The International Rail Registry and The Luxembourg Rail Protocol to The Cape Town Convention—Global Registration of Mobile Assets

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Abstract

The International Rail Registry follows the success of the specialized registry for aircraft equipment instituted by the Cape Town Convention and Aircraft Protocol. Both registries are global in their reach, operating entirely online to allow financiers and their advisers the ability to register international interests in mobile equipment and search for competing interests. In establishing the new International Rail Registry, its design and operations are being shaped by its centrality to the Cape Town Convention as well as the needs of the rail industry. Consideration is being paid to the demand for rail finance worldwide, the lessons to be learned from the Aircraft Registry and the need to balance security with accessibility to the records of international interests in railway rolling stock.

*This paper is not intended and should not be construed as legal advice; it is provided for information purposes only and the registrar accepts no liability for its contents.

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Introduction

In 17th century London the radical idea of a reliable record of financial interests in property needed special measures to bring it to public attention. A Plain Dealer’s Prayer for a Registry, published in 1678, is a 25 verse poem extolling the virtues of record-keeping:

This is the judgement of sober men
Will be this long desired Registry
Upon whose fond none can be cheated when
They trade or trust on that security
Which if it pass as it is now fitted
The just are double blessed, the knaves outwitted.

Plain dealers had to pray for a Registry because of the entirely unintended consequences of the 1536 Statute of Enrolments, King Henry VIII’s emergency legislation to prevent secret conveyancing. His legal advisers had suggested a broad approach to the registration of assets and financial interests, but this was not implemented, and as a result the law had the opposite effect to that intended. It was neatly side-stepped by a new “lease and release” deed, invented after the law was passed and therefore exempt from registration altogether. The birth of leasehold interests in England also meant the death of public registration of those interests for a very long time.

The absence of records may have hidden assets from King Henry VIII’s clutches, but it also seriously hindered trust in the market for many years. More than a 100 years later the impact in terms of fraud and insecurity for creditors was not lost on the reclusive attorney of Middle Temple, William Leach. In 1651 he lamented that “there hath been many courts, and divers offices . . . to search in; and very many records, books and remembrances, or rolls to turn over, view or read for every of the four terms of the year; and in some of such courts such . . . incumbrances have been intermixed

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4 The Country Mans Case Uncased. Or, the Plain-Dealers Prayer for a Registry. [1678] “to be sold by John Oliver in the Old-Baily, over against the George near Ludgate,” (now held in the British Library).

with others in such manner, as they have been very difficult to be found . . ..”\(^6\) It took more than another 200 years for the shortcoming to be corrected, and for transparency to return to the registration of financial interests in property in England.

Thankfully, the architects of the Cape Town Convention on International Interests in Mobile Equipment have learned the lessons of history by making an international public register for each class of assets central to the way that the provisions of the Cape Town Convention operate.\(^7\) As a result, and with work on ratifications now underway, the International Rail Registry is entering the next phase of its development without the need of rhyming couplets.

**Cape Town Registries**

The first Cape Town registry to come into being was the International Registry for Aircraft Equipment, the merits of which Rob Cowan and Donal Gallagher discuss in volume 45 of the UCC Law Journal (January 2014).\(^8\) The rise in usage of International Registry for Aircraft Equipment over eight years is testament to its success. Since it started operations in 2006 there have been over 595,000 registrations covering 110,000 aircraft objects with an estimated value of over half a trillion USD.\(^9\)

As the Luxembourg Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to

\(^6\)William Leach, “Propositions 1. For recording and registering of deeds and conveyances. : 2. Judgments, statutes, and other incumbrances upon lands and tenements. For prevention of frauds and deceits in sales; and quieting of possessions of purchasers. 3. For inabling creditors to have the benefit of copy-hold, and intailed lands and tenements for their satisfaction. As far as may be conveyed by surrender, or cut off by fine or common recovery; and of all chattals real, as well as personall.” Printed by W:H: and sold by G:B: at his shop in Fleetstreet, 1651(original in the British Library).

\(^7\)The Cape Town Convention is available at the UNIDROIT website: www.unidroit.org/instruments/security-interests/cape-town-convention.

\(^8\)Cowan and Gallagher, The International Registry For Aircraft Equipment—The First Seven Years, What We Have Learned, 45 UCC L.J. 225–257 (Jan. 2014).

