RNE NON-PERSONAL DATA POLICY

(as approved by the RNE's General Assembly on 6 December 2022)

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1/ Background principles

1.1 General economic and legal environment of (non-personal) data

- Data have acquired a function as economic resource in the data economy, because of a combination of technological and economic factors. More generally and based on further reuse, data can indeed serve a large number of purposes, whether economic or not (such as support to policy), related or possibly unrelated (or with little connection) to their original purpose. Against this background, there is a general consensus that data should be shared more.
- There is no such thing as 'data ownership', namely ownership rights on data. From the legal perspective, data are indeed not considered as a 'good'.
- Data are rather often subject to a variety of 'legacy legal frameworks', often indirectly (*i.e.*, via intellectual property rights applying to the technological environment of data rather than to data as such and confidentiality). Such legal patchwork is highly reliant on the context.
- Pursuant to the freedom of expression principle, to the free-flow of data paradigm and to the general principle that 'everything which is not forbidden is allowed', data and information are in principle free to circulate.
- Especially in the data economy, data are quickly produced, used and then quickly destroyed to the benefit of other data, especially when aggregated with other data ('derived data'). Derived data can be more or less similar to original data and, subsequently, more or less likely to be 'tainted' with entitlements of third parties related to original data (such as confidentiality).

1.2 RNE (non-personal) data

- RNE non-personal data (see Annex I 'RNE Non-personal data inventory') originate from railway activities. Most data are generated by the relations (whether commercial or operational) between a large number of actors in the railways, and especially the IMs and the RUs, whether they are automatically generated or whether their generation implies human intervention. Many actors may therefore contribute to the coming into existence of data.
- The RNE data ecosystem is fed from different places, mainly RNE Members acting as data providers.[1] The sources of data vary depending on the business processes and workflows they serve. The major source of data is the RNE IT applications which are mainly filled with data manually or automatically transferred from IMs' systems. In

[1] RNE counts 38 Full Members (infrastructure managers and allocation bodies) from over 30 different countries and 11 Associate Members (Rail Freight Corridors).

return, RNE applications are primarily designed for experts in the railway domain but not the general public. RNE's aim is to centralise the data and cover the whole life cycle of international freight and passenger train services and all relevant for the market information around the provision of those services:

  - Charging estimation (e.g., CIS)
  - Content of network statements and corridor information documents (e.g., NCI)
  - Capacity availability with the planned constraints on the network (e.g., TCR)
  - Service facility information regarding commercial, legal and technical access conditions (e.g., ERFP);
  - Path requests and path allocation (e.g., PCS)
  - Train traffic management with real-time information (e.g., TIS)
  - Train performance management and reporting (e.g., RNE Reporting services).

- These systems collect structured data in traditional databases. For example, locations (e.g. in GeoEditor, TCR, CIP, ERFP), companies (e.g. in CCS/CRD), standardised TAF and TAP TSI messages (e.g. in PCS and TIS).
- Various stakeholders are involved in, affected by, and contribute to RNE non-personal data:
  - European Commission/European Parliament/Council of the EU: they set the legal and regulatory framework at Union level; they can also act as a user of RNE data. For example, for evaluation of existing or an impact of new legislation (e.g., evaluation and impact assessment studies) or feeding their own systems (e.g., TRIMODE);
  - National public authorities and agencies;
  - European Union Agency for Railways (ERA): the agency is in charge for the safety and interoperability in railways (e.g., in the telematics domain about TAF and TAP TSI deployment plan, schema, messages, etc.);
  - RNE members: they primarily provide the structured data in all RNE IT applications;
  - RNE customers (e.g., RUs, terminals, freight forwarders): they can act as either data users (e.g., PCS, TIS) or data providers (e.g., CRD, ERFP);
  - Third parties: any organisation with interest in obtaining some kind of historical or real-time information from RNE (e.g. any public and private bodies like EU institutions, bodies and agencies, consultants, universities, students, scholars, IT providers, etc.).
- In most of the cases the data input is provided on a contractual basis (e.g., multi- or bi-lateral agreements between RNE and RNE Members and based on agreements between RNE Members (IMs) and RUs) or based on terms and conditions of respective websites of RNE accommodating the application. If there is no contractual relation with the

prospective data user, a sperate data sharing/licence agreement is signed for the data output.

