to specific domain, such as IFRS, US GAAP or Chinese GAAP are tied together into taxonomies. The terms used in individual reports must be contained in the relevant taxonomy in order to pass a very basic level of validation.

Unlike dictionaries, taxonomies contain more than just a description of the relevant reporting term. They also contain a range of additional information that relates to the reporting term. Of specific interest are:

- **Labels**, which, as the name suggests, provide a label that can be associated with a specific reporting term. Each reporting term can have a number of labels, including labels in different languages, and for different purposes. It's possible to have a "verbose" label for example, which is discursive and a "terse" label which is short. It's possible to have a "documentation" label which is a lengthy summary of the meaning of a term. And it's possible to have multiple languages associated with every single label, meaning that a taxonomy can contain many translations.
- **Reference links,** which connect a reporting concept to authoritative guidance such as the IFRS disclosure standards.
- **Presentation links** which allow taxonomies to be ordered and arranged in a logical manner. These links connect multiple concepts contained within the taxonomy, creating parent-child and order relationships.
- **Formula links** which allow the creation of business and accounting logic rules within the taxonomy.
- **Dimensional links** which allow data to be expressed in multi-dimensional form. Often called "cubes", multidimensional reporting is an important part of many kinds of reports, including segment reporting, and financial exposure reporting.
- **Table links** which allow closed taxonomies to drive the creation of complex, multidimensional forms as well as tabular presentations.

Like all aspects of XBRL, taxonomies are *platform independent* open and portable.

The last thing to understand about taxonomies is that they can be expanded. If a specific report needs unique disclosures *(Example: "("Nuclear Decontamination Provision"*), unique labels or unique dimensions (such as business segment reporting – Example: *"At ACME AG we break out and report on the operations of our Coal, Nuclear and Renewables Divisions separately"*) then an expansion or *extension* taxonomy can be connected to the official or *base* taxonomy to take account of the unique circumstances of particular reporting entities.

These extension taxonomies are very powerful, but must be used carefully.

To round out the earlier analogy, you can think of XBRL taxonomies as *loose leaf* dictionaries, in which additional words can be added when absolutely required.

0.9 SUMMARY

In this background information we have outlined the inherent inefficiencies and tensions that exist between the User (who wants structured data) and the Issuer (who thinks in terms of the preparation of unstructured documents).

We've identified the way that information has been moved around these ecosystems historically, and we've provided a very high level picture of the difference between open and closed reporting in the XBRL context, as well as an outline of XBRL taxonomies.

It is worth mentioning that today there is no other competing standard or open technology in use for the provision of structured performance and financial data, for either open or closed reporting structures, *other* than XBRL.

1 Q1. In terms of Strategy, to which extent can XBRL be the optimum technological choice? How do you explain that currently annual financial reports are not filed in more EU countries?

1.1 INTRODUCTION

In this section we argue that structured data is a vast improvement on unstructured data. We argue that XBRL provides unique benefits to users, issuers and regulators. We argue that standards reduce costs, improve quality and improve comparability. We outline reasons that EU securities regulators have been slow to move from paper-paradigm reporting to data-paradigm reporting. We argue that the time is now right for ESMA to introduce XBRL based reporting.

1.2 WHY USE STRUCTURED DATA INSTEAD OF UNSTRUCTURED DOCUMENTS?

Users are primarily interested in obtaining structured data. Issuers issue documents containing unstructured data. However, if the paper paradigm were to be gradually replaced, international experience clearly shows that issuers can move to provide documents that contain structured information, in place of HTML and PDF disclosures. We argue that the structured information should be XBRL.

Providing structured data :

- enhances comparability;

- reduces the cost to users and thereby expands the field of users carrying out fundamental analysis;
- disintermediates an expensive rekeying industry, but also opens that industry up to innovation to expand its offerings;
- (in some countries) reduces the overall respondent burden as the structured data can be reused for other regulatory purposes (for example, reusing data from financial statements in statistical surveys or in tax declarations).

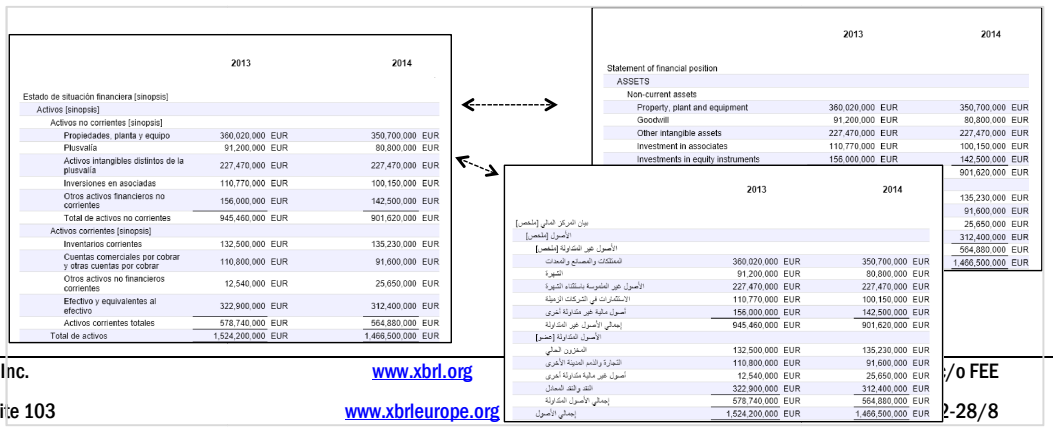
The key proviso, in all of this, is that there is a need to ensure that the question of comparability is dealt with sensibly, with a view to the users' needs, as well as the issuers' costs. Largely we address this point in Q2 (below).

1.3 AS XBRL IS A NON-PROPRIETARY WAY TO STRUCTURE REPORTING THAT DATA, WHY IS IT THE RIGHT CHOICE FOR ESMA?

We argue that, implemented intelligently, XBRL provides a range of benefits to users and issuers alike that can't be ignored.