Railway Rolling Stock ("the Rail Protocol")\textsuperscript{10} advances, the International Rail Registry is fortunate in being able to draw on the Aircraft Registry’s experience to establish a global, online record of security interests\textsuperscript{11} which, in turn, helps to improve the availability of capital for rail rolling stock and the efficiency of the rail market around the world.

Regulis SA, a subsidiary of SITA,\textsuperscript{12} was established in Luxembourg in 2014 with the sole purpose of developing and operating the Rail Registry pursuant to the Convention and the Rail Protocol. Having won the contract to operate the Registry for an initial term of 10 years once the Protocol enters into force, the emphasis now is on setting up all the detailed arrangements to ensure that a stable, reliable and secure system is in place as the first states ratify the Rail Protocol.

This final stage of development is an iterative one, involving feedback from industry practitioners as well as from IT and security specialists. For the Rail Registry to do its job it needs to be reasonably straightforward to use, whilst at the same time operating with high levels of security. A judgement will have to be reached as to where to strike the right balance, and this is where consultation with the industry is essential.

**Demand for the Rail Protocol and the International Rail Registry**

Rising international trade, as the world recovers from the 2008 financial crisis, has inevitably resulted in an increasing number of international rail projects; either to join up the existing trade routes of one nation with another or to forge entirely new routes to transport people and goods across

\textsuperscript{10}The Rail Protocol is available on UNIDROIT’s website at: www.unidroit.org/instruments/security-interests/rail-protocol.

\textsuperscript{11}Registerable “international interests” are defined as being security interests in relation to the legal positions of a conditional seller under a title retention agreement, a lessor under a leasing agreement or a chargee taking security in an item of railway rolling stock under a finance agreement.

\textsuperscript{12}Aviareto Ltd, the operator of the International Aircraft Registry, is also a member of the SITA group of companies.
Continents. China’s railway, for example, will be five times its 1950 size by 2020. It now has 100,000 km of railway in operation, with 10% for high speed trains, and last year spent over $100 billion USD on a further 6,600 km (4,100 miles) of new lines. As the authors of a joint International Bank of Reconstruction and Development and World Bank report noted, “well-run railways do the ‘heavy lifting’ of economic development, offering capacity at a cost much lower than road transport.”

Railways are capital-intensive operations, however. Demand derives from the needs of financiers, train manufacturers, railway operators and national governments, all of which benefit from greater market transparency, reduced risk and more ready supply of capital which the Rail Protocol and International Rail Registry supports.

Globalisation in international finance is one reason for establishing a single global registry of financial interests in rail rolling stock; another is the rise of international freight traffic, which demands an increasingly unified approach from the rail industry. It has been clear for some time that international standardisation in this area would provide many benefits. The rail freight route between Asia and Europe is a good example; 37 governments are now cooperating to make 11,000 km of railway navigable with a single contract, under unified law and regulations and a single liability system.

The Railway Protocol creating a stable international legal regime to protect international interests in railway rolling stock comes at a pertinent time in the development of international rail routes for freight and people. As Howard Rosen and Benjamin von Bodungen point out elsewhere in this journal, “the novel registration system will be particularly helpful in respect of railway rolling stock which operates in more than one jurisdiction because it resolves the

13 Reuters, January 9, 2014.
present cross-border legal issues which arise in the case of security interests created under one law being challenged in the courts of another jurisdiction where the asset is physically located.\footnote{Rosen and Bodungen, The Luxembourg Protocol To The Cape Town Convention on International Interests in Mobile Equipment on Matters Specific to Railway Rolling Stock—Overview And Current Status, 46 UCC L. J. (2015). The authors note that it is not a requirement under the Cape Town Treaty for the creation and registration of an international interest in railway rolling stock that such equipment moves cross-border.}

Of course, cross-border financing may also help to develop or upgrade national railways, which are just as important to the ultimate aim of fostering economic development or removing obstacles to sustainable growth.

