INLAND REVENUE CT E-FILING:
The Business Case for XBRL

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Introduction

The UK government has made a broad and deep commitment to establishing a sound technical foundation for e-Government. Within this framework, there is a requirement for standardising data tags and vocabularies across government departments. CT e-Filing is an Inland Revenue initiative that will allow corporate entities to file form CT600 electronically using eXtensible Markup Language (XML), along with XML Schema, which defines the arrangement of XML data in a file. This builds on similar XML implementations for SA and PAYE forms. To that end, the Inland Revenue development team has created a standardised set of data tags and structures for representing the CT600 in XML. This was released for consultation to tax and accounting software vendors on 22 November 2001.

In the commercial world, over 120 software vendors, accounting firms, and users of financial data have formed an independent consortium in order to standardise the data tags and vocabularies for business reporting, using XML and XML Schema for the same reasons that the Inland Revenue chose to do so. The resulting specification is the eXtensible Business Reporting Language (XBRL) and the community is XBRL.org. What XBRL adds to XML Schema is a framework for defining financial and business performance terms to be used consistently within and across many different software applications. The terms have a fixed meaning, defined and endorsed by professional associations and independent of any particular software application. The framework then allows those terms to be organized in any given business form or report along dimensions that are common in reporting: business entities, the period of reporting, and classification with respect to the type of each data item. Furthermore, XBRL is accompanied by a growing number of vocabularies covering large areas of accounting and financial data – a core set of UK accounting concepts being among those vocabularies.

The data captured in CT600 and many other Inland Revenue forms has much in common with a business report: an extracted view of data captured from various systems and organized to facilitate consumption, either by a human reader or by a software application to process the data. Although the act of filing is also a transaction, in the sense that it will have a rigidly defined set of data points to convey, looking at the full lifecycle of the filing reveals that like any business report, each data item has a context in which it should be interpreted, and the data may subsequently be reused in ways not fully predictable by the original software designer, so that preserving the context is important. There is a strong case that now is the time for the CT600 schema to leverage the XBRL (Version 2) schema and development community, so that all future Inland Revenue filings, and the reports required by other regulatory bodies within the government, can even more effectively leverage this market-driven standard. XBRL.org invites the Inland Revenue to participate in this community and leverage the XBRL Version 2 specification.

This document outlines the benefits to the Inland Revenue, software developers, and other constituencies, of adopting the eXtensible Business Reporting Language (XBRL) in the delivery of the CT e-Filing initiative as a first step toward broader use of XBRL in other filings and reporting throughout the government. The document has two parts:

1. The Business Case, which discusses the benefits of incorporating XBRL and proposes alternative methods of implementation. This part is relevant to all readers.

2. The Technical Summary, which discusses how XBRL could be implemented and is of interest to readers requiring more detail. In particular, it discusses:

   - The background to the technological direction of e-Government and XBRL;
   - How the XBRL schema supports CT e-Filing; and
   - How the XBRL schema can be incorporated into CT e-Filing with a minimum of cost;
   - Future applications enabled by use of the XBRL schema in Inland filings.

1 Business Case

The CT e-Filing initiative gives the Inland Revenue an exceptional opportunity to benefit a large community of taxpayers, corporate filers, tax accounting software vendors, and financial services companies. This widening of the scope and enhancement of future flexibility and market acceptance can be achieved by incorporating the eXtensible Business Reporting Language (XBRL), an open standard, as part of its initiative. Adopting XBRL will help the Inland Revenue to:

1. Reduce future compliance costs borne by reporting entities;

2. Encourage interoperability between tax software and other e-business systems;

3. Accelerate adoption, uptake and usage of e-Filing services once launched;

4. Lower its future cost of implementation of other e-Filing services;

5. Create opportunities for its own future value-added e-Services; and

6. Contribute significantly to the government's vision for e-government.

The fundamental reason for adopting XBRL is that it <u>can</u> deliver these benefits. XBRL is a freely licensed, internationally endorsed, market-driven specification that follows existing Internet standards - that the government mandates - and adds value to those standards by codifying recognised accounting standards. Software developers familiar with XML and XML Schema will immediately recognize that all of their tools and technologies for working with XML continue to apply to XBRL; what XBRL adds is a common vocabulary and means of structuring financial and business performance data in a way that works across different applications. Moreover, there is a growing community of software vendors – XBRL Solutions, e-Numerate, IBMatrix, Semansys, Audion – that are releasing tools that take advantage of XBRL's specific features , and a community of 120 organizations starting to use those tools. Although if XBRL is limited in scope only to a single filing type – the CT600 – then the incremental benefit is limited; what XBRL offers is interoperability both within Inland's forms for individuals, corporations, and partnerships, but across the government for reporting on non-profits, collection of statistics, and extending that interoperability into filers' own systems.

