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The International Rail Registry and the Luxembourg Rail Protocol

How Global Registration Helps Governments, Financiers and the Rail Industry**

In this paper I will talk about the operation of the International Rail Registry, the global need for transportation finance and the benefits that flow from the Convention on International Interests in Mobile Equipment on Matters Specific to Railway Rolling Stock ('the Rail Protocol')¹.

Because the concept of registration is intrinsic to the Cape Town Convention, the International Rail Registry is a fundamental element of the Rail Protocol. As the architects of the Cape Town Convention recognized, a single global registry open to search on the internet helps to bring both certainty and transparency to this new system of rights for financing mobile assets.

In 2014, Regulis SA, a subsidiary of SITA,² was established in Luxembourg with the sole purpose of developing and operating the Rail Registry pursuant to the Convention and the Rail Protocol. An important consideration in awarding the contract to operate the Registry for an initial term of 10 years once the Protocol enters into force was SITA's track record in establishing the International Aircraft Registry. This has been run by another SITA subsidiary, Aviareto, for over ten years.³ By any measure, the Aircraft Protocol and its Registry has been a phenomenal achievement. Over a twenty-year period, the Aviation Working Group

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¹ The Rail Protocol is available on UNIDROIT's website at: <www.unidroit.org/instruments/security-interests/rail-protocol> accessed 23 August 2018.

² Aviareto Ltd, the operator of the International Registry of Interests in Aircraft Equipment, is a member of the SITA group of companies <<https://www.sita.aero/>> accessed 23 August 2017.

³ Arts. 16–26 of the Convention; Arts. XII–XVII of the Rail Protocol.

estimates it will save the air transport industry USD 161 billion. Take-up is still growing, and since the International Aircraft Registry first started work in 2006 it has recorded over 750,000 registrations in total.⁴

As the Rail Protocol 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 interests⁵ which, in turn, helps to improve the availability of capital for rail rolling stock and the efficiency of the rail market around the world.

Like its counterpart in aircraft finance, the new International Rail Registry will be accessible through the internet 24 hours a day, 7 days a week, allowing potential creditors to check any rival claims to the railway equipment being financed.⁶ When the Rail Protocol enters into force, creditors' international interests registered in the International Rail Registry will have priority, in almost all cases, over any and all unregistered or subsequently registered *in rem* interests.⁷

As Howard Rosen and Benjamin von Bodungen have noted '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 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.'⁸

The aim of the Rail Protocol and the International Rail Registry is to create a more favourable climate for train finance by reducing risk, leading to improved private credit for railways worldwide.

I Demand for Transportation Finance – Bridging the Investment Gap

The need for the Rail Protocol and Registry is reflected in a wider pattern of unmet demand for transportation finance around the world.

In the case of railways, networks and operators face two issues. The first is that railways are moving away from being subsidy-dependent national services, with many are developing cross-border international operations that have commercial potential. The second is that there is a gap between demand and supply of funds, which infrastructure generally is facing around the world.

⁴ *International Registry of Interests in Aircraft Equipment, Eleventh Annual Statistical Report*, 1 January 2016 – 31 December 2016 (published February 2018).

⁵ 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.

⁶ The International Aircraft Registry is discussed in John Atwood, 'The Cape Town Convention: The New Dublin International Registration System in Practice' (2011) 43 (2) *Uniform Commercial Code Law Journal* 637–653.

⁷ Art. 29 (1) of the Cape Town Convention.

⁸ (2015 November) 46 *Uniform Commercial Code Law Journal*. It should also be noted 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.

In setting up the International Rail Registry to support the Luxembourg Rail Protocol, the aim is to help bridge the gap between what the world needs in terms of transportation, and what governments can afford to fund directly at the moment.

Over the next 15 years, the Global Commission on the Economy and Climate reckons that the investment gap – the difference between current demands for infrastructure and projected spending – will amount to between 39 and 51 trillion US dollars.⁹ This analysis comes from McKinsey, which was asked to investigate how to mobilise private-sector financing for sustainable infrastructure. The higher of their two estimates forecasts what would happen if China reduced its investment in infrastructure to that of the rest of the world over the period in question. The result is a gap of roughly 3.4 trillion US dollars a year. The more optimistic of the two estimates is based on a global increase in investment of 4.3%. This is called the ‘aggressive investment-growth scenario’ and, if you look beyond the average investment rate, you will see why. In order to achieve this average, the authors note that China would have continue increasing investment at 13% a year for fifteen more years, which would still leave an investment gap of around 2.6 trillion US dollars a year.

II Growing Demand for Rail

Transport accounts for about a third of the demand for investment, with rail projects representing quite a sizable share – for fairly obvious reasons.

Rising international trade 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 continents. China’s railway, for example, will be five times its 1950 size by 2020.¹⁰

The impact of rapid urbanisation is also putting pressure on passenger transportation. Many countries now need to improve their metro and train services within and between cities. Already, cities account for more than half the world’s population and, by the middle of the century, we can expect another 2.5 billion people to move in from the countryside, creating greater demand for inter-urban rail and metros.