For users, XBRL allows:

- The simple extraction of relevant, richly defined data for use in analysis.
- The examination of *face financial* data items in multiple languages. XBRL



definitions are contained in taxonomies that can (and do today for IFRS) support disclosure descriptions in as many languages as you like. This means that for all of the face financial disclosures, that the descriptions can be automatically replaced with alternate language descriptions. This does not work for textual disclosures, but is very valuable for a large number of users.

In the figure above, a financial statement has been prepared in Spanish. Because the IFRS taxonomy being used supports a number of other languages, it is possible to alter the language associated with specific disclosures (typically the face financials and other tables) instantly, without additional effort. Note that this requires that the taxonomy being used (such as the IFRS taxonomy) contains the relevant label translations.

- Reliability and data quality that can't be provided by way of rekeying – the information comes directly from the company itself. Structured data prepared by the company is more accurate than information prepared by third party data providers that rekey unstructured data. Of course, it is important that the company be provided with tools and incentives to review the quality of the information they have prepared. For example, we consider it good – or perhaps essential – practice for the regulator to provide a large number of screening data quality rules. These rules help ensure that errors are not included in filings, and that they are prepared consistently.
- Much richer data sets. Necessarily, the range of information available in commercial data feeds is limited to the main financial indicia. XBRL data can be much deeper, thanks to the detail that it's possible to embed into the filings. Of course, there is a cost trade-off associated with this level of detail that needs to be considered: where preparers are asked to tag more information in their financials, the cost will be commensurately higher.

For issuers, XBRL enables:

- The unambiguous provision of structured data to users. The use of XBRL can ensure that companies can be much more confident about the manner and accuracy with which their information is being used.
- The preparation of their accounts using a wide range of software and services solutions in a well-established market, built up around the XBRL standard, ranging from the very largest vendors to small startups that specialize in this field. Availability of software reduces costs for issuers, including SMEs.
- The provision of their information to more potential investors and market participants. One of the reasons that smaller listed firms are illiquid and have narrow shareholder bases (both of which impact the cost of capital) is that the markets are insufficiently informed about their activities and performance, simply because the cost of preparing this data is too high.

Over time, XBRL also allows (and properly speaking for large complex businesses, encourages, or forces):

- The use of collaborative and embedded systems to greatly simplify the creation of accurate financial statements that are tightly integrated into the operation of their business.

1.4 WHY HASN'T XBRL BEEN MORE WIDELY EMBRACED ACROSS THE EU AMONGST SECURITIES REGULATORS TO DATE?

In Europe in addition to the supervisory reporting in the banking and insurance sectors, XBRL is in use (or about to be in use) amongst a significant number of business registers and some securities regulators, for mandatory filings by listed companies in Spain (CNMV), and voluntary filing in Germany. Feasibility studies

have been carried out in Italy and in Norway. The Business registrar sector has dramatically driven the adoption in Europe for the filing of annual accounts. There are now 13 Business Registers in the European Union which use XBRL for filing and publication. Eight Business Registers have made their XBRL filings mandatory or quasi mandatory. The filings are mainly local GAAPs, but 3 use both National GAAPs and IFRS (UK, DK, DE). They are as follows:

- Belgium – BNB – Mandatory Filing – 2007 – 400.000 filings
- Denmark DCCA – Mandatory Filing – 2011 – 210.000 filings
- Italy Infocamere – Mandatory Filing – 2011 – 1.200.000 filings
- Spain – Registro Mercantil – Mandatory Filing – 2009 – 600.000 filings
- UK – Companies House – Voluntary Filing – 2006 - 1.500.000 annual filings
- Germany – Datev/Bundesanzeiger– Quasi mandatory Filing – 600.000 filings
- Netherlands – Chamber of Commerce – 2015 Mandatory – 844.000 filings
- Estonia – Business register – 2010 – Mandatory – 140.000 filings
- Voluntary filings in Luxembourg and Sweden,
- France – Infogreffe – data available in XBRL – 800.000 companies
- Projects in Ireland, Poland

Thus several million XBRL financial statements per year are already available in the European Union.

Across the rest of the world it is mandated most notably (with data available) in the US, Japan, China, Korea, Chile and the UAE. There are, of course, many other regulatory implementations around the world and within Europe, but they are for *closed* reporting.

Why then, has XBRL not been adopted by more securities regulators in Europe thus far? There are a number of reasons.

Firstly, as has been noted, the process of moving from unstructured data to structured data involves shifting the thinking of many parties involved in a careful and conservative practice. This process has, itself, been slowed considerably by

the changes at the EU level from CESR to ESMA, and the drawn out process of considering a mandate within the European Parliament. NCAs have, quite understandably, been cautious about making a national change when EU action in this area has been on the horizon.

Secondly, the process of open reporting is more complex than closed reporting. Capturing information about financial statements in a structured technical format provides very significant benefits, but it is not a "magic wand" that automatically creates comparability between companies. While reporting is based on accounting standards, and while structured reporting is based on those accounting standards, there will remain many areas of variability between companies. The process of marking up IFRS or local GAAP disclosures in XBRL eradicates the need for rekeying, opens up the opportunity for significant efficiency and automation within the reporting firm, and allows errors and problems to be identified prior to filing. It does not automatically normalize reporting between company A and company B. It makes life much easier for users interested in "as is" reporting. It makes it easier for new entrants in the data provider field. It also provides a powerful new set of capabilities to existing actors in that market. But normalization is still required. See Question 2 for more details about this area and to understand the difference between harmonization and normalisation.

Thirdly, and related to the previous point, the cost to issuers of tagging disclosures in XBRL can vary widely, depending on the decisions made by mandating agencies. This is very apparent in examining existing implementations, with variance of two orders of magnitude in evidence around the world, but the higher numbers (generally from the US) tend to be the ones that some stakeholders focus on, often erroneously.

For clarity, the XBRL community is of the view that the impact on issuers can be kept to an absolute minimum, and the utility for users can be maximized and demonstrated via careful design and prototyping.

Fourthly, until relatively recently, there has been some confusion about the coverage of the IFRS taxonomy, prepared by the Disclosure team at the IFRS Foundation. Over the last two years a very considerable amount of work have been carried out by that team ensuring that in addition to mandated disclosure rules, a very significant proportion of "common practice" disclosures have been encapsulated into this taxonomy. Without this additional work there was, correctly, significant concern that comparability would be impaired through excessive levels of national or company-based extensions.

