2012 IACA MERIT AWARD APPLICATION

Photo: Joe Ross

"Remembering the Past While Embracing the Future"
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Jurisdiction: Germany (North Rhine Westphalia) and Jersey (Jersey Financial Services Commission)
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Date: 23 march 2012

Introduction:

Our submission for the 2012 IACA Merit Awards is on a joint European project to develop a Registry Messaging System ("**RMS**"). In order to add clarity to our entry we have attached a supporting document, we will be referring to this document where appropriate. In any event this document is a good read in its self.

We believe that the development of the RMS truly reflects this year's conference theme "Remember the Past While Embracing the Future", page 4 and 5 of the support document outlines the history and the future of business registers development.

Although Jersey and Germany are making this joint submission the other members of the RMS project, Serbia, Macedonia and Ireland are equal participants.

So what is the RMS?

Description of the Innovation:
There has been no exchange of information at a European Union Member State level between Business Registers. The RMS was developed to show that such information could be exchanged electronically.

The RMS addresses the issues which have plagued previous attempts at business register interconnectivity. The RMS platform has distinguished itself from other interoperability platforms by incorporating four key components, which are:

- Central Entity Index
- Directory of Registers
- Service Catalogue
- Intelligent Adapter Connection

Please see description of these functions at pages 11 to 16 of the support documentation.

The basic setup is that Register A can communicate to Register B using existing web-services but incorporate a link to the RMS system via the Intelligent adapters.
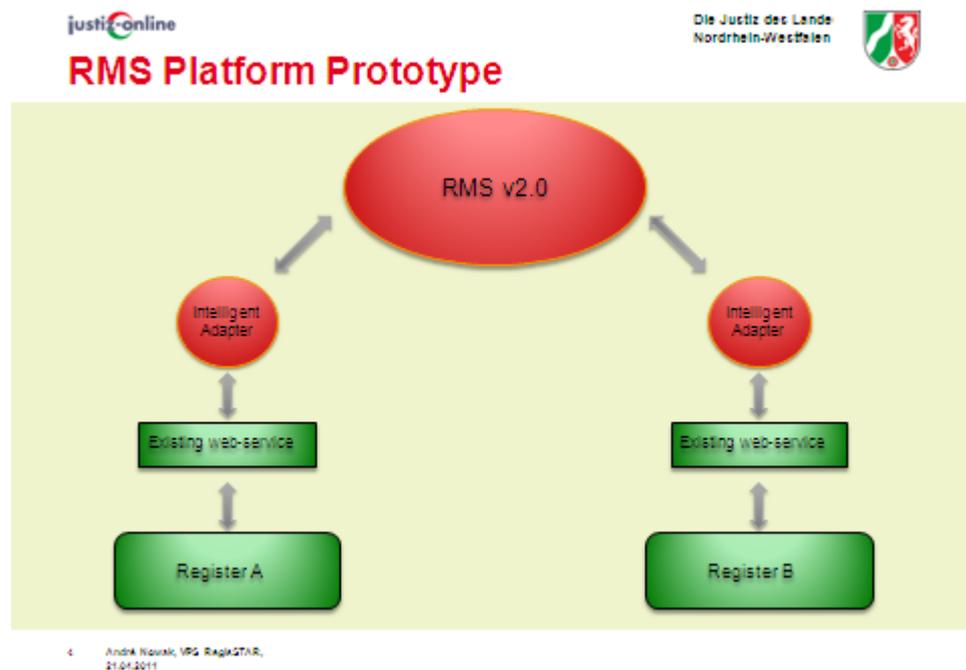
Results of Implementation:

Work on the RMS prototype started in early 2010 with staged implantation taking place as the solution widened:

- From June 2010 interconnection of Companies House in Cardiff/UK and German Business Registers (RMS v1.0);

- Notification service for changes at the Companies House that affect branches of UK companies in Germany (oneway solution);

- It became apparant that a oneway solution would not fit the demandments of the Proposal for a Directive of the European Parliament and of the Council concerning interconnection of business registers;

- Development of RMS Platform Prototype between Ireland, Serbia, Macedonia, Jersey and Germany as solution for an electronic network as demanded by the EU (RMS v2.0)

The results of the implementation were demonstrated at the ECRF meeting in Bonn, Germany in June 2011. The results of the presentation and the subsequent use of the RMS have been significant. Other platforms are now looking at the RMS infrastructure and design with a view to incorporating such designs within their systems.

Benefits of the Project:

The top seven benefits of the system to the user (both production and customer) are:

- RMS is the first platform to fully demonstrate business register to business register electronic communication;
- Because of the four key components identified above, data search is much quicker than for other business register platforms;
- Monitoring and notification services are available;
- Global relationships of companies can be monitored
    - e.g. between companies and their foreign branches;
- Changes in relevant documents and particulars are recognized;
- Affected registers receive notification of changes
    - e.g. changes at the register of a company are announced to the register of its branch;
- Registers involved in cross-border-mergers can exchange messages directly through the platform

Developments costs were provided as a European project. The benefits from the expenditure will be significant, especially as the technology is shared with other organisations in Europe and elsewhere.

Lessons Learned:

Initially, there were a number of competing platform developments in Europe which meant that business registry and ICT resource were being spread across the different projects and not being utilised efficiently. A number of working groups were set up which were able to "iron out" any differences.