To give a greater understanding on how XBRL can deliver these benefits, we expand on each of the six points above:

(1) *Compliance cost minimisation.* Filing entities will benefit from reduced implementation and compliance costs because XBRL can support all types of business reporting and consolidation. XBRL incorporates common definitions based on the reporting jurisdiction or the type of report being done. Having one underlying standard to exchange tax and accounting information will reduce complexity and cost in this important area of corporate IT.

> *Example: Accounting systems for small to medium size enterprises, such as Microsoft Great Plains, are already being enabled to produce XBRL reports. Of course XBRL allows the definition (using XML Schema) of specific forms with specific fields and enforced relationships in those forms, so that filers need supply no more information than they do today. Supporting documents, such as statutory accounts, may be coded in XBRL and appended to the form so that it can be harvested for tax-related excerpts – extracted from a schema originally designed for statutory reporting purposes.*

(2) *Encourage interoperability among software vendors.* Tax and accounting software vendors will be able to use, more readily, data from other applications. Their developers need only write software for the XBRL standard format, rather than for many different proprietary or report-specific formats. This will encourage interoperability and create new opportunities for all such vendors. Working better with accounting systems, tying in more closely to authoritative literature and market information, permitting extensibility so that filers can attach more detail locally and stripped when sent, being part of a framework so that results can be more easily audited and fraud reduced, being able to compare more easily historical filings for consistency – all of these not only create opportunities for vendors but contribute to better compliance.

> *Example: Using the standardized XBRL UK accounting definitions, less code will need to be written just to map and transform data from one scheme to another. This reduces the amount of code to be maintained, requiring less modification with new releases, and allowing applications that produce and consume the XBRL format data to evolve more independently.*

(3) *Accelerate adoption of e-Filing.* Companies already adopting XBRL for financial reporting – including Microsoft – and submitting Inland Revenue filings will be able to accelerate their adoption of the CT e-Filing service. Compatibility with their other XBRL-enabled software will ease implementation.

> *Example: Not only Microsoft, but larger systems suppliers – including SAP and Oracle – are adopting XBRL. Many other organisations are adopting XBRL including the US Government, the EU and several other large companies. The tax departments of leading companies will want to be seen as leading the way and will obtain internal funding for the adoption of XBRL. XBRL is emerging as the standard for business data transfer in the same way that 'IBM-compatibility' became the standard for hardware. At present, the cost of being XBRL-compatible is small. In the future, the price of not being XBRL-compatible could be great.*

(4) *Lower Inland Revenue implementation costs.* Future Inland Revenue e-business projects will benefit from the reusability inherent XML and XML Schema, and will benefit even more by leveraging XBRL schemas, by virtue of its extensive and growing set of common financial and accounting definitions. Incremental development efforts will enjoy reduced costs and timetables.

> *Example: As the Inland Revenue seeks to take a more collaborative approach with taxpayers, using shared correspondence files and the 'Collaborative Workspace', the use of differing XML schemas that have no common elements or patterns to leverage would complicate such initiatives. Although Inland can achieve this within the scope of its own filings, it takes a consortium to achieve commonality across departments and enterprises. The common business-reporting platform of XBRL already provides this commonality, community and consensus.*

(5) *Enhance functionality.* XBRL has rich features that make it easy to extend a document. These features allow links to supporting documents and schedules for the specific company, or external links to regulations, statues, and legal reference material. When considering the entire life-cycle of tax filing, and the relationships between individual regulatory filings, these features will add considerable value to the e-Filing service.

> *Example: Other applications can take advantage of XBRL linking etc. to build a drill down, for example, from supporting material in a filing. By leveraging XBRL when developing schemas, Inland can leverage the General Ledger functions to get the full audit trail.*

(6) *Lead the way.* The vision for e-government strongly endorses the idea of sharing data definitions through common standards, encouraging standardisation and reuse. XML Schema based systems are good; even better would be to leverage the international accounting community's investment in XBRL and its emerging standard framework and definitions.