- As a result, RNE finds itself in a unique position, at the intersection between all stakeholders concerning RNE data.
- Railway data – and in particular RNE data - do hold value, not only for a broad range of respective operational purposes (*i.e.*, to plan capacity allocation, to make trains run safely on tracks, to duly inform passengers, etc.) but also for other purposes, possibly not envisaged at the time when data are generated. For instance, data can support policy-makers in making (railway-, mobility- or other types of) decisions. Data can also be used by other mobility actors in other modes of transport to support them in running their respective business. Subject to further technological processing, data could also fulfil other (possibly non-mobility-related) purposes by a large number of actors.
- As data become increasingly valuable in the data economy, the provision or sharing of data incurs costs, whether organisational, technological, etc. The costs incurred by the provision or sharing of data is increasingly being recognised by the EU legislator concerning railway data (see Art. 10 (3) of the new Passenger Rights Regulation (PRR)[2], chapter 4.2 of the TAF TSI Regulation).
- It is therefore fair that the provision or sharing of data is subject to a price, which would at least cover the costs of providing or sharing data in case of already existing data. The costs incurred by data collection (whether technical or legal) and/or the costs incurred by further processing of data for commercial reasons, prior to data provision or sharing should also be eligible to be covered by the price of data provision or data sharing.
- The value of data arises from its use and reuse. As a result, the true value of RNE data can be known only subject to a data-related business and marketing strategy followed by actual reuse by third parties.
- Another consequence is that the price of data provision or data sharing may also take into account the fact that data do have a(n) (economic) value.
- The view that data can be monetised under economic conditions by RNE (members) is also confirmed by the Open Data Directive[3] (see recital 36). Public undertakings operating utilities (such as, possibly, IMs) are under the scope of the Open Data Directive. However, and save the case of 'high-value datasets' or more stringent national regulation, they remain free to charge an economic price for the provision of data. The Open Data Directive thereby confirms the role of public undertakings in utilities as economic agents and possibly active data providers in the data economy.

[2] Regulation (EU) 2021/782 on rail passengers' rights and obligations (recast) (New PRR)

[3] Directive (EU) 2019/1024 on open data and the re-use of public sector information (recast) (Open Data Directive).

- Non-personal (operational) data in other modes of transport (e.g., aviation, inland water transport, maritime) are available on the market for commercial re-use since a long time (e.g., see flightradar24.com, marinetraffic.com). It seems that there is already an emerging market for data in railway sector as well (e.g., timetable and location data in passenger services offered by UIC here; transport related information for intermodal operators offered by UIRR (and CTO) here -> note: no commercial conditions are listed on the website).
- Conditions for re-use should be non-discriminatory for comparable categories of re-use. In that regard, the prohibition of discrimination should not, for example, prevent the exchange of information between 1) RNE Members and RNE 2) RNE Members and RNE Members or 3) RNE and public sector bodies (e.g., European Commission, European Union Agency for Railways, national public bodies and authorities of the Member States) free of charge for the exercise of RNE/RNE Members public tasks, whilst other parties are charged for re-use of the same data (e.g., private companies). Neither should it prevent the adoption of a differentiated charging policy for commercial and non-commercial re-use (see recital 46 of the Open Data Directive).
- RNE charges for non-personal data and data-driven services shall be calculated in accordance with objective, transparent and verifiable criteria, pre-established, published and kept up to date on RNE website.
- Three types of data and information sharing or provision activities by IMs shall be distinguished, as they bear consequences on the sharing of data by RNE and, especially, on data monetisation ambitions:
    - First, the provision of data or information for operational purposes pursuant to a contractual relationship (such as the contract of use of infrastructure (CUI)/track access contract (TAC) of IMs with RUs) or to similar arrangements;
    - Second, the provision of data or information for operational purposes (possibly mandated by law) to other entities in or outside of the railway ecosystem without the existence of a prior contractual relationship (or similar arrangement) (e.g., ticket vendors and tour operators);
    - Third, the provision of data or information for non-operational purposes, and especially for commercial purposes ("data monetisation"), to entities who may or may not be in the railway sector and in all likelihood without the existence of a prior contractual relationship (or similar arrangement).