Support Documentation attached
<div align="center">**END**</div>

RMS
REGISTER MESSAGING SYSTEM

**Ministry of Justice,
North Rhine Westphalia
Martin-Luther Platz 40
Dusseldorf
Germany**

**Jersey Financial Services
Commission
Castle Street
Jersey**

2012 IACA MERIT AWARD APPLICATION SUPPORT DOCUMENTATION
"Remembering the Past While Embracing the Future"

Photo: Joe Ross

RMS – A Proposal for Semantic Interoperability for Business Registers

March 2012

JFSC, NRW

Contents

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Introduction

Business Registers are the fundamental pillars of any economy. They provide transparency for transactions between trading partners. Some authors would argue that the implementation of a Business Register is the very catalyst to the creation of capital itself [(i)]. It provides certainty of legal transaction and moves businesses from the extra-legal to the legal. The World Bank through its Regulatory Reform programme provides funding for developing economies to create Business Registers to provide stability and impetus to their economy. The importance of the Business Register as an organisation is seen annually in the attention received by the World Bank Doing Business Report [(iii)].

European countries, particularly those in South East Europe that have received World bank funding for regulatory reforms programmes, view their Business Registers as a means of creating a competitive advantage. This is a perspective shared by those jurisdictions on the periphery of Europe (off-shore) such as the Channel Islands. One must remember that some of the legal forms used in the Business Registers of mainland Europe came from these jurisdictions [(iv)]. By and large, citizens and businesses of the European Union take the services of a Business Register for granted. Therefore, it is also assumed that at a European level these organisations natively exchange information in a meaningful manner for the purpose of serving their wider economies and meeting their statutory regulatory responsibilities.

However the reality is very different from what is assumed. It is a fact that there is no exchange of information at a European Union Member State level between Business Registers. The very premise of the Treaty of Rome's provision for the freedom of movement of goods, person, services and capital is not provided for by the structures of the Member State's Business Registers [(v)]. The EC Green Paper on the 'Interconnection of Business Registers' recognises these issues and seeks to look for solutions [(vi)].This white paper proposes a real and tangible working solution to finally resolve the problem of the interconnection of Business Registers using a common technical Platform.

History

Business Registers began to digitise their records in the mid-1990s which until then were largely held in paper. Throughout the mid-1990s Business Registers began to invest heavily in Information Technology (IT) to increase efficiencies within their organisations and to provide more electronic services to their clients. The diagram below shows the average timeline of Business Registers in Europe in terms of their advancement and their use of technology.
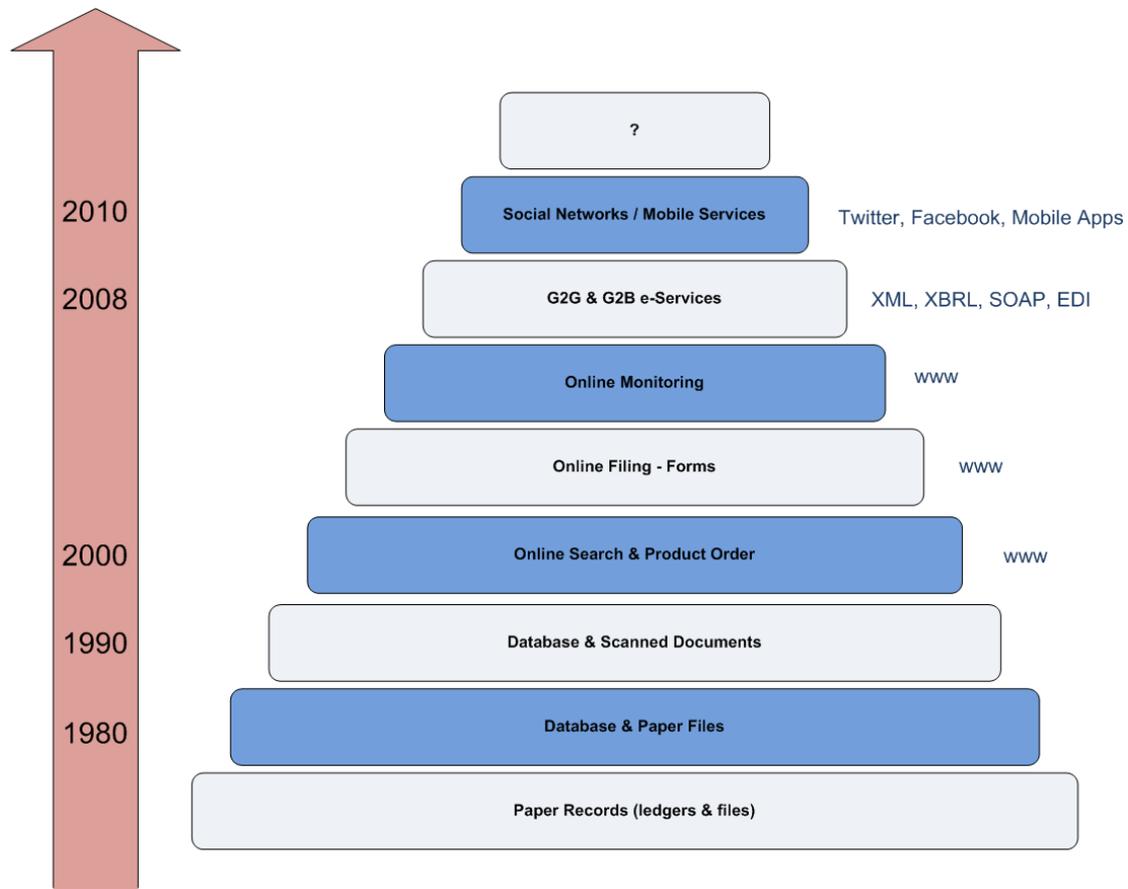