> *Example: the Inland Revenue can demonstrate that it is supportive of taxpaying business community, by leveraging that community's standards, rather than being seen to be doing its own thing. This will accelerate the adoption of other Inland Revenue initiatives like the 'Collaborative Workspace'.*

We understand the pressures that the Inland Revenue is under to deliver its CT e-Filing initiative. Yet a key factor in determining the long-term success of this initiative and its impact on future initiatives will be the use of an industry st andard at its core, as this will influence the speed of adoption. We believe that XBRL is that standard and may still be incorporated in the considerable work already undertaken by the Inland Revenue development team.

To incorporate XBRL in the released p roduct, we propose that Inland Revenue modify the CT600 schema so as to refer to relevant tax accounting element definitions derived from the XBRL UK definitions, extending the set of definitions where necessary, and referring to the underlying XBRL schema. The resulting schema for the CT600 would validate almost exactly the same documents. As with any XML based document, unused elements and attributes can be ignored by existing parsing software, and in any event, the use of XBRL as shown later in this paper do not initially require the use of any functions that would not be already operational in Inland's systems. Assuming that appropriate XBRL and XML schema expertise is applied quickly, it should have no impact on the final delivery schedule.

The benefit will be that all of the other features and capabilities of XBRL – including published XBRL schemas covering specific jurisdictions - will simplify future development. Software vendors will appreciate the value of being able to develop to a base XBRL schema for both the CT600 and future reporting requirements. In other words, this would have the Inland Revenue developers – a small community – learn XBRL-specific schemas now, in order to reduce the amount of Inland Revenue-specific schemas needing to be learned later by independent software vendors and corporations – a much larger community.

There are several reasons why the timing for this is fortuitous:

- The consultation period for the design of the CT600 schema for CT e-Filing is still in progress;
- Tax software vendors' product releases for tax year 2003 are over a year away;
- The first implementation and deployment of CT e-Filing is still at least six months away;
- XBRL Version 2 is stable and due for imminent release;
- Tools for XBRL Version 2 development are already sufficient to support the CT600 design;
- It is clear how to leverage XBRL within the current CT600 design ; the approach is demonstrated in the technical part of this paper.

We also recommend that the Inland Revenue and the XBRL consortium begin coordinating this work with the Office of the e-Envoy on the pan-government thesaurus, and e-GIF to incorporate the standardised accounting definitions from the IASB and UK XBRL taxonomies to assist future developm ent right across the government.

2 Technical Summary

2.1 Current situation and direction of technology

This section provides a background to the technology planned for both the Inland Revenue CT e-Services and XBRL. Adopting XBRL as a set of definitions in XML Schema would be a logical continuation of the Inland Revenue's current technical direction.

The UK government has made significant commitments to laying a sound technical foundation for e-Government in the form of the Government Interoperability Framework (e-GIF) and its components in which data dictionaries embodied as XML Schemas are published and shared. As an example of the government's commitments to interoperability, early in the life of the e-Government initiatives its leadership resolved to use the Dublin Core standard – a set of standard XML element tags which are placed inside World Wide Web documents so as to make them easier to find and accurately identify when searching the web. Additional commitments to interoperability standards – by adopting industry standard names and meanings for data elements – will be forthcoming. The Inland Revenue and its technology base for CT e-Services is aligned with this overall philosophy -- both the SA form and the CT form, for example, share a common set of definitions, including those in the table below – although the scope of interoperability is contemplated only within the set of the Inland Revenue's own applications.

Table 1. Common core definitions for SA and CT applications.