1.2 RNE Members commitments concerning non-personal data

RNE Members confirm their commitment to

- actively provide non-personal data in all RNE applications in accordance with the existing arrangements;

- provide non-personal data in satisfactory quality and timely manner;
- data exchange/sharing/transfers with or to third parties/countries of data available in RNE applications under the terms and conditions of this policy, including its annexes;
- grant RNE the right to commercialise data available in RNE applications (i.e., data assets as listed in Annex 1 'RNE data inventory') taking into account all parameters and interests at stake (e.g., confidentiality) of all parties concerned (e.g. IMs, RUs, SFOs, WKs) within the framework of services as listed in Annex 2 ('RNE IT Service Catalogue').
- gradually soften/introduce level of granularity in the confidentiality clauses regarding capacity and traffic information in their network statements, general terms and conditions and CUI/TAC with applicants (e.g., RUs).

1.3 Confidentiality of capacity and train information

- IMs are bound by confidentiality obligations *vis-à-vis* RUs, based on the SERA Directive, which has an impact on the processing and further sharing of RNE data. The (i.) scope, (ii.) procedure and (iii.) legal consequences of confidentiality are not clearly defined in the Directive.
- SERA confidentiality obligations shall be approached as part and parcel of the broader picture of EU railway law, namely in combination with the other railway legal frameworks such as the (New) PRR and the TAP and TAF TSIs, and with the overarching objectives of EU railway law. Against this background, the following concrete conclusions may be drawn:
    - Confidentiality obligations shall be interpreted with the liberalization of railway services and the establishment of a level playing field between RUs as overarching objectives.
    - A general distinction shall be made between passenger vs freight railway services, because of the different nature of such markets.
    - Based on the (New) PRR, information on passenger train circulation and information on punctuality of passenger services cannot be considered confidential.
- The interpretation of SERA confidentiality obligations depends on national law and incentives. In particular, the existence of transparency obligations, data sharing or data access obligations results in the IM having to strike a balance between confidentiality on the one hand and transparency/access/sharing on the other hand. This has implications on the scope of confidentiality, the procedure for labelling data or information as confidential and the legal consequences of confidentiality.

- The interpretation of SERA confidentiality obligations can also benefit from insights from non-railway-specific legal frameworks and initiatives, such as
    - The guidance from the European Commission on confidentiality in the context of competition law[4] could be used as a standard for (1) assessing confidentiality claims by analogy, including (2) concerning the procedural aspects.
    - Chapter II of the Data Governance Act[5] related to the making available by public sector bodies of data subject to right of third parties, including confidentiality obligations. Such legal regime demonstrates that (1) the presence of confidentiality obligations does not imply a total ban on further processing and sharing of data. (2) It also envisages an array of both legal and technical mechanisms to protect confidentiality of data while enabling further reuse, which could serve as inspiration for RNE data processing of capacity and train information considered confidential.
    - The scholarly initiative of the European Law Institute ('ELI') and the American Law Institute ('ALI') "Principles for the Data Economy" is intended to be used by law-makers, courts and contracting parties when dealing with the allocation of data as an economic resource. Based on applicable law, it aims to foster the data economy without infringing on legitimate rights of one on data (such as confidentiality). The ELI-ALI Principles for the Data Economy provide legal mechanisms for sharing data while preserving such legitimate rights and interests.
- All available legal sources discussed above converge in the following conclusions:
    - Confidentiality of capacity and train information does legally not require a total ban on further processing and sharing of these data. In other words, confidentiality shall not be used as a proxy for 'ownership', or else it would lead to over-protection, potentially to the detriment of other values (in the case of railway data, it could be the liberalisation and the level playing field of railway services).
    - Confidentiality claims on the side of Applicants (e.g., RUs) shall be justified and based on objective reasons. This invites to adopt a clear and transparent procedure for labelling information as confidential and to burden entities protected by confidentiality (such as RUs) to substantiate confidentiality claims.