All this transport must be more sustainable than ever. The popularity of railways reflects a growing need for mobility to have a less damaging impact on the environment. If you count the number of railcars and locomotives in the world now, it adds up to somewhere between 4 million and 6 million units of rolling stock.¹¹ Even with the constraints on investment, the overall market for new trains is growing by about 2% to 2.5% a year.

⁹ McKinsey & Company (2016). Financing change: How to mobilize private-sector financing for sustainable infrastructure.

¹⁰ Reuters, 9 Januar 2014.

¹¹ Roland Berger for UINIFE the Association of the European Rail Industry; Worldwide Rail Market Study – status quo and outlook 2017.

III Positive Return on Investment in Rail

We know that the world needs more railways. And we know that well-planned extra transport capacity has proven and positive economic benefits. 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’¹². Standard and Poor’s analysts believe that their estimates are on the low side – even so, they calculate that the multiplier effect of infrastructure overall is a ratio of 2.5 for every 1% of GDP invested.¹³

This potential growth is being constrained by the availability of resources, however. Governments cannot fund everything, and the European Investment Bank says that public infrastructure investment has declined by half over the past 50 years. Europe’s governments spent about 5% of GDP in the 1970s. Now it’s about 2.5%.¹⁴

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. So, could some further investment come from the private sector? Now, private investors spend around 1 trillion to 1.5 trillion US dollars a year. McKinsey thinks that this contribution can be expanded. In their work for the Global Commission on the Economy and Climate, they looked at current projects and at the additional demand. In their evaluation, private institutional investors could fill up to half the financing gap if they can identify projects that are bankable and sustainable.

The Luxembourg Protocol and the International Rail Registry acts as an economic stimulator that does not tie up public funds. 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. Financiers, train manufacturers, railway operators, and national governments, all would benefit from greater market transparency and a more ready supply of capital, which the Rail Protocol and International Rail Registry supports.

For Hungary there are benefits both in relation to domestic financing of railway equipment, by reducing risk and cost, as well as from protecting rolling stock operating outside of Hungary where the debtor is based here.

¹² *International Bank of Reconstruction and Development/World Bank*. Freight Transport for Development Toolkit – rail freight (2009).

¹³ Standard and Poor’s, Jan 2015, Economic Research: Global Infrastructure Investment: Timing Is Everything (And Now Is The Time) <[http://www.tfreview.com/sites/default/files/SP_Economic%20Research_Global%20Infrastructure%20Investment%20\(2\).pdf](http://www.tfreview.com/sites/default/files/SP_Economic%20Research_Global%20Infrastructure%20Investment%20(2).pdf)> accessed 15 October 2017.

¹⁴ European Investment Bank, ‘Private Infrastructure Finance and Investment in Europe’ (2013) EIB Working Papers 2, <<http://www.eib.org/infocentre/publications/all/economics-working-paper-2013-02.htm>> accessed 15 October 2017.

IV Defining and Identifying ‘Rolling Stock’ – a Broad Potential Market

The definition of ‘rolling stock’ under the Rail Protocol is a broad one. It covers conventional trainsets, locomotives, multiple units and railcars. Globally, that is already a 57 billion US dollar business each year, just for new rail equipment alone. But the Rail Protocol also covers any vehicle which moves ‘on a fixed railway track or directly on, above or below a guideway’. So metro and urban light rail vehicles are covered. Mining equipment which runs on rails is covered. Even rail-mounted crane gantries at a port are covered, and given that the unit price of each of these may be between \$5 and \$10 million US dollars, there is also scope for attracting additional investment in this market.

Partly because the Rail Protocol covers such a broad range of equipment, and partly because (unlike aviation) there is no common global standard for numbering railway rolling stock, the Registry will issue a completely unique, permanent number for each unit financed and registered under the Protocol.

The new system will bring the rail industry into line with other markets for the first time. 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 but the chassis number never does. An aircraft will have a permanent MSN Serial number, but its tail number changes. The rail industry, however, has tended to use numbering systems which relate to the operation of the train. Generally known as a ‘running number’, this is like the registration number for a car, and can be changed if the rolling stock is leased or sold, for example, to another operator, making it unsuitable as a basis for registration. 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.

There is currently no permanent unique asset numbering system in this market, hence the need to establish the Unique Rail Vehicle Identification System (URVIS). URVIS numbers will be issued by the Rail 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.

Rail manufacturers say that this new system would be beneficial in its own right, as an aid to tracking assets, and would certainly be helpful in allowing financing to be registered before a new train enters operational service.

V Purpose of the International Rail Registry

An International Registry is essential to each and every Protocol of the Cape Town Convention¹⁵. 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.¹⁶

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.¹⁷

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 are to the creation of credit. The banking crisis of recent years has revealed to investors and governments, or rather reminded them, of the importance of registration. 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 priorities reduces confidence, which in turn leads to a contraction in credit, fewer or smaller transactions, and a decline in demand.

VI Regulations Relating to the Registry

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 the Registry itself.¹⁸ The provisional Supervisory Authority¹⁹ has an important role during the next stage of the Rail Protocol's

¹⁵ Currently there are Protocols for Aircraft, Railway Rolling Stock, Space and Agricultural, Construction and Mining Equipment (known as 'MAC').