Data Transmission Types	Financial Accounting Data Types	Tax Specific Types
IRStringType	ISOCurrency	IRHeaderStructure
IRDecimalType	IRMonetaryStructure	WorksNumberType
IrnonNegativeDecimalType	IRnonNegativeMonetaryStructure	TaxCodeType
YesNoType		IROfficeNumberType
AddressLineType		IROfficeReferenceType
InternationalAddressStructure		IROfficeStructure
NameTitleType		
NameType	(Selected CT Elements)	
NameStructure	../Turnover/Total	MarginalStartingOrSmallCompany
GenderType	../Turnover/OtherFinancialConcerns	AdvanceCorporationTax
TelephoneNumberType	../Income/TradingAndProfessional/Profits	TotalReliefsAndDeductions
EmailType	../Income/TradingAndProfessional/NetProfits	CISDeductions
TelephoneExtensionType	../Income/NonTradingLoanProfitsAndGains	CISDeductionsRepayable
WorkHomeType	../OtherIncome/LandAndBuildingIncome	TaxAlreadyPaid
TelephoneStructure	../OtherIncome/DeductedIncome	TaxOutstanding
ContactDetailsStructure	etc.	etc.

The Inland Revenue's current direction suggests further extensions to this approach in which generic data elements – possibly drawn from definitions across the entire government – are published in common core schemas. Other schemas would collect application-specific elements related to a single purpose within an application, e.g. all the elements on a given tax form.

XBRL is an internationally agreed framework for defining common accounting terms using XML and XML Schema. The codification of these terms is the responsibility of XBRL.org members within jurisdictions representing the international (IASB) and national (e.g. UK, US, Australia, Singapore, Japan) accounting communities, investors (e.g. Morgan Stanley), and software vendors (e.g. Microsoft, SAP, Hyperion, Reuters). The XBRL framework consists of hierarchical schemas, each sharing commonly defined elements and thereby building on them. The "core" schemas define: generic data

level concepts such as a number with a context consisting of its type, relevant period and entity it refers to; links between sets of numbers and one or more footnotes; links between an accounting classification and the supporting literature. "Taxonomies" cover a domain, such as the IASB's accounting definitions, US GAAP definitions, and further specialisation such as Singapore's definitions based on IASB. The decision to organise the schemas between "core" and "taxonomy" was taken to maximize reusability. The same set of definitions can reduce the cost of software development and data sharing between many different applications; particularly so with applications that manipulate financial data throughout the entire reporting lifecycle, from initial transaction, through management reporting, financial reporting, regulatory reporting, audit and historical analysis.

2.2 XBRL Schemas support CT e-Filing

The Inland Revenue has an exceptional opportunity to reduce future compliance costs among reporting companies, while retaining flexibility to expand the set of services it offers. This is possible by considering not only the needs of point-to-point transmission of individual filings, but the wider picture of corporate regulatory filings, internal corporate IT infrastructure needs, and the lifecycle of data used in reporting. By using XBRL as a component Schema for all e-filings, starting with CT600, the Inland Revenue may achieve these benefits without incurring additional costs and be in line with the longer range vision on the use of component reuse within the Government Gateway, e-GIF and the pan-Government thesaurus.

1. *Enhances the reusability of Inland Revenue software.* The SA and CT XML schemas currently demonstrate sophisticated use of best practices in reusability - reusability being a fundamental reason for the use of XML. For example, the "data dictionary", which consists of elements and syntax rules, is modularised into separate schemas for transmission-level data types – such as 9-digit numbers with 2 digits to the right of the decimal – from the individual schemas for different forms.

   However, there is another way to further subdivide that set of schemas to improve reusability on a larger scale. By distinguishing those schema elements which are application-independent – in that they refer to externally defined accounting concepts such as Turnover, Profit, Reporting period, and the relationships among these concepts – versus those that are application-dependent such as Tax already paid, Allowable losses including losses brought forward. XBRL already provides a way to factor these different elements, enhancing reusability.

2. *Sacrifices no power or flexibility.* Using XBRL as a base schema for CT600 and other forms results in no loss of functionality relative to the current CT600 schema. A schema for the CT600 form can import the XBRL base schemas and an appropriate UK Jurisdiction taxonomy (which itself is just an XML Schema whose elements all define accounting related elements and relationships in a standard way). XML Schema just by itself can support:

   - Data element level validation – e.g. check that the field is a non-negative number;

   - Structural validation – e.g., check that if there is a claim to group relief on CT600B that the non-resident company is specified.

   XBRL also supports a common form of calculation appearing within a "business rule":

   - Vector summation – e.g. Box 15 is the sum of 15% of Box 14 less 30% of Box 13.

   as well as providing a representation for other relationships, such as definitions, granular links to footnotes or into supporting documents, and information about preferred presentations.