Finally, most European securities regulators have not considered this question for at least four years. Since that time, both the XBRL standard and implementing technology have matured substantially.

1.5 WHY IS XBRL RIGHT FOR ESMA?

As mentioned above in points one and four, NCAs have been somewhat waiting on EU level developments since 2009.

The development of XBRL itself has significantly matured since 2009. Since that time, XBRL has developed important technical specifications answering issues met by users (largely the regulators), under which :

- The iXBRL or Inline XBRL specification has been developed. It allows data to be tagged within an otherwise ordinary web page, allowing the preparation of a single document (an iXBRL document) which is both human and machine readable. iXBRL is typically used for open reporting, but can also be used for closed reporting.

- The Versioning specifications which allow the precise communication of change between versions of taxonomies, simplifying the process of dealing with changes to reporting requirements and accounting standards.
- The Formula specifications which provide a very rich mechanism for creating business rules for managing data quality, as well as formulae which allow the processing of complex arithmetic and logical rules in order to create new values.
- The Table linkbase specification which allows the creation of sophisticated, multidimensional forms for closed reporting.

The XBRL community is now technically mature and focuses its efforts on providing guidance and best practices, and on simplifying and constraining the underlying technology. Simply put, the business requirements for reporting are now met.

In addition, thanks to current mandates from the EBA and EIOPA, as well as business registrar mandates in a number of countries, a broad and deep software ecosystem that supports the standard has been created in the EU. A rich software ecosystem is a critical part of the success of any technical standard, and XBRL is supported by a vast array of reporting tools and software.

1.6 ONE FILING OR TWO?

One area that any regulator considering mandating XBRL needs to consider is whether there should be a single filing made or two filings made by issuers. To clarify, if there is one filing made it is prepared either via XBRL, with or without standardized rendering to accompany it, or with iXBRL, which is itself a rendering. In this scenario, there can be no question about the authority of the data contained in the disclosure: it is wrapped up in the format.

If there are to be two filings, one in XBRL and another in PDF or HTML in order to provide the "document" rendering in a traditional manner, the authority of the XBRL version will tend to be subservient to the "paper-based" document.

That said there are good reasons, including to ease the transition, to allow dual filing arrangement.

1.7 WHY STANDARDS?

Why should the ESEF be based on a standard, and not a proprietary arrangement, either a commercial one, or one developed by ESMA itself?

International Standards:

- Lower costs.
- Improve clarity and reliability.
- Create opportunities for innovation that aren't available in a proprietary environment.
- Open up market access in environments which can otherwise be limited by monopolistic or oligarchic behaviours.
- Provide economies of scale.

Why XBRL particularly ?

- Harmonization of European regulatory reporting (EBA, EIOPA)
- Significant European adoption of the standard for private and public company filing alike
- Experience of many EU countries using XBRL for national GAAP reporting.

2 Q2. How do you make the argument for the need for harmonization and data comparability? To what extent can XBRL assist in this process?

2.1 NOMENCLATURE

Please note that in this document we frequently refer to "Harmonised" and "Normalised" data. By this we mean:

> **"Harmonised"** data is information that draws on identical definitions – preferably a single one. "IFRS Recurring Revenue" is not the same as "US GAAP Recurring Revenue" so the concepts are not harmonised.
>
> **"Normalised"** data is information that is considered for a users specific purposes to be comparable, even though it is drawn from different sources. Ie: a user can assert that, for her purposes "Cash" under IFRS, Japanese GAAP and US GAAP are identical, *even though the formal accounting definitions in use are different.*

"Harmonising" data is the convergence process that Accounting standards setters go through. "Normalising" data is the process of creating "good enough" comparability, where disclosures are not identical and not harmonized. This is a normal part of fundamental data analysis for users, including data providers, analysts and investors.

2.2 INTRODUCTION

The IASB conceptual framework states that the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. They are considered

primary users of IFRSs as they cannot require reporting entities to provide information directly to them and as such must rely on the financial report for much of the financial information they need.

But it is close to impossible to identify truly common data needs for the user community. Different users have very different needs. Some are interested in high-level comparative ratios. Others are interested in time series analysis for single companies or groups of companies. Still others are interested in specific data contained within notes to the accounts. But we must determine the priorities for investment analysts and digital reporting.

Today, investors and analysts are using third party data or manually extract information, and may switch to using the digital report as their main data source to facilitate their analysis and reduce their data information costs. A recent XBRL survey (2011) done by the CFA Institute stresses the importance of digital tagged financial information to primary users. It highlights that 44% of all respondents obtain all (8%) or most (36%) of the financial data using electronic tagged data from 3rd parties. But, it also demonstrates that a large number of users still extract all data (18%) or most (34%) of the data manually from the source documents – incurring unnecessary costs to acquire data. Data aggregators and other emerging software intermediaries will continue to play an important role but will come under increased pressure to 'pass through' the benefits of digital reporting.

But why do IFRSs primary users rely on third party electronic data?

The main reasons that some investors and credit lenders rely on or use data aggregators' products and fundamental data content are:

- for the value add content and analytical services they provide
- for reference purposes: ease of use to navigate a document and view financial data

- content amongst companies and over time for a single company
- to obtain structured tagged financial data to pre-populate in house data models
- reducing their data information acquisition costs (even though it is expensive to buy structured data in, it is cheaper than rekeying it yourself)
- to have empirically consistent available and comparable data to screen and perform quantitative analysis on a large number of stocks. Note that this does not necessarily mean *all* stocks, nor say anything about data quality.

As discussed before, the question of comparability is made significantly more complex by the diversity of reporting practice evident within the overall population of issuers and indeed, within relatively small cohorts of peers.

This is a function of accounting itself, not the reporting format. Without changing accounting fairly fundamentally, no structured data format that merely tags IFRS or local GAAP is going to be a "magic wand" that creates comparability where it doesn't exist today in its paper form.