Figure 1: A History of Business Registers in Europe

At a European level, it became obvious that the sharing of this information that was held electronically at a National level would be very useful. Several member states came together in the early 1990s and began developing prototypes for sharing information for the sole purpose of providing a single multi-lingual interface for the search and retrieval of Business Register information. The data set and the number of participating countries expanded over the years. The technological underpinnings changed as improvements in technology were made. This prototype ended up as what is known as the European Business Register (EBR) network today.

It became clear that some Business Registers in certain jurisdictions were falling behind in terms of their advancement and their ability to potentially exchange information at a European level. In 2007, there was an amendment to the 1st Company Law Directive which made it mandatory for Member States to provide certain services online [(vii)]. This at least brought all Member States up to a common technical and service level.
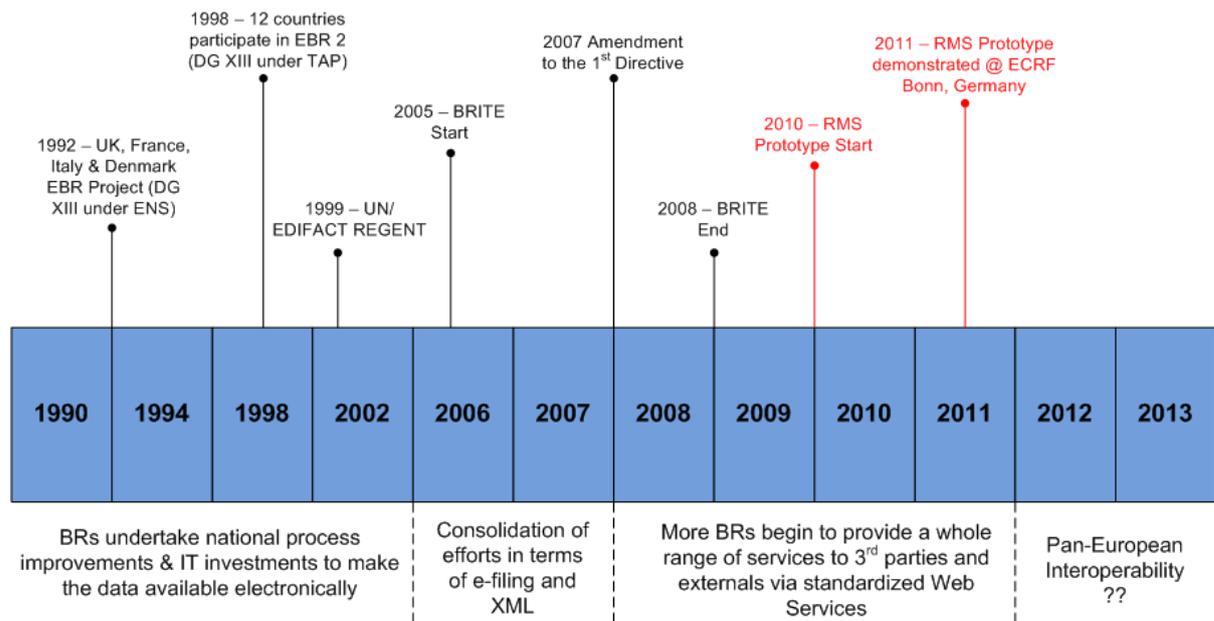
Figure 2: Timeline of Business Register Interoperability in Europe

As one can see from the timeline above there has been very little achieved in terms of real Business Register to Business Register (BR2BR) information exchange. The three year BRITE project funded by the EC under FP7 ended in 2008 [(ii)]. This Research, co-ordinated by the EBR [(viii)] project, laid the foundation for BR2BR interoperability and described a number of services that could natively be deployed to a platform once it was instantiated.

However in terms of BR2BR there has been very little progress evident on the ground and Business Registers have reverted back to solving local National issues. It was not until the advent of the Register Messaging System(RMS) Prototype coordinated by Ministry of Justice, North-Rhine Westphalia (MOJ-NRW) that real progress was made. The business case for the development of this prototype is set out below.

Business Case

The Business Registry domain of Europe has grappled with the interconnection, the semantic interoperability and data exchange mechanisms for Business Registers for nearly two decades with little or no success. Business Registers in Europe are not alone in facing difficulties when attempting to link their organisations together on a common platform. IACA [(ix)] (International Association of Commercial Administrators) and CRF [(x)] (Commerce Registers Forum) have also faced the same issues. They have in turn looked to Europe to provide guidance in terms of how its Member States are attempting to create a pan-European platform for Business Registers. However, to date there has been little actual instantiations of physical networks. More resources have been applied and focused on research than on implementation. The notable exception to all this is EBR. However EBR is actually a network that supplies information from the Business Registers to the general public (BR2C) and does not support services required by the Business Registers themselves (BR2BR).