1.4 Contractual freedom

[4] https://ec.europa.eu/competition/antitrust/business_secrets_en.pdf

[5] Regulation (EU) 2022/868 of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act)

Pursuant to the principle of contractual freedom, this data policy contains the driving principles for the further use, and in particular further sharing with third parties, of data by RNE. The data policy constitutes the cornerstone of RNE data (licencing) contracts.

Definitions and glossary

(1) 'application' means [1] a software entity that provides a set of functions to a user [2] any digital product or service that runs on an operating system.

(2) 'Application programming interface' ('API') means a collection of invocation methods and associated parameters used by one piece of software to request actions from another piece of software. In RNE data ecosystem is the main technology to transport (raw) data between parties.

(3) 'data' means any digital representation of acts, facts or information and any compilation of such acts, facts or information, including in the form of sound, visual or audio-visual recording;

(4) 'structured data' means data that adhere to a pre-defined data model and is therefore straightforward to analyse;

(5) 'raw data' means data that are not structured data;

(6) 'metadata' means 1) (TAF TSI Regulation) data about data. It describes data, software services, and other components contained in the enterprise information systems. Examples of the types of metadata include standard data definitions, location and routing information, and synchronisation management for distributing shared data OR 2) (Regulation 2017/1926) a structured description of the contents of the data facilitating the discovery and use of this data OR 3) (Directive 2007/2) information describing spatial data sets and spatial data services and making it possible to discover, inventory and use them;

(7) 'personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

(8) 'non-personal data' means data other than personal data; In this policy non-personal data and industrial or business data are used interchangeably; everywhere in this policy 'data' are used with the meaning 'non-personal data' unless otherwise specified.

(9) 'human-generated data' means data generated by humans;

(10) 'machine-generated data' means data generated by machines; *in RNE data ecosystem both human and machine-generated data (co)exist.*

(11) 'dynamic data' means data subject to frequent or real-time updates, in particular because of

their volatility or rapid obsolescence; Data generated by sensors on the tracks for train movements are typically considered to be dynamic data;

(12) 'static data' means data that do not change often or an a regular basis; for example, all infrastructure data are considered to be static (e.g. data in CIP, ERFP, CRD);

(13) 'data changed on a regular basis' means data that change on regular intervals (e.g. one year); for example, publication of new network statement or corridor information document, including update of track access charges (e.g. in NCI, CIS).

(14) 'open access' means a set of principles and a range of practices through which research outputs (e.g. academic journal articles, conference papers, theses, books, monographs, reports, studies) are distributed online, free of access charges or other barriers. With open access strictly defined, or libre open access, barriers to copying or reuse are also reduced or removed by applying an open license for copyright. Open access licences (e.g. of Creative Commons) are a priori not suitable for handling data, software and hardware.

(15) 'open data' means [1] [Open Data Directive] as a concept is generally understood to denote data in an open format that can be freely used, re-used and shared by anyone for any purpose. Open data is about availability and re-use of public sector information from the general public and economic operators for private or commercial purposes. [2] [Opendefinition.org] Open data can be freely used, modified, and shared by anyone for any purpose. [3] Practice of publishing (raw) data in a way that is accessible, reusable, machine readable and licensed permissively. Can be generated by a wide range of parties, including public authorities, the semi-public sector, businesses and the public.[6] It is therefore data accessible to all, made available by public administrations or private companies that can be reused by natural or legal persons for various purposes, including the implementation of their business models or the simple identification of new ones, or also for research, journalism, development, or academic purposes. *By its legal form, purpose and activities RNE is not considered part of the EU or Austrian public sector (e.g., public body or public undertaking). At the same time, RNE is a 'keeper' of huge amount of data with legal entitlements claimed mostly by private entities (e.g., confidentiality of RUs). Thus, RNE data are in principle not open data.*

(16) 'co-generated data' means data to the generation of which a person other than RNE has contributed, such as by being the subject of the information or the owner or operator of that subject, by pursuing a data-generating activity or owning or operating a data-generating device, or by producing or developing a data-generating product or

[6] https://op.europa.eu/en/web/eu-vocabularies/concept/-/resource?uri=http://eurovoc.europa.eu/c_5ea6e5c4

service; *This term and the concept behind it has a great importance in RNE data ecosystem where, usually, a number of different actors have contributed to the generation of (real-time) data, sometimes in very different roles. Given the fact that RNE IT and data activities are performed in Europe-wide context only and considering RNE Members decisive role in data accumulation, all RNE data are in one way or the other co-generated.*

(17) 'data available in RNE applications'/'data assets' means co-generated data in RNE IT systems.