Whether the demand is for national or international railways, the trains, locomotives and other rolling stock account for a significant proportion of the investment required. Rail industry insiders estimate that around 25% of the overall capital expenditure for a new railway system is devoted to rolling stock. If the main or only option is outright ownership of rolling stock this creates a barrier for new entrants seeking to operate railway services as they are cut off from the alternative of leasing trains. Equally, it is a constraint for incumbent operators who have significant capital funds tied up in rolling stock which they cannot free up readily. The World Bank Railway Database,\footnote{World Bank. 2007. Railways databases update 2007: users guide. Washington DC; World Bank Group (excluding data for private concessions).} which was last updated in 2007, showed a total of 4.4 million units of rail rolling stock held by operators worldwide. More recent estimates raise the number of units to around 6 million\footnote{Roland Berger for UNIFE the Association of the European Rail Industry, Worldwide Rail Market Study—status quo and outlook 2017.} with annual growth at about 2.0% to 2.5%. Inefficient use of capital is a stumbling block in any market, let alone one so fundamental to improving a nation’s infrastructure and so capital-intensive as rail. Being able to diversify the source of funds, offering investors a means of reducing risk, or supporting a leasing market for capital equipment all represent major advantages for countries ratifying the Rail Protocol.
Role of the International Rail Registry

An International Registry is essential to each and every Protocol of the Cape Town Convention. As Sir Roy Goode elegantly put it “the central features of the Cape Town Convention are the easy creation of an international interest, by security or title retention, with a set of basic default remedies and the ability to secure fast provisional relief; the establishment of an international public register to record these interests, operated by a Registrar under the supervision of a Supervisory Authority; and a simple set of priority rules based on the principle that a registered interest has priority over a subsequently registered interest or an unregistered interest and is protected from the general body of creditors in the debtor’s insolvency.”

Under the Rail Protocol, creditors will be able to register their international interests in the International Rail Registry and such interests will then, in almost all cases, take precedence over any and all unregistered or subsequently registered in rem interests.

The value of this framework has been recognised in the work of Professor Jane K. Winn. She cites the tight integration of the International Aircraft Registry into the Convention’s framework, making its use mandatory for any party subject to the requirements of the Convention, as one of the factors contributing to its success.

The centrality of the Registry to the Rail Protocol is significant at a time when advanced economies are re-learning how valuable documenting assets and transactions is to the creation of credit. The banking crisis of recent years has revealed to investors and governments, or rather reminded them, of the dangers that our “plain dealers” recognised

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19 Currently there are Protocols for Aircraft, Railway Rolling Stock, Space and Agricultural, Construction and Mining Equipment (known as “MAC”).
21 Art. 29(1) of the Convention.
back in 1678. Undermining the reliability of the records that guarantee or make credit trustworthy can put a market in jeopardy because it is precisely these records that establish who holds the risks. As many financial institutions and their debtors have discovered, not having reliable information and clear priority reduces confidence, which in turn leads to a contraction in credit, fewer or smaller transactions, and a decline in demand.

**Development of the International Rail Registry**

The development of the International Rail Registry benefits from the extremely clear principle, established at the outset of the Cape Town Convention that the purpose of registration is to record information which provides notice of the possible or potential existence of an international interest. The International Rail Registry allows verified registry users to make, amend and discharge registrations as required by the Regulations. The onus is therefore on the applicant to ensure that information being registered is accurate. The Registry is then open to public inspection so that other parties can check and, if appropriate, challenge any notices that are recorded.

Back in 1999, Ronald Cuming outlined how this principle means that the Registrar is not expected to review or assess the legal adequacy of registrations, nor to police parties’ rights: “While the registrar has the obligation to ensure that the registry regulations are followed, he or she should have no obligation to verify registration information submitted by a registrant or confirm the source of that information. In any event, when the international registry provides for electronic remote access facilities . . . there is no opportunity for human intervention between the submission of registration data and their entry in the registry database.”

Having carefully defined the remit of the International Rail Registry and the role of the Registrar, the Cape Town Convention also establishes the legal basis for creating Regulations which then set out the main requirements for

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the Registry itself.24 The provisional Supervisory Authority25 which can issue subsequent regulations has an important role during the next stage of the Rail Protocol’s entry into force in revising and clarifying detailed Regulations so that the Rail Registry can become operational in the most effective way possible.