Neither XML Schema nor XBRL provide, at this time, a generalized co-constraint facility that would allow the representation of relationships such as:

- if there are profits in box 46 then the entry in box 59 must be negative.

With respect to this last point, XBRL version 2 already includes elements and relationships to support "calculation links" within contexts that can be flagged as to whether the closed world assumption holds or not; these will be extended in the future to encode the equations and other logic of business rules in a reusable, general way. Depending on the timing of the next release of XML Schema – since XML Schema 1.1 did not deliver on expected co-constraint functionality -- XBRL may either incorporate draft functionality or develop its own representation, since this feature is frequently requested. The Inland Revenue, as a participant in XBRL.org, would be well positioned to influence this direction in a way that would benefit the entire financial and business reporting community.

3. *Reduces implementation costs borne by filers.* If the Inland Revenue follows best practice and reusability to its logical conclusion, XBRL offers significant benefits to UK taxpayers. Taxpayers depend upon software vendors to supply them with tax, accounting, regulatory and investment reporting products. The more rapidly these products can be developed and integrated with legacy systems, the faster the benefits will be delivered to Taxpayers through lower compliance costs. Vendors may achieve this through a broad agreement on the underlying common definitions and granularity at which data can be packaged – in this case, common data dictionaries i.e. element names, definitions and the fixed relationships between them. Furthermore, the facilities in XBRL for linking to regulations and other data, its support for drill-down, and capturing calculations as links, all support new value-added functions for the future CT e-Service.

As a recent precedent, by endorsing the Dublin Core standards for describing content, the government simplified implementations of many other products and defined a clear direction for vendors. Likewise, the Inland Revenue can incrementally adopt XBRL, layer on value-added functions, and perhaps eventually contribute to mandating of XBRL for accounting and business metric data dictionary elements in e-GIF, to the benefit of all companies and institutions that deal with business performance data.

2.3 The XBRL Schema supports CT validation requirements

This section illustrates how the XBRL Schema can be used to construct a schema that continues to support the key validations required for CT reporting, and also provides other features.

Figure 1 shows the concept of "ChargeableGains". The data type of each element is "CTwholePoundStructure", which is a non-negative integer in which the currency is fixed in pounds Sterling. This is because it is important to have data-value validation done to the greatest extent possible at the source. An XML Schema validator can accept an XML instance, the CT600 Schema, and ensure that the instance conforms to the schema. A negative number appearing in the "allowable losses" element, for example, would raise a validation exception.

The CT600 Schema defines the elements and the way they must appear together, in an XML document. If another application needed a different arrangement – e.g. where GrossGains is a required element even if it is zero – it would need a different schema.

In XBRL, the same information is expressed in a set of elements that are independent of each other. They can appear anywhere; they do not need to appear inside an element "ChargeableGains" whose

only role is for presentation of a group of three related numbers. If in fact they needed to be grouped together, this could be done through another XBRL element called a tuple, or, more precisely, through the definition of an element (in this case, ChargeableGains) that has the type "tupleType". XBRL instance documents are somewhat verbose, but only because XBRL makes a clear distinction between the name of an element, its id, and its type, which are sometimes blurred.

Note that the same data item validation properties hold: a negative number appearing in the "allowable losses" element, for example, would raise a validation exception, just as in the CT600 design.

The underlying motive for this separation in XBRL is to maintain reusability. For a simple example, the CT600 schema can simply import an appropriately defined XBRL taxonomy (Figure 3). The definition shown there allows XBRL elements defined for the tax domain to be referenced and appear in CT600 documents and are synt actically compatible with the elements defined previously. The example below uses a separate namespace "ukir" but in fact this is not necessary, it could be the same namespace as the CT600 schema itself.