(18) 'data affected by legal entitlements' means data affected by intellectual property rights, trade secrets, confidentiality arrangements and alike.

(19) 'data rights' means the following rights: right to access data; right to use data; right to share data with third parties.

(20) 'co-generator of data' means a legal person that contributed to the initial data generation by particular technical means. *One example concerning dynamic data would be real-time train information in TIS where the co-generators are 1) IMs in their capacity of providing tracks equipped with signalling devices/transponders for initiation of TAF/TAP TSI messages in IMs domestic systems, 2) RUs in their role of entities operating trains equipped with transmitters compatible with the signalling equipment of the IMs, and 3) RNE as a provider of the TIS application as a central data bank. Another example concerning static data would be 1) all IMs filling in/automatically providing (e.g. via API) data in ERFP, CIS, NCI and 2) RNE as a provider of the said applications.*

(21) 'initial data' means non-personal data at source without any further operation(s) of processing;

(22) 'derived data' means data generated by processing other data and includes aggregated data and data inferred from other data with the help of external decision rules.

(23) 'synthetic data' means information that is artificially manufactured rather than generated by real-world events. This data is created based on existing data, mainly through minor variations of existing data. *There is no synthetic data in RNE ecosystem.*

(24) 'big data' is usually associated with three key concepts: volume, variety, and velocity. *In RNE context it means all data in all different forms generated, processed and stored mainly in RNE IT applications, websites and office tools. It does not refer to a specific Big data application which is not currently employed in RNE data ecosystem.*

(25) 'linked data' means a set of design principles for sharing machine-readable data on the Web for use by public administrations, business and citizens.

(26) 'artificial intelligence system' (AI system) means software that is developed with one or more of the techniques and approaches listed in points (a) to (c) below and can, for a given set of human-defined objectives, generate outputs such as content,

predictions, recommendations, or decisions influencing the environments they interact with. AI techniques and approaches are: (a) Machine learning approaches, including supervised, unsupervised and reinforcement learning, using a wide variety of methods including deep learning; (b) Logic- and knowledge-based approaches, including knowledge representation, inductive (logic) programming, knowledge bases, inference and deductive engines, (symbolic) reasoning and expert systems; (c) Statistical approaches, Bayesian estimation, search and optimization methods.

(27) 'training data' means data used for training an AI system through fitting its learnable parameters, including the weights of a neural network;

(28) 'validation data' means data used for providing an evaluation of the trained AI system and for tuning its non-learnable parameters and its learning process, among other things, in order to prevent overfitting;

(29) 'testing data' means data used for providing an independent evaluation of the trained and validated AI system in order to confirm the expected performance of that system before its placing on the market or putting into service;

(30) 're-use' means the use by natural or legal persons of data available in RNE applications, for commercial or non-commercial purposes other than the initial purpose within the task for which the data were (co-)generated;

(31) 'processing of non-personal data' means any operation or set of operations which is performed on RNE Members free of or with legal entitlements data, such as collection, recording, organisation, structuring, merging, synchronisation in and with other applications (e.g. RINF application of the European Union Agency for Railways), storage, adaptation, retrieval, consultation, use, dissemination, alignment, aggregation, combination, restriction, erasure, or destruction.