The Business Case for the development, implementation and support of a functioning platform that connects the Business Registers of Europe together is relatively straightforward to justify. The following is neither an exhaustive nor complete list of Business Cases:

1) The informal and unstructured method of communication between Business Registers in Europe is highlighted by the fact that the physical Business Registers cannot be uniquely identified or certified as the legitimate and official authority. In simple terms, it is the case that within the European Union the official Business Registers of the Member States have not been verified or certified.
2) Existing European Company Law instruments explicitly demand cooperation between Business Registers. This cooperation does not take place. This means that entities remain unregulated in Business Registers throughout the European Union.
3) The European Commission Green Paper on the 'Interconnection of Business Registers' clearly states that savings of up to 70 million Euro per annum will be made by linking Business Registers.
4) Most Business Registers in Europe are technology aware and already make large capital investments in their systems to serve their own local jurisdictions. The effort and resources required for them to provide services at a European-level is not extensive. The reuse of existing interfaces is possible and the burden of integration can be greatly reduced.
5) Most of the constructs and components required to connect the Business Registers together have already been accepted and approved by the Business Registers themselves during the BRITE research project.
6) Several other European initiatives including e-Justice, SPOCS and Peppol have sought data sources from the Business Registers which do not currently exist. This underlines the demand from other domains for a consistent, stable, reliable and official source of European Business Register information.

The Business Cases for the implementation of a Business Registry platform are generally accepted by the domain, by the European Commission and by other related domains. However, the problems faced in building and implementing such a platform are not as easily accepted or recognised.

Challenges

Business Registers in Europe have more in common with each other than differences. Each Member State invariably states the differences in their underlying corporate legislation. However, the means and manner in which they have implemented their Registers and the services that those Registers provide are very similar. It would then be fair to say that the task of connecting these Business Registers together would be relatively straight forward. The history of the Business Registry domain includes a number of attempts to do so. However all of the past attempts have been unsuccessful because the initiatives failed to recognise and be cognisant of the idiosyncrasies of the domain.

The Business Registers that make up the Business Registers of Europe have the following characteristics:

a) Public or Private: The institutions that govern the Business Registration function in jurisdictions in Europe can be both a public body or private company or individual. The greffier in France or the registradore in Spain are private individuals. Companies House, UK and Bolagsverket in Sweden are public bodies. In both cases they are the legitimate, official and authorised institution that controls the registration of Businesses in their jurisdictions.

b) Large or Small: The variance in the size of the Business Registers is great. Business Registers range from single organisations with over a thousand people to smaller organisations with less than ten. This means that the resources that can be brought to bear on integration differ fundamentally.

c) Centralised or Decentralised: Business Registers in Ireland, United Kingdom, Norway, Sweden and Finland have single centralised organisations for the purpose of Business Registration. In mainland Europe Business Registration is decentralised to local chambers of commerce, commercial courts, greffier, registradores and individuals.

d) Administrative or Judicial: Business Registration in Germany tales place in Commercial Courts under the aegis of the Ministries of Justice. In Ireland the registration takes place in the Companies Registration Office under the authority of the Department of Enterprise, Trade and Innovation.

e) Notarised or Self-Declared: In Italy and Germany documents submitted to the Business Register are notarised.In the United Kingdom they are signed by an officer of the company and submitted.

f) Representative of Jurisdiction or Not: There are a number of Member States where the nominated organisation purports to represent the entire jurisdiction. In some cases this is not true.

The differences highlighted in the characteristics of the organisations above add to the difficulties when reaching consensus in terms of approach and method to interconnection. In the past, too many attempts to achieve interoperability failed because the initiatives did not gain the support of all of the above organisations, they

sought to harmonise the legislative differences between jurisdictions and very simply placed too great a burden on the individual organisations to integrate.

A Pan-European fully inclusive platform for Business Registers must be able to overcome the following domain difficulties:

1) The intransigence of some jurisdictions to European initiatives whereby local issues always take priority. It is a fact that some countries have no interest or willingness to share services at a European level. In the absence of a mandatory requirement from the EC these will always be difficult cases.

2) Some jurisdictions will not have the resources (technology or personnel) to engage in integration activities

3) Local standards and policies must remain local.

4) Minimal agreement at a European level to facilitate cooperation.

5) Efforts by some countries to force compliance to or harmonisation of data elements must be avoided.

6) The existence of some interfaces and services at Member State level.

What Is Meant By Interoperability?

The interconnection of Business Registers can take place on a number of different levels:

- Level 0: no interoperability at all;
- Level 1: technical and syntactical interoperability (no semantic interoperability);
- Level 2: two orthogonal levels of partial semantic interoperability of meaningful fragments.
  - Level 2a: unidirectional semantic interoperability
  - Level 2b: bidirectional semantic interoperability
- Level 3: full semantic interoperability, sharable context, seamless co-operability

It is assumed that full semantic interoperability will only be achieved after progressing through all the levels. As of now there is no interoperability at all. This paper proposes to achieve Level 1 by instantiation of the RMS platform where the basic data elements are exchanged in the form of provided services. Level 2 and Level 3 are achieved through the population of the ontological repository by the participants of the prototype whereby shared meaning of terms can be created.

The following shows a simple use case which highlights the differences in levels of interoperability:

Level 0: [No interoperability]
Company A in Ireland registers a branch in Germany by visiting a notary in Germany and producing certified copies of its constitution documents in Ireland.