Up until 2011 the IFRS taxonomy strictly reflected what is defined within the IFRS bound volumes. Following such a strict approach did not provide companies with the relevant set of items used in practice by the different industries to prepare IFRS financial statements in XBRL. To address this concern, the IFRS Trustees approved a scope extension of the IFRS taxonomy to include common practice elements.

But still, the scope of common practice elements is restricted to those disclosed within the primary financial statements and notes to the financial statements. It does not cover information most commonly disclosed elsewhere (management commentary, investor presentations, trading updates and earnings releases). As

such, non-GAAP normalized data, activity specific operating metrics, and core investment derived financial values such as EBITDA and free cash flow, are currently not included within the scope of the IFRS taxonomy. It would be possible to enhance comparability in the design and development of taxonomies that cover these areas.

Users need comparable data. They need value-added services from data aggregators that do not only provide what is reported by companies within their financial statements but also provide value-added information such as the calculation of additional data items to ensure consistent data availability across companies and over time for a single company. They need for example: quarter four periods, derivation of gross profit where a company only discloses sales and cost of goods, historical adjustment of as reported data for currency re-dominations or currency conversions. They also need value-add content analytics such as the calculation of financial ratios, trailing 12 month data, per share data, growth rates. They want historical point in time data feeds for model back testing and finally they need content integration such as :

- Retrospective adjustment of as-reported per share data for corporate actions
- Improved searching and comparability of operating segments by way of standard coding of the data
- Using business and geographical classification systems
- Using market reference data to calculate investment ratios and per share data for all listed foreign and domestic quotations and securities of a company

In short, electronic tagged and structured financial data is a must-have for good quantitative analysis and for stock screening. The critical qualitative characteristics of useful electronic financial information are reliable, comparable and consistent available data with long histories for quantitative analysts on a large number of

companies to screen on or involve in regression analysis with sufficient transparency to review quickly 'outliers'.

But what steps could be taken to enhance comparability while introducing XBRL into the reporting process? In answering this question we outline a number of different options. These different options have different impacts on the level and quality of comparability and harmonization. They also have different impacts on the costs and burden imposed on issuers.

Let's start with a summary table showing the pros and cons of different formats:

	PDF	HTML	XML	XBRL
Structured Data?	☒	☒	☑	☑
Multi-lingual support?	☒	☒	☑	☑
Business Extensions?	☒	☒	☒	☑
Consumer Oriented?	☒	☒	☒	☑
Preparer Oriented?	☑	☑	☒	☒
Preparer Oriented Rendering?	☑	☑	☒	☒
Business software available?	☑	☑	☒	☑

In this context, the important point to note about XML is that it is a base format that needs extensive customisation to be used – the kind of customisation that XBRL has applied to it, in fact.

Now, working on the assumption that the question is really, "What are the various options open to ESMA in implementing XBRL and their relative advantages?", let us move on to cover some of the options.

2.3 OPTION 1: LIMITED, HARMONIZED DATA

One option available to ESMA is to seek uniform, high level, structured XBRL data, at the very least for IFRS filings by issuers. This information would be harmonized in the sense that it would comply with the IFRS standards, via the official IFRS taxonomy. In this scenario, we would regroup high-level information, 500 items or less, generally contained only in the face financials. There are at least two different approaches to the implementation of this option.

First Approach on limited harmonized data

In addition to the provision of a paper-paradigm financial statement in PDF or HTML, ESMA could seek the provision of a limited, closed, form based, supplementary filing.

This approach has been adopted in a number of countries sometimes as a simplifying measure, and sometimes as a stepping stone to more sophisticated filing arrangements in the future.

Pros	**Cons**
Simple to implement for regulators and issuers alike.	Additional filing creates strong potential for divergent disclosures (the apparently identical fact in the financial statement and the supplementary filing are different).
Provides a range of baseline comparison information.	Simplistic: can't take into account the diversity of reporting that exists in the financial statements themselves, because of the use of

	closed forms.
Simple, and maximizes comparability, as no extensions are allowed.	Creates possibly distorted comparisons, as no extensions are allowed.
Harmonised in that it would use the IFRS taxonomy.	Relatively low utility for certain users.

Second Approach on limited harmonized data

Alternatively, ESMA could seek an iXBRL markup with so called "blind extensions" to arrive at a very similar result. In this scenario, ESMA would oblige regulators to enforce the preparation of a single document, in iXBRL, which, as a web page or set of related web pages, conforms to the look and feel preferred by the issuer and contains all of the (divergent) reporting arrangements that the accounting standards allow. However, wherever pre-selected IFRS concepts appear (as in option 1, a basket of 500 or so selected key disclosures), they would be marked up as structured XBRL data inside the iXBRL. If an issuer utilizes one of the selected concepts, they would be required to mark them up. Other concepts (even if they appear in the IFRS taxonomy) could be left in plain HTML. This approach (the unmarked up disclosures are often referred to as "blind extensions") has successfully been implemented in the UK, for tax and company registrar filings, although this relates mostly to unlisted companies. (99.9% of the 2.5M filing prepared for HMRC are for private companies).

Pros	**Cons**
Simple to implement for regulators, fairly simple and very cheap to implement for issuers.	Limited set of markup will not *always* be internally consistent or comparable.

Provides a range of baseline comparison information.	Simplistic: can't take into account the diversity of reporting that exists in the financial statements themselves.
"One document" with two formats means that introduction of errors can be kept to an absolute minimum.	Creates possibly distorted comparisons, unless extensions are allowed(*). (as is the case at Japan FSA)
Issuer preference for "paper-paradigm" is retained.	Relatively low utility for many users, simply because of the limited data set.

(*) Extensions covering aspects of a filing such as segment disclosures, different aggregation or disaggregation arrangements, and company specific presentations and roll-ups can be catered to with iXBRL. Providing this level of flexibility makes for more powerful and more useful data sets, but adds to the complexity associated with their preparation.

2.4 OPTION 2: FACE FINANCIAL FILINGS

An alternative approach is to require the face financials in their entirety to be filed in XBRL with the notes to the accounts remaining as an unstructured filing.