(32) 'data holder' means a legal person which, in accordance with applicable Union or national law, has the right to grant access to or to share certain non-personal data (e.g. RNE, RNE member);

(33) 'RNE Member' means infrastructure manager ('IM') or allocation body ('AB') being a full member of RNE or rail freight corridor ('RFC') being an associate member of RNE;

(34) 'data user' means a natural or legal person who has lawful access to certain non-personal data and has the right to use that data for commercial or non-commercial purposes;

(35) 'data exchange' means the circulation of non-personal (operational) data among stakeholders in the railways (e.g. IMs, RUs, WKs) under the TAF/TAP TSI framework;

(36) 'data sharing' means the provision of data by a data holder to a data user for the purpose of the joint or individual use of such data, based on voluntary agreements or

Union or national law, for example under open or commercial licences subject to a fee or free of charge;

(37) 'data transfer' means the transfer of non-personal data in non-EU/EEA country.

(38) 'high-value datasets' means documents the re-use of which is associated with important benefits for society, the environment and the economy, in particular because of their suitability for the creation of value-added services, applications and new, high-quality and decent jobs, and of the number of potential beneficiaries of the value-added services and applications based on those datasets; *All high-value datasets are about spatial information (e.g., see INSPIRE Directive 2007/2 and a proposal of Commission Implementing Regulation laying down a list of specific high-value datasets and the arrangements for their publication and re-use). Thus, none of RNE data are regarded as high-value datasets.*

(39) 'FRAND' means fair, reasonable, and non-discriminatory terms of data sharing.

(40) 'FAIR' means the principles of findability, accessibility, interoperability, and reusability.[7]

(41) 'TAF TSI' means the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union (see Commission Regulation No 1305/2014).

(42) 'TAP TSI' means the technical specification for interoperability relating to the subsystem 'telematics applications for passenger services' of the trans-European rail system (see Commission Regulation (EU) No 454/2011).

(43) 'bulk download' means download in whole or in part of particular database based on predefined criteria.

(44) 'database' means a collection of independent works, data or other materials arranged in a

systematic or methodical way and individually accessible by electronic or other means.

(45) 'dataset' means a structured collection of electronic data.

(46) 'data quality' means the degree to which characteristics of electronic data are suitable for secondary use;

(47) 'primary use of data available in RNE applications' means the processing of non-personal data for the provision of infrastructure, freight and passenger services in railway sector;

(48) 'secondary use of data available in RNE applications' means the processing of non-personal data for the following purposes:

[7] More on the FAIR principles can be found here: https://www.go-fair.org/fair-principles/

(a) to support Union and/or national institutions, agencies and bodies to carry out their tasks defined in their mandates (e.g., policy making, evaluation of existing and impact assessment of new legislation);

(b) to produce national, multi-national and Union level official statistics related to railway sector (e.g. ERA's reports on railway safety and interoperability in the EU);

(c) trainees and apprentices at RNE Members;

(d) education and teaching activities in railway sector (e.g., universities, students)

(e) scientific research related to railway sector (e.g., studies);

(f) projects of RNE and RNE members;

(g) projects of railway sector organisations CER and EIM;

(h) railway museums;

(i) non-commercial and commercial projects of third parties (e.g., placing on the market of new products or services)

(49) 'data space' means a decentralized infrastructure for the trusted sharing and exchange of data in data ecosystems based on commonly agreed principles. The concept of data spaces is already explicitly used as a solution approach in the European Union's data strategy. This is not a single centralised solution, but rather individual dataspaces are planned for different domains.

(50) 'EU common mobility data space' means the EU data space dedicated to transport and mobility data.

(51) 'public body' means the State, regional or local authorities, bodies governed by public law or associations formed by one or more such authorities or one or more such bodies governed by public law;

(52) 'public undertaking' means 'public undertaking' means any undertaking active in the areas set out in point (b) of Article 1(1) of Open Data Directive over which the public sector bodies may exercise directly or indirectly a dominant influence by virtue of their ownership of it, their financial participation therein, or the rules which govern it. A dominant influence on the part of the public sector bodies shall be presumed in any of the following cases in which those bodies, directly or indirectly:

(a) hold the majority of the undertaking's subscribed capital;

(b) control the majority of the votes attaching to shares issued by the undertaking;

(c) can appoint more than half of the undertaking's administrative, management or supervisory body;

(53) 'data sharing restriction' means that the re-user is not allowed to share/resell/sublicence the data received from RNE, either in part or totally. The re-user may adapt elements contained in the received data in order to make it compatible or

compliant with the format, content or characteristics of its data/products or to offer an improved user experience of its products. Depending on the purpose of re-use, exceptions to the above rule may apply.