Level 1: [Syntactical interoperability]
Company A in Ireland registers a branch by visiting a notary in Germany and producing copies of its constitution documents in Ireland. The Commercial Court in Germany registers the branch by requesting the official documents from the Companies Registration Office in Ireland. The status of the Irish company is validated. The Branch is registered. The CRO in Ireland is notified that one of its companies has registered a branch in Germany. The Commercial Court in Germany will dynamically receive any updates on substantive changes to Company A that affects its branch registration in Germany. The parent/child relationship is established.

Level 2: [Partial Semantic Interoperability]
This is the same as Level 1 except that the Commercial Court in Germany is provided with equivalences in terms of the type of entity that Company A is, the status of the company and the capacity of the director attempting to register the branch. This provides the Commercial Court with partial semantic equivalences for an entity from another jurisdiction.

Level 3: [Full Semantic Interoperability]
Company A visits the Companies Registration Office in Dublin to register a branch in Germany. The Companies Registration Office in Ireland initiates a service to request on behalf of one of its entities the registration of its branch in Germany. The Commercial Court in Germany and the Companies Registration Office begin a

choreographed exchange of registered information (described by the 11th Company Law Directive) to complete the registration of the branch.

The Solution

The Register Messaging System (RMS) aims to addresses a number of the issues identified by previous attempts to interconnect Business Registers in Europe. In the proceeding sections we will identify the main components of the RMS and how these components are combined to form an efficient, flexible and scalable solution for the interoperability of Business Registers through Europe.

The RMS platform distinguishes itself from other interoperability platforms through 4 keys components, each of which will be explained in detail below:

- Central Entity Index (CEI)
- Directory of Registers (DOR)
- Service Catalogue
- Intelligent Adapter Connector

The functionality offered by these 4 components addresses significant shortcomings that have in the past prevented the development of a true European Business Registry to Business Registry interoperability platform.

Central Entity Index (CEI)

The Central Entity Index (CEI) is an integral part of the RMS platform as it creates a single, central repository containing a series of common data fields for all entities of each of the participating Member States. The existence of the CEI provides extensive performance benefits for participants when consuming data using one or more of the services offered by the RMS. For example, rather than the RMS retrieving the requested data from the local registers of each participant individually, one single query across a single dataset means that the service consumer receives accurate results without delay and without a dependency on the status of the individual Member States services.

Due to data protection laws and also the disparate nature of the individual registers, a common subset of entity attributes is recorded in the CEI. These entity attributes are entity name, entity number, entity status and entity seat.

It is evident that the most important considering for the successful implementation of the CEI is to ensure the integrity of the data it contains. Should the data be incorrect or out of date it would be increasingly difficult for participants to trust its accuracy. To that end, a prerequisite for participation in the RMS was to agree that any changes to the entities in the local register would be pushed in 5 minutes or under to the RMS through services created for that purpose.
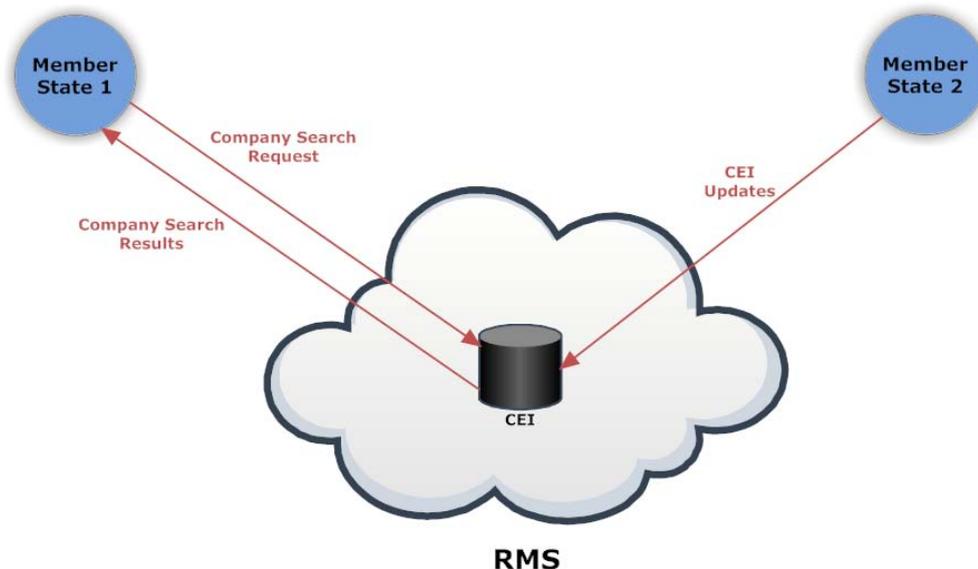
Figure 3: Central Entity Index

The CEI is used by a number of services in the RMS Service Catalogue, most notably the Company Search, Company Relationships, Monitor Entity Attributes, Transfer of Seat and Cross Border Merger services.To date, the RMS CEI contains over 5 million unique records for Germany, Ireland, Serbia, FYRO Macedonia and Jersey.