This mechanism would provide data that is harmonized to the extent that filings utilize the IFRS or local GAAP taxonomies, and the extensions are controlled in such a way as to maximize comparability but also to allow the issuer to choose the appropriate level of detail and the place to present the information. This is very achievable.

The face financials (or primary financial statements) represent an important source of data for users. Note, as previously discussed, these would be *harmonized* but not *normalized*.

Pros	Cons
Implemented carefully, creates a large body of high quality, harmonized fundamental data.	Without careful quality control, and assurance (especially over extensions) the risk that data is not harmonized remains.
Relatively high utility for many (perhaps most) users, assuming that normalization solutions are developed.	Primary financial statements do not represent the totality of user data needs.
	Against IFRS principles if the issuer is not allowed to choose its level of detail and the place to present the information (primary financial statement or disclosures)
	Costs for issuers could be high if mechanism is not designed carefully.

2.5 OPTION 3: FULL FINANCIAL STATEMENT

Either as a later enhancement to the Primary Statement filings referred to in the previous section, or as an initial "big bang" approach, ESMA could opt for full financial statement filings, to maximize the harmonized data available.

Once again, this could be achieved either with XBRL/iXBRL. This approach would be very similar to the US SEC arrangement, although a number of steps could be

taken to greatly enhance the quality of the filings and the consistency and comparability of the resulting documents.

In addition, it would be possible to expand the obligation still further, to require the markup of full Annual Report Filings. This would ensure that the management discussion sections of issuer filings are consistent with the content of the financial statements, and, indeed, that this information (which is heavily relied upon by many users) is in structured format.

Once again, it needs to be emphasized that this would be *harmonized* data and not *normalized* data. The latter is fully comparable, although many of the nuances within the accounts might be lost.

Pros	**Cons**
Implemented carefully, creates a huge body of high quality, harmonized fundamental data.	Without careful quality control, and assurance (especially over extensions) the risk that data is not harmonized remains.
High utility for users assuming that normalization solutions are developed.	Risk of divergent markup practices is relatively high.
	Costs for issuers would be high if mechanism is not designed carefully.

2.6 OPTION 4: USER-NORMALIZED DATA

Finally, one, perhaps radical, approach to this question might be to consider the data markup entirely from the perspective of the user. All of the other options set out above propose the use of the IFRS taxonomy, which mirrors the accounting and audit-led financial statement development, utilizing IFRS standards.

However, since users have rather different perspectives on the comparability and utility of financial statement data, and, indeed, make decisions themselves about the comparability of different accounting approaches, it would theoretically be open to ESMA to allow users to drive the structured disclosures.

In other words, if user groups (presumably EFFAS and CFA) developed a *users* taxonomy, that contained matches, for user purposes, of IFRS *and* local GAAP concepts, then data comparability could be achieved from the users perspective.

Under this scenario, an "Analyst and Investor Friendly" supplementary disclosure would be prepared, in XBRL or iXBRL format, specifically for the purpose of providing *normalized* data to users. IFRS and or local GAAP disclosure would also be in XBRL, so as to allow the creation of a clear audit trail. Ie: "Acme AG's *analyst:profit* of €1.000.000 can be linked back to the company's *ifrs:profit* of €1.000.000". These kinds of supplementary "non-GAAP" disclosures are often carried out today, just not operating under a consistent set of normalized terms.

This approach could be similar to Option 1, in that it would represent just a proportion of the financial statement, although if National GAAP disclosures were not captured in XBRL, not all of the regulators' needs would necessarily be met. Over time the extent of the taxonomy could be expanded in order to expand the analytic utility of this "pre-normalized" data set. This idea might have significant merit, but would require equally significant study and analysis.

Pros	**Cons**
Creates normalized, highly comparable data.	Obliges issuers to make judgements about the markup in terms of a framework developed by users, not accounting standards setters. Would likely require the

	preparation of IFRS or local GAAP disclosures in XBRL format as well, in order to ensure that the "user" based

2.7 SUMMARY

In this section we have sought to outline a number of different options that ESMA might consider. We have sought to show that comparability means different things to different users and that the lack of comparability inherent in financial statements is a function of accounting rules and corporate diversity, rather than anything to do with structured data. Nevertheless, a range of choices can be made that will either maximize harmonization or maximize normalization.

Of course, bear in mind that XBRL can additionally be used very effectively to capture entity and legal structure information. Indeed, the XBRL community would encourage the expansion and reuse of the LEI as the "entity id" that ties together filings.

While taxonomies can assist companies to clarify their reporting and disclosure choices and decisions, very significant care must be taken in designing the way that extensions are utilized. This is something that the XBRL community is working to provide guidance on at the present time, in the light of a range of real world implementations.

3 Q3 – Do you have advice on how we could best develop the Data Point Modeling ?

The EBA and EIOPA projects have leaned heavily on a methodology for modeling data requirements called the "DPM". The DPM, in particular, is designed to allow abstract capture of the semantics associated with highly dimensional forms.

The conceptual and technical model used for EBA and EIOPA reporting (highly dimensional modeling) is rather different from the reporting of financial statements. The overall cross-over of EBA and EIOPA reporting with the financial statements is not significant enough to re-use their Data Point Models as they are for financial reporting.

We are aware that it has been suggested that the DPM could be used to assist the ESMA implementation. This may well be the case with the development of a new dedicated model.

Please note that the DPM is an open methodology for data modeling, and not an specific format or product, so therefore the DPM is not XBRL International intellectual property.

The XBRL community is currently embarked on the preparation of a normative set of best practices guidance, or "Body of Knowledge". It is very likely that this kind of testing and analysis of the DPM methodology will form part of this document.

4 Q4 – Despite the claim that XBRL provides high quality of information, which initiatives are developed to ensure this on a sustainable basis?

XBRL provides information that has been sought directly from companies, in structured electronic format that can be reused by otherwise unconnected systems. It avoids rekeying and it provides semantic clarity.

That said, what does XBRL allow in order to manage or *enhance data quality*?

XBRL is built almost entirely around the concept of *data validation*. The standard provides numerous ways to ensure that information prepared in XBRL format can be checked. Checks can be carried out in a variety of ways and in a variety of places.