Scope of the non-personal data policy

- Legal scope
    - Personal data protection law (*i.e.*, GDPR) not dealt with. For the personal data activities of RNE see the RNE privacy policy here: https://rne.eu/legal-notice/
    - IPRs not directly dealt with (*i.e.*, copyright and *sui generis* protection of databases): intellectual property rights may be found to be applicable to the technological environment of data (and especially to software and database). However, intellectual property rights do not directly apply to data.
- Scope *rationae materiae*:
    - RNE data covered by the policy: it applies to the data assets as listed in the RNE Data Inventory (see Annex I)
    - RNE data not covered by the policy: data available in RNE Joint Office tools supporting the daily operations of the association (e.g., Microsoft 365, Microsoft Teams, Microsoft SharePoint, RNE CMS, etc).

Addressees of the non-personal data policy and means of promotion

- Addressees:
    - RNE, IMs/ABs, RFCs
    - Third parties
- Means of promotion: this policy shall be published and kept up to date on RNE website (rne.eu).

Objectives and founding principles of the RNE non-personal data policy

- There is a need for a policy to regulate the interactions of all stakeholders concerning RNE data (see Annex 1) and to structure the data policy of RNE, in particular with a view to commercialising such data beyond their use and sharing for sole operational purposes.
- Objectives:

  - moving from ‘close versus open’ data to more granular settings, where data can be shared in conditions which safeguard the legitimate interests of stakeholders
  - increase the transparency of RNE data activities
  - shift from application-centric to data-centric legal regulation of RNE data and gradual reduction of RNE templates on different IT systems concerning data collection
  - serve as an inspiration for RNE Members in their data activities.
- In the absence of a by default right ‘on’ data (namely, no data ownership), claims related to data should be duly justified, necessary and proportionate
- The (contractual) relationships between the actors are so that some of RNE data is provided by the IM to RNE based on the contract between the IM and the RU (such as the contract of use of infrastructure (CUI)/track access contract (TAC) or capacity allocation contract). Other data are IM generated only (e.g., static data, data changed on a regular basis).

General principles for data sharing

- Data in RNE applications shall be made available following these principles:
  - Fairness
  - Transparency
  - Non-discrimination
  - Findability
  - Accessibility
  - Interoperability
  - Reusability
  - Non-exclusivity
  - Competitiveness between suppliers/providers/vendors:
    - one solution/approach or product or company should not be favoured over other solution/approach or product or company without competitive procedure (e.g., public procurement, tender).
    - The participation in joint projects/pilots does not automatically qualify the supplier/provider/vendor for (long-term) exclusive partnership with RNE
  - Contribution to the data value chain in railway/intermodal/mobility sector and data economy; serving to the railway sector data needs and projects shall always take priority

- Business orientated and economically advantageous for RNE and RNE members.

- In principle, RNE data shall be deemed free of legal entitlements (e.g., confidentiality, trade secrets, intellectual property rights) from third parties and therefore suitable for further processing, sharing and reuse (data in CIS, NCI, CIP, TAF TSI CRD, ERFP).
  - RNE shall be entitled to process all free of legal entitlements data provided by its Members in RNE IT applications. For 'Processing of non-personal data' see definition 31 in the glossary above.
  - RNE shall apply the following by default conditions for data sharing of data free of legal entitlements:
    - Pricing: see Annex 2 'RNE IT Service Catalogue'
    - Type of data re-users and whether further sharing is allowed or not: no limitations as to the further re-users and further sharing is allowed;
    - (Type of) purposes for reuse: no limitations as far as the purpose is deemed lawful
    - Duration: no limitations
    - Type of data (contract) (*i.e.*, whether *ad hoc* provision of data, contract for the exploitation of a data source): no limitations depending on the use case.
    - Prohibited purposes and data processing activities (if any): there no prohibited purposes
    - Liability regime: subject to the Austrian law
    - Reciprocity of data sharing or not: reciprocity of data sharing on the side of re-user is encouraged; however, it is not a precondition for data sharing on RNE side.
- By exception, some RNE data are affected by legal entitlements (i.e., of IMs, RUs, SFOs), such as confidentiality obligations (e.g., capacity allocation and traffic management data). The following distinctions shall apply:
  - Data that should be deemed "closed", namely to be used only within the RNE data ecosystem: there are no data in the RNE data ecosystem deemed 'locked' and not suitable for further processing and sharing;
  - Data that can be shared only with a co-generator holder of the legal entitlement: historical train information from RNE TIS with the RU(s) that has/have (in cooperation) ran the train(s);