¹⁶ Roy Goode, 'Contract and Commercial Law: The Logic and Limits of Harmonisation' (November 2003) 7.4 Electronic Journal of Comparative Law.

¹⁷ Art. 29 (1) of the Convention.

¹⁸ Regulations for the International Registry pursuant to the Luxembourg Rail Protocol – Article 17(2)(d) of the Cape Town Convention.

¹⁹ The Preparatory Commission for the Rail Protocol is the provisional Supervisory Authority at this stage.

entry into force in revising and clarifying detailed Regulations so that the Rail Registry can become operational and maintain parity with the Aircraft Registry in the most effective way possible. 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.

Currently the Regulations governing the International Rail Registry are in draft form.²⁰ These 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 rules and procedures to adapt as system development takes place.

VII Role of the International Rail Registry

The role of the International Rail Registry is to provide investors with certainty that their interests are visibly recorded, which allows, in almost all cases, that they have priority over interests filed at a later date. The Rail Protocol covers;

1. Lessors under a lease,
2. Creditors under a secured loan, and
3. Vendor's rights under a conditional sale where title to the rolling stock is retained.

The International Rail Registry allows verified registry users to make, amend and discharge registrations as required by the Regulations. It is a single global registry, so there is only one place of record. It operates entirely online, without paper, and the electronic record is definitive. And each item of rolling stock is identified uniquely using a global numbering system issued by the Registrar.

Within the Registry, the onus is 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.²¹

²⁰ UNIDROIT <<https://www.unidroit.org/english/conventions/mobile-equipment/registry-rail/draft-regulations-20160222.pdf>> accessed 10 October 2017.

²¹ Ronald Cuming, 'Considerations in the Design of an International Registry for Interests in Mobile Equipment' (1999) 4 Uniform Law Review 275, 280.

VIII Access to the Registry

Under the Protocol, the role of the Registrar is to provide a secure and reliable system, and to control access to the registry for account holders, but not to assess the legal adequacy of registrations, or to police parties' rights.

Before access is granted, therefore, Users are individually identified, authorized and verified when they apply to hold an account with the Registry. Each User of the Registry is then responsible for making sure that their registrations are accurate.

Users are enrolled electronically and, once they have access to the Register, registrations are made online. We anticipate two types of users, namely;

1. Transacting Users – who are the parties to the financing.
2. Professional Users – typically their legal advisers.

The Rail Registry must strike 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. In the event 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. 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.

Access to the Registry recognises that parties to transactions may wish to use intermediaries to undertake registrations. This structure gives rise to more than one possible route for notices of international interests to be recorded in the Registry, most typically either:

1. Directly, by one of the 'named parties' to the transaction. In this case a company verified as a Transacting User Entity (TUE) by the Registrar authorizes an administrator who then may enter the registration or authorize another employee to do so, or;
2. 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 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. Once a registration has been made and confirmed, it appears on the Register where it is open to search by anybody.

IX The Role of the Administrator

In order for a person to make, or change, registrations in the Rail Registry each User must be individually identified, authorized and verified beforehand. Whether they are a Transacting User Entity or Professional User Entity, each organisation must identify an Administrator,

whose role and responsibilities includes approving and authorising any further individuals as Users, and removing Users from the account, if they no longer work for the firm, for example.

X The Registration Process

Once Users are verified, they can make, amend and discharge registrations.

The process is a simple one;

1. Step one is that information is entered into the system.
2. It then needs the consent of all named parties to a transaction for the registration to take effect; this is done electronically through the Registry by authorized Users of the respective organisations.
3. Users are responsible for making sure that claims have been properly registered with the correct details, and for generating a Priority Search Certificate once registration has taken place. This is date stamped and is an important last step.
4. As well as a Priority Search, an informational search can also be made at any time.

The Aircraft Registry has been providing a broadly similar role for a number of years now. This experience shows that Priority Searches and Registrations tend to go hand-in-hand, and that the numbers of both have been rising steadily over time.

XI Regulations – Keeping Pace with Technology

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.²²

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 affect both the technology available to the Registry and the expectations of its users. It is to be expected that advances in technology in 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

²² Jane K Winn, 'The Cape Town Convention's International Registry: Decoding the Secrets of Success in Global Electronic Commerce' Cape Town Convention Journal, Forthcoming University of Washington School of Law Research Paper No. 2012-11.

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.

XII Next Steps

As well as promoting ratification in key countries such as Hungary, work is continuing to make sure that governments, the legal profession and the rail industry are briefed, and to seek their feedback. Clear benefits derive from implementing the Rail Protocol in developing and established economies alike. 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’²³. We look forward to establishing an International Rail Registry which can encompass the registration of international interests and the voluntary registration of sales transactions, as well as evolving to provide additional ancillary services in this important market.

²³ Howard Rosen, ‘The Luxembourg Rail Protocol: a Major Advance for the Railway Industry’ (2007) 12 (3) Uniform Law Review 427–428.