The design of the Cape Town Convention and the Rail Protocol means that fundamental responsibilities of the Registrar are to,

(i) Ensure the integrity of the Registry database;
(ii) Verify the identity of those parties seeking to register interests in the Registry;
(iii) Ensure that local entry and numbering systems are practical;
(iv) Meet the detailed requirements for operation as set out in the Regulations; and
(v) Develop ancillary services which enhance the use of the Registry.

Considerations in the design and operation of the International Rail Registry

Size and scale

Although the fundamental operation of the International Rail Registry is the same as its counterpart in Air, one potential difference is in the scale of the Registry. By the nature of the rail industry there are a great many more train units than there are aircraft or aircraft engines. The rate of financing will determine how many of these are eligible for registration, which will in turn drive the rate of registration once a country ratifies the Protocol. The Registry, therefore, has to plan for a range of take-up scenarios. Each locomotive, carriage or freight wagon is treated as a separate unit for the purpose of registration, and with

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24 Regulations for the International Registry pursuant to the Luxembourg Rail Protocol—Article 17(2)(d) of the Cape Town Convention7.
25 The Preparatory Commission for the Rail Protocol is the provisional Supervisory Authority at this stage.
around six million of these in operation globally, Registry operations and the underlying technology have to be scalable to reflect the size of the market.

**Identifying assets**

The second difference is in the identification of each item of railway rolling stock, which requires the introduction of a dual global numbering system for the rail industry. Cars, telephones, computers and aircraft all work under a dual numbering system—a unique asset identifier which never changes as well as a non-permanent name or number. A car will have a registration or number plate and a chassis number; the number plate may change, the chassis number never does. An aircraft will have a permanent MSN Serial number, but its tail numbers change. The rail industry, however, has always tended to use numbering systems which relate to the operation of the train. Generally known as a “running number” this is similar to the registration number for a car, and can be changed if the rolling stock is leased or sold, for example, to another operator. Furthermore, the broad definition of mobile equipment within the scope of the Rail Protocol goes beyond heavy rail trains to include rolling stock for metros, monorails, ports, mines and all sorts of light rail systems.

Because of the need for a new means of permanently numbering each asset in this wide group, the Unique Rail Vehicle Identification System (URVIS), has been established. URVIS numbers will be issued by the Registry, either individually or in blocks for manufacturers, and will then be attached to each unit of rail rolling stock and used to register international interests.

After the Luxembourg diplomatic conference adopting the Protocol, the Rail Working Group formed a dedicated industry task force to develop URVIS. The working party includes representatives of UNIFE (European manufacturers), CER (Community of European Railway and Infrastructure Companies) and the European Commission.

Ideally manufacturers will take the URVIS numbers issued by the Registrar and apply them to new rolling stock as it is produced. Similarly the aim is for maintenance companies to attach URVIS numbers as they overhaul existing
railway equipment. URVIS is one more step towards worldwide standardisation in rail, and offers opportunities for benefits beyond those to be had from the Rail Protocol alone.

The key to this is determining a format which can be read and recognised by machines as well as by people. There are many other numbering systems used on trains and it will be important to ensure compatibility, and avoid contention, with these. Machine-readable numbers offer many advantages in the tracking and tracing of rail equipment. The Transport Administration in Sweden, for example, is already using Radio Frequency Identification, to trace rolling stock crossing national borders; a useful service in a country where approximately 70% of goods wagons are foreign.

Verification and security

Under such a regime, both the initial design of the system and the ongoing operational procedures must ensure that users are thoroughly verified before they are allowed to record any registrations, and that the integrity of Registry data is preserved once it is entered onto the system.

Rob Cowan and Donal Gallagher, in their analysis of the experience of the Aircraft Registry, talk about the importance of designing a system which can write records in “electronic stone.”

Maintaining the integrity of the International Rail Registry requires both an adaptable system architecture, and an ongoing investment plan, so that records are preserved over the long term even when today’s information technology becomes obsolete or redundant. Fortunately, the International Rail Registry benefits enormously from the prior work of the Aircraft Registry, which has nine years of experience in this field.