4.1 HOW ARE VALIDATION CHECKS USED?

Typically, XBRL rules are published, allowing preparers to "pre-flight check" their filings, by running published rules against draft XBRL documents, catching problems before they leave the premises.

In addition, those same XBRL rules are utilized within the "gateway" of the relevant regulator or exchange, so as to ensure that bad data doesn't get accepted. Different types of rules (see below) can generate different kinds of errors. A traffic light system:

- green – the filing passes all tests,
- amber – the filing fails "warning" tests only, requiring additional attention or explanation by the issuer;
- red – the filing fails a critical test and is not accepted,

is typically used, creating so-called "validation at the periphery", greatly enhancing the quality of the information available to regulators and users.

4.2 WHAT KINDS OF RULES GET APPLIED?

The types of rules that can be designed and deployed are varied and limited more or less only by the imagination. A range of different kinds of rules tend to get designed, tested and deployed:

Basic Checks

These kinds of rules tend to involve confirming that a value in a filing is in the right format – if it's meant to be a monetary item it is, and isn't a text item. If it must be one of an enumerated number of choices, it is. These kinds of tests are based on XBRL syntax rules and are baked into the standard.

Mandatory and Co-Constraints

These kinds of rules are fairly self-explanatory. If a concept must be in a filing, it is. If item X appears, then item Y must as well, or if item X appears, then item Z must not. Again these kinds of rules are built into the standard.

Accounting and Business Logic

A very wide range of rules of this sort can be developed. They include:

- Non-negative rules, that capture monetary and numeric items that must be positive or zero.
- Use of incorrect dates in a filing.
- Use of a deprecated (ie: outdated) concept in a filing
- Calculation rules, for items where filers provide summations.

- Roll forward errors (opening balances should be the same as last period closing balances)
- Reasonableness tests, that check that an item is not wildly variant from information provided in a previous filings
- (etc!)

All of these different kinds of rules work together to create high quality filings.

It is vital that the quality and consistency tests developed by a regulator are themselves very carefully checked. XBRL International recommends the use of Test Driven Development (TDD) based mechanisms to create the necessary quality in these tests.

Note that what is not possible with automated checks of this sort is to determine whether suitable judgment has been made in tag selection. Generally, this is a process that requires significant experience and training and can be greatly enhanced by way of independent third party assurance.

A plethora of quality test strategies are available. Whatever is applied must be carefully formulated, prototyped and enhanced in an iterative, agile manner.

5 Q5. To which extent the filing rules have a massive impact on the nature of filing? Can you provide relevant examples?

5.1 BACKGROUND TO FILING RULES

When the first projects were implemented (SEC, EDINET, IFRS, …), all the filing rules were described in an anciliary filing rules document.

With the development of subsequent projects, this document has been reused and, and, rightly or wrongly, it was largely adopted (and genericised) by the XBRL community some years ago, creating the "GFM" or Global Filer Manual.

Since the GFM was created, the XBRL Formula Specification has been developed and passed into wide application. XBRL Formula can be constructed as Pass/Fail rules that aid data quality and can be packaged together with the XBRL taxonomy that manages the content of specific filing arrangements.

The European Committee for Standardization (CEN) has published in June 2014, as deliverable of the Workshop "Improving transparency in financial reporting (WS XBRL)", the CEN Workshop Agreement[1] CWA 16744-4:2014 about "European Filing Rules", mainly oriented to the EBA and EIOPA reporting frameworks.

[1] http://www.cen.eu/work/areas/ICT/eBusiness/Pages/WS-XBRL.aspx

5.2 LIMITING RELIANCE ON PUBLISHED FILER MANUAL

XBRL taxonomies and XBRL formula are executable metadata allowing regulators to specify the rules that must constrain filed data.

In contrast, the filer manuals are written documents which, at least to a certain extent can be interpreted and extended in different ways by different readers, with as consequence, possible distortions in the way rules are applied.

To limit this unnecessary flexibility (which would only serve to increase implementation costs for software vendors and internationally operating businesses), XBRL International would recommend limiting or replacing the Filer Manual with formula rules, embedded into relevant taxonomies, instead.

6 Q6. How would you best limit the use of extensions, while still allowing them (“normalized way”)? Is it simply narrowing primary element members or adding but linking to IFRS requirements for example?

The use of extensions is a complex issue, which the XBRL consortium now has very significant experience with, in both a positive and a negative sense.

6.1 PURPOSE OF EXTENSIONS

Put simply, extension taxonomies allow a stakeholder to add or to change concepts and or structure starting from an existing taxonomy.

As the name suggests, XBRL was built with extensions in mind. This is because different performance reports from different organizations *are* different, notwithstanding the fact that they are based on the same, comparable reporting framework.

Extensions are intended to allow organizations that are reporting to:

- Define and report against their internal organizational structure (segment reporting).
- Define and report against their own level of aggregation and disaggregation (ie: altering calculation and presentation structures to suit their needs)
- Create and report against entirely new concepts, to cater to their unique disclosure decisions.

This kind of framework allows:

- analytical systems to reconsolidate data in ways that make more sense to users (ie: to normalize them).

- Users to identify unique aspects of filings.
- Users to compare individual segment disclosures over time, or against peer companies (eg: "*compare the rolling stock manufacturing segment performance of Siemens AG and Bombardier Transportation*").).

6.2 EXTENSIONS LEVELS

Extensions may be defined at several levels:

- By **regulators** who wish to extend an existing base standard taxonomy
- By **preparers** depending on the reporting needs and strategy adopted by the regulator:
  - ***No extensions:*** the regulator does not allow the preparer to modify any element or structure,
  - ***Limited extensions:*** presentations can be adapted without modifying the original set of concepts and/or concepts can be added beyond the scope of the base taxonomy,
  - ***Unrestricted extensions:*** extensions contain additional concepts and structure modifying the base taxonomy.

6.3 PROBLEMS WITH EXTENSIONS

Extensions, if not managed carefully, can create problems. In particular, extensions can be intentionally (although mostly unintentionally) misused in a number of ways that can harm comparability. For example, extensions can:

- Introduce non-unique definitions. If not appropriately constrained, an issuer can create its own definition of "Profit", or any other concept within an official taxonomy.
- Create complex tree structures that are difficult to interpret.