Directory of Registers (DOR)

The Directory of Registers (DOR) contains all pertinent information about participating Member States. The DOR is a pre-requisite to achieving the unique identification of entities across the Business Registry domain through identification systems such as the REID. The REID is a construct of the BRITE research project and is widely accepted by most if not all Business Registers as the logical way of identifying entities. The BRITE project published a detailed description about the construction of a REID value [(iv)]. However as an overview the following table shows its main structure:

CCRRRR.NNNNNNNN-PP	
CC	ISO Country Code – fixed 2 characters
RRRRRR	Register identifier within country
".":	Divider. Full stop (period); ASCII 46.
N_1, N_2 ,........., N_{20}	Number unique within the register – Maximum 20 characters.
"-"	Separator Hyphen; ASCII 46.
PP	2 Check Characters conforming to ISO 7064, Mod 97-10 international standard

As can be seen from the structure of the REID, without a DOR containing an agreed list of Register Identifiers it is impossible to accurately identify an entity. The DOR was successfully implemented within the RMS Prototype as shown in the image below.

Figure 4: RMS Directory of Registers

From the RMS DOR, we can see that each individual register in a Member State is identified by a unique DOR Code. For example, for Ireland the DOR Code is either IECROCR, for the company register, or IECROBR, for the business names register. Similarly, for Germany, the structure of the DOR Code is the same even though each commercial court can have up to 5 individual registers.

The DOR Code that is created forms the basis for the first part of the REID value, so the Irish company Enterprise Registry Solutions will have a REID value of IECROCR.358857-53.

Service Catalogue

The RMS Service Catalogue contains a list of core services that participating Member States can consume. The table below gives a detailed breakdown of the services offered by the RMS and the properties that they have:

Service	Service Type	Service Delivery	Jurisdiction / Scope	CEI Data Access	Centrally Orchestrated
Monitor Entity Attributes (Status, Name, Address, Seat)	Core	Asynchronous	Single	Yes	No
Company Profile	Core	Synchronous	Single	No	No
Company Relationships	Core	Synchronous	Single & Multiple	Yes	Yes
Company Search	Core	Synchronous	Single & Multiple	Yes	No
Relationship Search	Core	Synchronous	Single & Multiple	Yes	No
Document Search	Core	Synchronous	Single	No	No
Update CEI	Core	Asynchronous	Single	Yes	Yes
Document Order	Core	Asynchronous	Single	No	No
Transfer of Seat	Core	Asynchronous	Multiple	Yes	Yes
Cross Border Merger	Core	Asynchronous	Multiple	Yes	Yes

Service Groups Legend

- Notification
- Information
- Identification
- Process

Figure 5: RMS Service Matrix

A typical example of how a Member State could consume one or more RMS services can be illustrated by the RMS Portal, which each participant has access too.

Figure 6: Company Search

The portal allows participants to search the CEI repository via the Company Search service; returning results for queries against over 5 million records in less than 3 seconds.

Once an entity has been identified, the user can then view detailed information (entity name, status, address, registration date etc.) about this entity via the Company Profile service.

Figure 7: Company Relationships

The Company Relationships service allows users to easily view any relationships the chosen entity has to other entities in the RMS. This service is particularly important to the user in identifying parent/child relationships that may exist between entities.
Finally, all documents for the entity can be viewed and then ordered via the Document Search and Document Order services.

Although some of these services can also be found in similar interoperability platforms, the existence of the CEI allows the RMS to offer additional services such as the Company Relationships, Transfer of Seat and Cross Border Merger to provide increased functionality that until now had been impossible.

Intelligent Adapter Connector

One of the most innovative components of the RMS solution is its Intelligent Adapter Connector. A key issue that has been identified in previous Business Register interoperability solutions is the integration difficulty for participants. In previous attempts, the only way for a participant to integrate with the solution was for the

participant, following guidelines defined by the solution, to create a gateway applicationthemselves. In order to create this gateway, participants had to allocate internal resources or spend money from their annual budgets. This obviously resulted in a reluctance to participate in some cases. The RMS offers a solution to this issue with the Intelligent Adapter Connector.

An Intelligent Adapter Connector is a bespoke RMS plug-in, deployed on the central RMS platform that consumes existing registry interfaces and transforms the data into a format that may be interpreted by RMS participants.
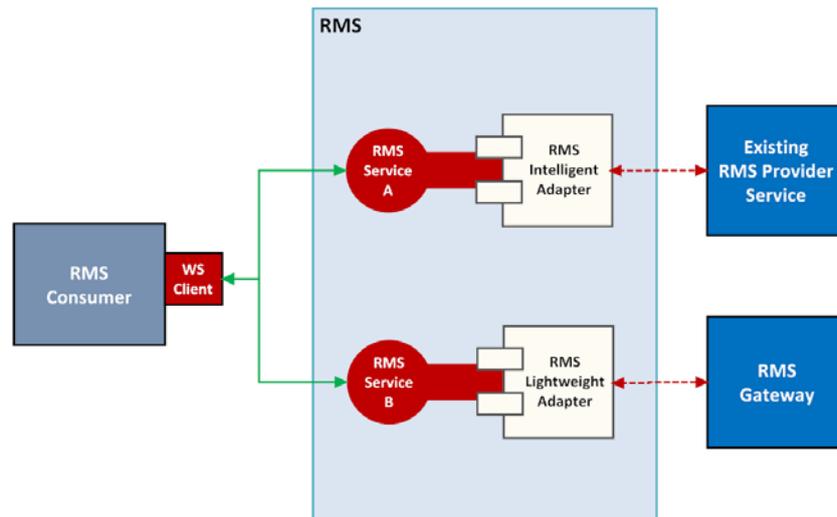
Figure 8: RMS Adapter Connectors

The integration interface of the RMS is designed to work on a service-by-service basis. This means that if, for example, an RMS data provider is required to expose 5 services to the RMS, but only 4 of their existing services meet are re-usable, the Intelligent Adapter Connector can be used for these 4 services in isolation. The RMS data provider will then only be required to develop an RMS Gateway for the single remaining service. The flexibility of this approach significantly reduces the barrier to entry for participants.