Figure 1. Fragment of CT600 Schema.

```
<xsd:complexType  name="CtwholePoundStructure">
      <xsd:complexContent>
         <xsd:restriction  base="IrnonNegativeWholeUnitsMonetaryStructure"/>
      </xsd:complexContent>
</xsd:complexType>
```



```
<xsd:complexType
        name="ChargeableGains">
    <xsd:sequence>
          <xsd:element
    name="GrossGains"
    type="CTwholePoundStructure
"
    minOccurs="0"/>
          <xsd:element
    name="AllowableLosses"
    type="CTwholePoundStructure
"
    minOccurs="0"/>
          <xsd:element
    name="NetChargeableGains"
    type="CTwholePoundStructure
"/>
      </xsd:sequence>
</xsd:complexType>
```

Figure 2. Fragment of CT600B Schema expressed in XBRL.

```
<complexType name="nonNegativeItemType">
      <simpleContent>
         <extension  base="ukir:nonNegativeType">
            <attribute name="numericContext" type="IDREF" use="required"/>
            <anyAttribute namespace="##any" processContents="lax"/>
         </extension>
      </simpleContent>
</complexType>
```
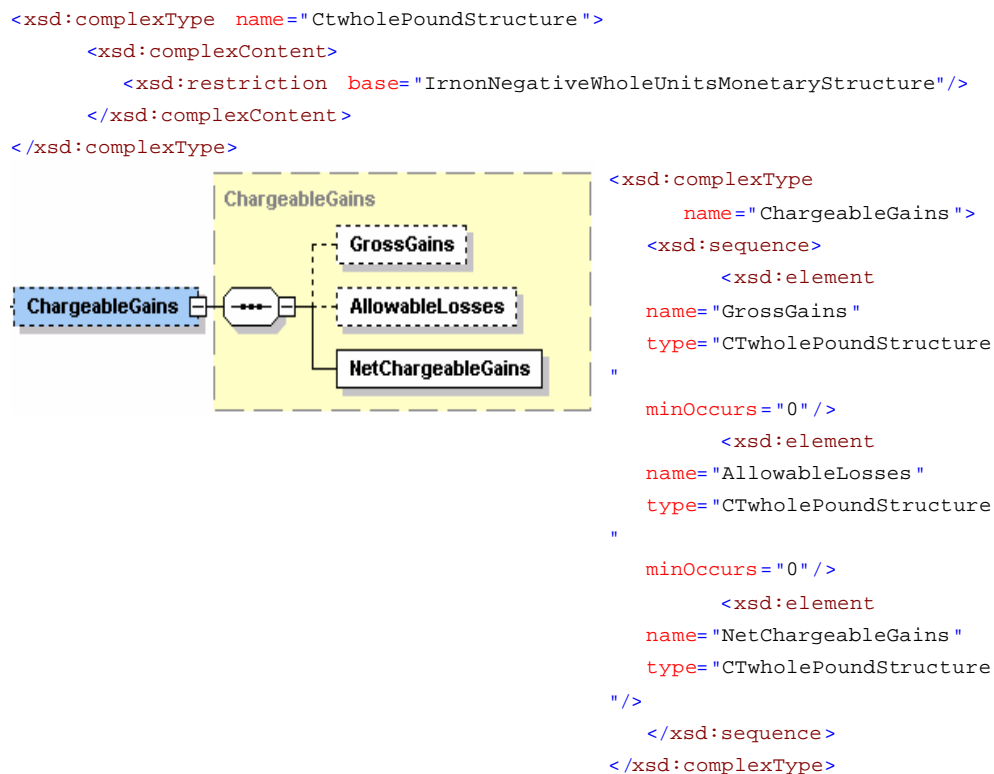
```
<element name="grossGains" type="ukir:nonNegativeItemType"
      substitutionGroup="xbrli:item" id="grossGains"/>
<element name="allowableLosses" type="ukir:nonNegativeItemType"
      substitutionGroup="xbrli:item" id="allowableLosses"/>
<element name="netChargeableGains" type="ukir:nonNegativeItemType"
      substitutionGroup="xbrli:item" id="netChargeableGains"/>
```

Figure 3. Importing XBRL into CT600.

```
<xsd:import namespace="http://www.inlandrevenue.gov.uk/xbrl/2001-12-01/"
        schemaLocation="ukir.xsd"/>
<xsd:complexType name="ChargeableGains">
      <xsd:sequence>
        <xsd:element ref="ukir:GrossGains" minOccurs="0"/>
        <xsd:element ref="ukir:allowableLosses" minOccurs="0"/>
        <xsd:element ref="ukir:netChargeableGains"/>
      </xsd:sequence>
</xsd:complexType>
```

This approach could enhance the CT600 schema in various ways. XBRL elements all have an explicit "context" (numericContext or nonNumericContext) in which the business entity and the period being referred to, by that element, are made explicit. So, there is no limit on the number of different (say) GrossGains elements that appear in a given document as long as in each case their context is different. For example, one GrossGains element might refer to the overall business entity, another to a subsidiary whose gains and losses must be reported separately, and yet another might refer to the prior period's GrossGains. The point is that XBRL already offers a solution to the problem of multiple contexts for a given element type, thus simplifying the design of future tax schemas in which multiple entities or periods must be reported.