Older, national registries which are now moving online have tended to retain some paper-based procedures, even if these are not immediately apparent to users. The International Rail Registry, like its Aircraft counterpart, is to be an

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26 Cowan and Gallagher, The International Registry For Aircraft Equipment—The First Seven Years, What We Have Learned, 45 UCC L. J. 225–257 (Jan. 2014).
entirely electronic operation from the outset.\textsuperscript{27} Everything is
done online; users apply to become recognised, they are ap-
proved and enrolled, and then make registrations, amend-
ments and discharges—all online. Registrations are con-
sented to electronically, and the electronic record is
definitive. This complete reliance on IT means that keeping
up with technological developments is a requirement that
both registries regard as fundamental.

The technology, however, is only half the picture. It is in
the interaction of users with the technology that the
International Rail Registry has to reach a balance between
accessibility and security in order to provide its core function
of being a reliable system of record available 24 hours a day,
seven days a week over the internet. Controls are necessary
even for users who are simply searching for information, and
particularly so for those who are making or amending
registrations or those who are consenting to a registration.
In the case of any change to the Registry it is vital that the
user's identity has been verified and that the consent of the
named parties to the transaction has been given under
authorization.

Access to the Registry is based on an appreciation that
parties to transactions may wish to use intermediaries to
undertake registrations. It also reflects the need for users
making registrations to be individually identified, autho-
rized and verified beforehand. Each organisation must
identify an administrator, whose role and responsibility
includes approving and authorising any further users. This
structure gives rise to more than one possible route for no-
tices of international interests to be recorded in the Registry,
most typically either:

(i) Directly, by one of the “named parties” to the
transaction. In this case a company verified as Trans-
acting User Entity (TUE) by the Registrar authorizes
an administrator who then may enter the registration
or authorize another employee to do so, or;

(ii) Via a professional adviser, such as a law firm. In this
case the firm becomes a verified Professional User
Entity (PUE) and its administrator and authorized

\textsuperscript{27}Arts. 16 - 26 of the Convention; Arts. XII-XVII of the Rail Protocol.
users make registrations on behalf of one or more Transacting User Entity having being authorized to do so, on an object-by-object basis, by that Transaction User Entity or Entities.

Whatever the starting point of the registration, it only takes effect once all the relevant information is entered and the consent of all named parties is given under authorization. Users are responsible for making sure that claims have been properly registered with the correct details, and for generating a priority search certificate.

Whilst the Rail Registry Regulations set out the broad requirements, these also allow for a further level of detail and definition to be established for significant functions. This will include the Registry’s own detailed operating procedures and risk management systems; drawing on best practice and the experience of the Aircraft Registry to put these into effect.

Evolution

In her study of what has made the Aircraft Registry such a success, Professor Jane K. Winn notes, “the drafters of the Convention wanted the International Registry to be built on the foundation of current electronic commerce best practices. As a result, the use of information technology has evolved organically within the Convention’s framework.” This will continue to be the case, and nowhere more so than in the areas of Registry security and the verification of users. Changes to browser technology, to the type of devices that we all use to access the internet, and to the way we make secure transactions in banking, shopping and other spheres will both affect the technology available to the Registry and affect the expectations of its users. It is to be expected that advances in technology in the future may require a change in the Regulations in order for these new developments to be best used by the Registry. Equally, to meet a change in the rules, the Registrar may need to draw on alternative technology. It is helpful in this regard that the Registrar

and the Supervisory Authority are both under an obligation to keep the Regulations under review, and that there is a means of making urgent changes should these be necessary. With a wholly electronic registry the relationship between rules, procedures and technology will always be closely coupled, and the evolutionary approach first spotted by Professor Winn will continue.

Regulations will be modified and adapted further as ratification of the Rail Protocol advances, and entry into force is anticipated. This is helpful to the development of the Registry as it allows for ever more detailed rules and procedures to be defined as system development takes place. At this stage there are a number of streams of work happening in parallel and currently the Regulations governing the International Rail Registry are in draft form.

Next steps

In parallel with promoting ratification, work is continuing to make sure that governments and the rail industry are briefed, and to seek their specific feedback.

Clear benefits derive from implementing the Rail Protocol in developing and established economies alike, and we look forward to establishing an International Registry which can encompass the registration of international interests and the voluntary registration of a sale transaction, as well as evolving to provide additional ancillary services.

As Howard Rosen has said, “this is a major step forward for the rail sector which traditionally—and unlike the aviation sector—has not benefitted from the opportunity of publicising creditors’ security interests in national railway rolling stock registries.”

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