The practical implementation of the Intelligent Adapter Connector can be seen with the integration of Germany to the RMS. Rather than spend time and money developing an RMS Gateway to provide the services offered in the RMS Service Catalogue, the German Intelligent Adapter Connector was created by the RMS to consume existing services from the Handelsregister.de website. This greatly reduced the participation costs for Germany without reducing the level of service it offered to the RMS.

Vision

The RMS builds upon the research conducted in the BRITE project. The constructs, components and reference models developed by BRITE were all unanimously accepted by the domain through its use of a 'Concertation Board' to seek approval. It can be legitimately argued that the RMS is the single largest development within the Business Registry domain for the last ten years. This is true, in that it has taken Research Objects that took many years to develop and has instantiated these objects in a full functioning platform.

The divisions and tensions between the existing network EBR and the RMS have been resolved by drawing clear lines of distinctions between BR2BR (RMS) and BR2C (EBR). Moreover, it is hoped that as EBR's existing interfaces are used by 20 Member States, these interfaces in turn can be used by the RMS. The RMS has a EBR Adaptor Connector that can connect EBR's membership natively.

The Vision of the RMS is to finally make available a single unified platform with all Member States participating in a structured and controlled environment. This future vision of the RMS platform would see it play a pivotal role in the emergence of the European Business Registry domain into Level 3 interoperability. Thus, enabling it to provide a plethora of services to the Business Registry domain, to related domains and to EC funded initiatives. The question of competing services and interfaces would be replaced with a single universal platform that finally provides true interoperability to the domain.

The diagram below shows where the RMS can provide services to the entire gamut of consumers of Business Registry information. The RMS provides a virtual private network of Business Registers which provide one data source and act subordinate to a higher level of European Member State Interoperability.

EMSIOp: European Member State InterOperability platform that provides a range of services typifying the objectives of the E-Codex project [(xii)]. The platform would be established to provide services amalgamated and virtualised from subordinate data sources or networks. This platform would adhere to the OASIS Group's ebXML recommendations.

RMS: The RMS would consolidate the Business Registry domain regardless of the existence of different interfaces and services. The service that would be provided to the EMSIOp would be representative of a unified domain with consistent service delivery.

European E-Justice Portal: This would as designated provide its own range of services to citizens, business and legal practitioners. The services available to this grouping of consumers would only be bounded by the trading relationships established under the trading agreements with the providers.

Member States: The Member States could interact with the EMSIOp directly for a number of restricted services related to more sensitive information being retrieved and consolidated by the EMSIOp.

Business Registers/Judiciary/Police: For BR2BR communication the Business Registers communicate directly with the EMSIOp.

Related Domains: All related domains would interact with the EMSIOp as consumers of provided information but as subordinates to the EMSIOp.
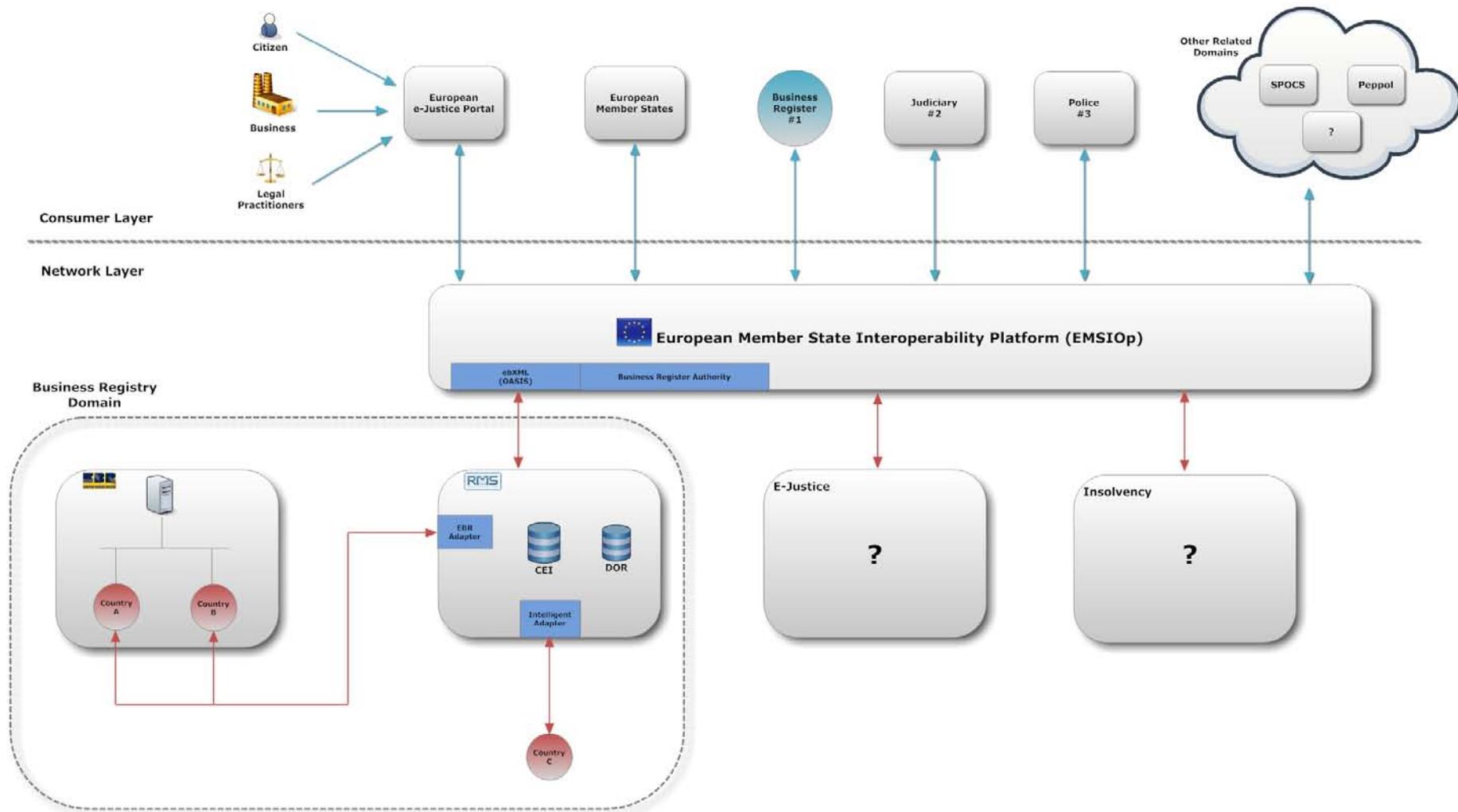
Figure 9: EMSIOp Vision