- Impair company time series analysis where company extensions themselves are not carefully managed.

6.4 APPROPRIATE USE OF EXTENSIONS

Any regulator needs to make some important, and carefully tested decisions about the use of extensions, balancing risk, the ability to constrain those risks, with the utility of this capability.

XBRL International can suggest some mechanisms that can greatly assist, basically wrapped up around the idea that issuers should "show their working" when altering or expanding existing structures in a taxonomy. These might include:

- Requiring extension concepts to "root" in the normative taxonomy tree.
- Requiring single extension relationships to explicitly extend or replace a single existing relationship.
- Disallowing "floating" extended link roles.

Another approach might be to oblige issuers to pre-vet their extension taxonomies, to ensure that they are balancing the needs of comparison with the need to distinguish the disclosures of specific firms.

- All of these issues are currently being discussed within the consortium as part of the Taxonomy Architecture Working Group, with resulting best[2] practices to ultimately form part of the forthcoming "Body of Knowledge". This guidance includes strict, clear, consistent instructions on how taxonomy extensions should be created:

[2] http://xbrl.org/sites/xbrl.org/files/imce/taxonomy_guidance_doc_2014.pdf

- not redefining concepts already existing in the core taxonomy, not permitting modifications to the structure of the taxonomy.
- Only allow extensions following rules described in an "extension guidance document" with clear rules, examples, empty templates,
- Establish a taxonomy extension maintenance process.

It is also worth considering the alternative approached taken to extensions (including whether or not to allow them) by different projects.

7 Q7. If XBRL was to be chosen for the development of EU core taxonomy and then national GAAP extensions, what would be the benefits compared to other technologies?

7.1 STRUCTURED VS UNSTRUCTURED REDUX

As discussed above, the difference between utilizing XBRL technology and alternatives such as PDF and plain HTML is fundamentally a question of structured, versus unstructured data.

Once structured data is available from companies themselves, the type, quality and depth of analysis that can be carried out is improved significantly. Structured data is what users rely on – not the document formats that PDF and HTML provide.

Making structured data available to market participants and regulators alike creates new opportunities for enhanced analysis, both by incumbent data providers, new entrants and by investors and analysts themselves.

Importantly, for smaller firms, providing structured data makes it much simpler for buy side analysis to be carried out, creating greater liquidity, the potential for greater spread of ownership, and greater access to capital.

Unstructured data such as PDF and HTML must be manually converted into structured data before it can be analyzed. This is expensive, inaccurate and creates a significant barrier to entry in terms of expertise as well as cost.

Structured data gives rise to enhanced analysis, making market participants and regulators alike better informed about performance fundamentals.

7.2 SOFTWARE SUPPORT

Utilizing XBRL involves a range of choices about the level of detail that will be sought from companies.

Whatever choice is made, there is a thriving software and services sector that specializes in helping issuers create XBRL from their performance information.

Clearly, converting Word and Excel documents into PDF or HTML is a very straight-forward exercise, so the cost of constructing structured XBRL data instead of unstructured PDF or HTML is higher. However the utility of providing XBRL data to users is sufficiently high that this is a reasonable price to pay for better informed market participants, who will be able to better allocate capital and build better connections between companies across Europe.

7.3 REDUCTION IN BURDEN

As XBRL data becomes more broadly used, other filing arrangements will also convert to this format, reducing, overall, the cost of compliance with a range of government and market-based reporting. Already, initiatives such as the Carbon Disclosure Project utilize XBRL reporting for European corporates. Financial firms regulated by EBA and EIOPA are also required to file in XBRL. As previously noted, a large number of Business Registers across Europe utilize the XBRL format, including with the IFRS taxonomy. In some environments, including the Netherlands and Denmark, this has led to "SBR" projects or Standardized Business Reporting projects which are specifically designed to cut red tape and make it easier to deal with government.

7.4 REPORTING MODERNIZATION

Shifting European corporates towards structured data, to replace unstructured data, is a long process, that goes far beyond financial statement filings, and ultimately requires large firms to take advantage of software approaches that embed structured data into transactional and internal reporting. In doing so, European business will be modernizing its capabilities to measure performance and risk. Using an XBRL standards-based approach simplifies this modernization, allowing incremental improvements, keeping costs down and allowing firms to take advantage of a multitude of offerings without being locked in to a single vendor.

7.5 USER UTILITY

As previously discussed, capturing XBRL based data instead of "paper paradigm" documents provides a platform for enhanced user-utility. It is true that securities regulator implementations need to be carefully designed and carefully tested in order to best capture that utility.

8 Q8. If national GAAP XBRL taxonomies would be developed, what would be the XBRL Europe involvement and on which basis?

This question is very much dependent on the approach taken by Business Registers across Europe. Clearly, in a number of jurisdictions, there is work to be done in order to create high quality and consistent national GAAP taxonomies.

XBRL Europe, as a part of XBRL International, is uniquely placed to assist national standards setters to develop taxonomies which are modern and consistent, clear and easily implemented. Connecting taxonomies across national boundaries, so as to build in significant comparability (either via harmonization or normalization) is something that Europe will need to closely consider. XBRL Europe is comprised of EU national XBRL jurisdictions which have already developed their own national taxonomies and is the perfect forum to cross-fertilize the experience from EU member states with existing taxonomies to those currently without taxonomies. XBRL Europe has already assisted countries in their search for information and experience in developing their national GAAP taxonomies in making links between the countries within its own Working groups.

XBRL Europe, along national XBRL jurisdictions, is promoting XBRL as "*Identified Standard*", according to the REGULATION (EU) No 1025/2012, relevant for fundraising and public tenders (with potential impact in IFRS and GAAP projects).

XBRL International is currently developing a range of guidance materials for efforts of this nature, including for taxonomy development. Under the mantra of the "Body of Knowledge" XBRL International aims to provide new guidance that will result in simplified, more consistent and more comparable taxonomies. On the back of this work XBRL International will be developing new, detailed and

rigorous frameworks for providing training and certification of projects and taxonomies.