Also, consider in particular a business rule as expressed in the CT600 design:

- 'box 16' (Net chargeable gains) must equal the sum of 'box 14' – 'box 15'

If the only way this rule will ever be used is to test for conformity, then there are several ways to do it. This is commonly done as an XSL pattern-action rule that emits a result if box 16 differs from the calculation shown. This approach also works fine in XBRL. XBRL offers an alternative by encoding the summation relationship, which is permanent and could be used in various ways, such as presentation as well as calculation, or even could be used "in reverse" in a different application. Figure 4 shows how XBRL encodes the calculation so that it can be used in different applications: any application that understands the semantics of this type of link in XBRL.

Figure 4. Reusable calculation of Net Chargeable Gains.

```
<!--Explicit relationship among calculated components -->
<calculationLink xlink:type="extended"
      xlink:role="http://www.xbrl.org/linkprops/">
   <loc xlink:type="locator" xlink:href="../ukir.xsd#grossGains"
      xlink:label="grossGains" xlink:title="grossGains"/>
   <loc xlink:type="locator" xlink:href="../ukir.xsd#allowableLosses"
      xlink:label="allowableLosses" xlink:title="allowableLosses"/>
   <loc xlink:type="locator" xlink:href="../ukir.xsd#netChargeableGains"
      xlink:label="netChargeableGains" xlink:title="netChargeableGains"/>
   <calculationArc xlink:type="arc"
         xlink:arcrole="http://www.xbrl.org/linkprops/arc/child-parent"
         xlink:from="grossGains" xlink:to="netChargeableGains" weight="1"
         xlink:show="replace" xlink:actuate="onRequest" xlink:title="calculation:
         Gross gains contribute to Chargeable Gains"/>
   <calculationArc xlink:type="arc"
         xlink:arcrole="http://www.xbrl.org/linkprops/arc/child-parent"
         xlink:from="allowableLosses" xlink:to="netChargeableGains" weight="-1"
         xlink:show="replace" xlink:actuate="onRequest" xlink:title="calculation:
         Allowable Losses deduct from Chargeable Gains"/>
</calculationLink>
```

2.4 XBRL Supports Other Features

The most important features of the XBRL schema and taxonomies that build on that schema are those designed to support functional extensions to reporting applications. The use of XLink to do this is to ensure the use of a standard syntax and semantics for links that both connect web resources across files and within them, and in which there is a single way of finding the role of the arc, its source and destination, etc.   XLink-aware tools, building on years of experience with related mechanisms in SGML and HTML, will appear in a time frame during which the Inland Revenue will be ready to use these features. In the case of the e-filing service, for example, XBRL provides a built-in mechanism for assigning footnotes to items in a financial statement, and provides links between an element definition e.g GrossGains, and any number of web resources relating to it. This could be used in a complex tax filing, allowing the filer to provide supporting evidence in electronic form, not as attachments to the entire filing, but precise and granular links from particular items to their supporting documents. For the tax forms, links could be included to online publications that provide definitions, statutory and judicial rulings, and so forth. Now that the primary legal publishers in the UK have embraced XML, this is a natural relationship.

The Inland Revenue has an opportunity to anticipate these future features and benefits, as well as reducing future implementation costs. Doing so requires a breadth of perspective; considering not only the requirements of CT, or e-filing, or the Inland Revenue, but the government more broadly and taking into consideration the needs of filers and software vendors responsible for creating tools. As XBRL becomes more widely deployed and is used for other financial consolidation and reporting tasks, the Inland Revenue can work with filers and software vendors so that all are positioned to take advantage of the standard. Other organisations such as the Australian Prudential Regulatory Authority have already chosen to incorporate XBRL into their next generation electronic reporting systems.   This was driven by an overriding concern for future flexibility and lower implementation costs, and from recognition that XBRL, as an emerging standard, aligns with the goal of developing consistent government-wide data definitions.

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