March 2012

Conclusions

The RMS is a significant delivery that finally grounds the work of many practitioners within the domain into a tangible platform for the Business Registers to review and explore. It also affords the wider community the opportunity to finally see the potential of an interconnection between Business Registers. The RMS is due in no small part to the efforts of the EC to review the domain. The domain recognises that the status quo cannot continue as it does not serve the domain or the Member States. The RMS is available now. It has been validated against 5 separate countries representative of the mix of characteristicsof the domain. It is surely a part of the way forward!

References

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(ii)   BRITE Research, FP7 Project 2005 – 2008.

(iii)   World Bank, Doing Business Report, www.doingbusiness.org

(iv)   Feethan, Nigel and Jones, Grant. Protected Cell Companies: A Guide to Their Implementation and Use, Spiramus Press Limited, 2008. ISBN 9781904905554

(v)   EEC or Treaty of Rome: Treaty Establishing the European Economic Community, 25 March 1957, 298 U.N.T.S. 3.

(vi)   European Commission, Green Paper on the Interconnection of Business Registers.
        http://ec.europa.eu/internal_market/company/business_registers/index_en.htm

(vii)   Amendments to the 1st Company law Directive 2007.

(viii) European Business Register, www.ebr.org

(ix)   International Association of Commercial Administrators, www.iaca.org

(x)   Corporate Registers Forum, www.corporateregistersforum.org

(xi)   REID - Unique Company Identification V2.0 – BRITE Research Project – November 2006

(xii)   E-Codex Project, www.ecodex.eu

Glossary of Terms

Application: software programme executed on a desktop or server

BR2BR: the means of interoperability from one Business Register to another Business Register.

BR2C: the means of interoperability from a Business Register to a private customer.

Business Register Interoperability Throughout Europe (BRITE): an FP7 EC funded project thatincluded NRW and CRO as Service Case participants. BRITE produced many definite results butdid not achieve a functioning BR to BR platform.

Business Register: The official person, organisation or authority tasked with the registration of enterprises in a particular geographical location. Article 3 of the 1st Company Law Directive.

Central Entity Index (CEI): a single persisted database implementation of all index informationfor all entities on the registers of the participant countries. It is singularly the most importantdata repository on the platform.

Directory of Registers (DOR): holds all the identification information for all of the Registersparticipating on the platform. The ID assigned must be unique and must identify the physicalregister and the associated registration authority.

EBR: European Business Register, private EEIG association of Business Registers and distributors

Intelligent Adapter Connectors: bespoke RMS connector used to leverage existing softwareservices a Member State may have in order to reduce any development and resource costsassociated with joining the RMS platform.

Lightweight Adapter Connectors: default RMS connector for a Member State that does nothave existing software services that the RMS can leverage from. It is used in conjunction withthe RMS Gateway to integrate a Member State with the RMS platform.

Prototype: a fully functioning proof of concept application

Registered Entity IDentifier (REID): a global unique identifier for all registered entities. It isconstricted of the ISIO country code concatenated with an ID for the Register which holds theentity, the ID of the entity and a number of check digits. The REID is a construct of BRITE andhas been accepted by most if not all BRs as logical way of uniquely identifying entities.

RMS: Register Messaging System

Web Service: a software component that is described via WSDL and is capable of beingaccessed via standard network protocols such as but not limited to SOAP over HTTP. Theinteraction between BRs will take place using exposed Web Services, both by the InformationProvider and Requestor.