The Body of Knowledge will assist ESMA in its efforts to help ensure suitable national GAAP taxonomies exist. Work to review and refine taxonomies of this nature are likely to take the more of assistance with Quality Assurance and review, rather than the construction of taxonomies themselves.

9 Q9. Do you have indications that benefits would outweigh costs even for SMEs? What would you suggest to alleviate their specific burden?

9.1 BENEFITS OF REPORTING FOR SME'S

Generalized individual reporting generates macroeconomic and individual benefits.

Providing consistent structured data across SMEs opens up a huge range of new opportunities for SMEs, deepening and strengthening their links within both national boundaries and across Europe.

Open, pan–European structured data for SMEs would allow:

- Better capital and debt allocation mechanisms than those that exist today, including by opening up access to credit scoring and credit review markets to entirely new participants.
- Vastly better customer and supplier review capabilities than those that exist today, including for entire supply chains. While credit scoring capabilities exist today, their quality and depth is mixed and their use by SMEs is patchy.
- Greatly enhanced customer and supplier search capabilities. If XBRL based financial statements for SMEs were widely available than a range of barriers, including language barriers, could be broken down in searching for new suppliers and customers. The number of suppliers to SMEs has expanded 7 fold over the last 25 years, as business becomes more sophisticated, specialized and geographically diverse. Too many SMEs

consider their markets to be purely local, when they need not be. Too many policy makers consider SMEs to be national businesses when they are already international and could be much more so. The provision of structured data into the EU business environment could be a key enabler for SMEs across the Union.

9.2 COSTS OF REPORTING - IMPACT OF XBRL ON SMALL ISSUERS

Reporting of financial statements generates directs costs for SME's. Our view is that using XBRL, those costs are quite limited. XBRL is already used for many national GAAP reporting. The financial statement reporting to business register is the normal state of affairs

While some environments have seen significant costs imposed on Issuers, these costs are the product of the implementation decisions made, rather than the technology *per se*.").

There are a number of choices that can be made to specifically protect small issuers from unnecessary burden and to keep costs down.

For *very simple* companies, note that the cost of preparing XBRL documents can be extremely small. Straight forward financial statements can be (and often are) created directly out of the Accounts Preparation module of common accounting systems. Since those accounts preparation packages either already do, or can be easily made to, support the creation of XBRL automatically, *the cost for shifting from unstructured to structured data is close to nil for very simple businesses.*

For larger operations that might not be feasible, but there are a number of mechanisms that ESMA could use to keep the costs down while ensuring that the utility of the data remains high, as set out in the next section.

9.3 SOME STRATEGIES TO ALLEVIATE BURDEN

1. Limit scope rather than limit compliance for smaller entities – Approach by steps

Some environments have created complicated phase-in strategies. We suggest that ESMA avoids them. We would suggest that rather than phasing in compliance with XBRL, it would be better to (at least initially, but perhaps into the long term) limit the *scope* of tagging required of smaller companies in order to reduce burden. So, for example, issuers with revenues less than €X should not be required to utilise extensions. They should instead have a subset of concepts from the relevant taxonomy/taxonomies that they need to report with.

One of the reasons that we would suggest that ensuring that the ESEF covers the entire population as early as possible is that for users to make the switch to properly utilise the structured data, they need a reasonable amount of data, for all listed companies, over a period of time. Staggered introduction of segments of the population make that hard. We therefore suggest that it is better to restrict the volume of tagged information that smaller firms must place into the market, than restrict the overall utility of the European data set.

2. Consider using a standard "Normalized" taxonomy for filing by small issuers that use National GAAP.

One complexity associated with small issuers is that, where they don't consolidate their financials, they often have the option to use National GAAP instead of IFRS. Where this happens, rather than run the risk of having highly divergent national taxonomies, it might be better, for simple companies, to mandate the use of a single normalized taxonomy that provides the key data needed by analysts.

The content of the reporting as seen by the markets has evolved with the introduction of new concepts as EBITDA and free cash flow as mentioned in Q2.

The natural trend is for ESMA and the standard setters to accompany this evolution and to set up technical standards and a taxonomy which will take into account a minimum set of concepts "above" the local GAAPs and which will cope with the type of information to be reported for the markets.

3. Ensure firms reap the benefits of providing data directly to market stakeholders.

There are a number of reasons that smaller firms don't get independent research coverage, but access to data is one of them. This is not to suggest that firms will suddenly get sell side coverage as a result of an XBRL mandate. Realistically, the research world – particularly on the sell side – is changing in very dramatic ways. But other ways of getting noticed (including, for example, fine grained and fine tuned indices based on the company-prepared structured data) can give rise to enhanced visibility and enhanced market access.

Opening up opportunities for issuers, large and small, to (a) understand how and where their data is being used and (b) the extent to which it is being used, is one of the desirable side effects that ESMA can design into its operations. This idea is a bit like the "impression" based marketing arrangements in use by the Search Engines. It would be relatively easy to provide a feedback loop to issuers that can show them where their data is being used and to a lesser extent, how their data is being used.

9.4 MORE BROADLY – BUSINESS REGISTERS

Not directly related to this point, but for information, our community is of the view that implementing structured reporting with XBRL for business registers opens up very significant new opportunities for Europe in particular. Across Europe, annual financial statement reporting to the business registrar is the normal state of affairs. The EU is able to bring about a level of consistency and quality in this area that no other region is likely to match.

Providing consistent structured data across *private* SMEs opens up a huge range of new opportunities for SMEs, deepening and strengthening their links within both national boundaries and across Europe with the benefits described above (cf &9.2)

This is a subject that we would be delighted to explore further with ESMA and other relevant agencies and experts.

10 Follow Up

XBRL International and XBRL EU would be delighted to provide a presentation to relevant ESMA officials to assist in their understanding of this subject and to follow up on any aspect of this document.

We will be in touch to offer our services in this area. Please don't hesitate to contact us directly to discuss any aspect of this document.

John Turner

+44 7919 015 010

XBRL International

Gilles Maguet

+33 (6) 716 23 119

XBRL Europe