- Data that can be shared only with restrictions and safeguards (e.g., anonymisation):
  - Data in the Path Coordination System (RNE PCS) concerning path requests and allocated train paths of Applicants (i.e., (annual and ad-hoc) timetable)
  - Data in the Train Information System (RNE TIS) concerning train movements of railway undertakings.

Purposes of third parties for data re-users

- List of purposes deemed acceptable (see also definition 48 in the glossary above):
  - policy making of Union and national public institutions, agencies and bodies of RNE Members' countries;
  - national, multi-national and Union official statistics related to railway sector (EU and RNE Members' countries);
  - education and teaching activities at RNE Members and in the railway sector in general;
  - scientific research related to railway sector;
  - projects of RNE Members;
  - CER, EIM;
  - non-commercial and commercial projects of third parties (e.g., new services and products)
- List of purposes deemed unacceptable
  - Any purpose which directly or indirectly endangers safety and security in railway infrastructure management and train operations (EU/RNE Members' countries);
  - Any purpose incriminated in applicable law.

Data processing activities of data re-users

- Data processing activities deemed acceptable: depending on the use case and subject to the arrangements in particular data sharing agreement to be signed with data re-user.
- Data processing activities deemed unacceptable: any other operation on data outside of the scope of operations under definition 31 above.

Data transfers outside of the EU/EEA countries

- Countries deemed acceptable:
  - the non-EU/EEA country such as Switzerland where the data is to be transferred by the re-user offers in its domestic legislation an essentially equivalent

protection of IP rights, trade secrets and confidentiality as in the EU/EEA countries, in particular in Austria ('adequacy system').

- Non-EU/EEA country in which the re-user contractually commits to protect the rights and interests of the data holder, even after the data is transferred ('accountability system').

- Countries deemed not acceptable:
  - Russia
  - Belorussia

Typology of data re-users

- Data re-users deemed acceptable
  - Policy making: EU and/or national bodies and their contractors of RNE Members' countries (e.g., European Commission, Ministries)
  - Consultancy:
    - consulting companies only if mandated and authorised by the above EU and national bodies
    - consulting companies' contractors of RNE under EU funding programs (e.g. CEF)
  - Research:
    - Universities
    - Researchers
    - Students
    - Interns at RNE and RNE Members
  - Regulatory and safety in railways for the sake of general analysis and statistics:
    - National railway safety authorities of RNE Members' countries
    - National railway regulatory bodies of RNE Members' countries
  - CER, EIM
  - Railway museums

Reasons which can be invoked by IM RNE Members in support of data sharing restriction claims

- List of admitted reasons: (obligation related to)

  - National/company security
  - Protection of the competitive process of train path allocation
  - Protection of the liberalization process
  - Protection of commercial confidentiality of Applicants
  - Railway safety
  - National legislation
- Process for claiming a data sharing restriction to RNE by IM/ABs/RFCs
  - Identification of the data at stake
  - Identification of the data sharing / further data processing case
  - Identification of the (likelihood of) harm with relation to an admitted reason

Safeguards which can be adopted in case of data sharing

- Technical measures - Transformation of the original data so that derived data can be shared
  - Anonymization of data
  - Aggregation of data
  - (Piloting of) regulatory sandboxes: in principle, the regulatory sandbox aims to create the technical and legal conditions for a smooth data re-use. The sandbox will facilitate the testing of specific technical solutions and compliance procedures while at the same time supporting companies to avoid uncertainty (especially in regard to confidentiality) and unnecessary burdens. If/when organised, this pilot would be expected to set up an operational framework for all interested organisations and create synergies with other initiatives. RNE Members and their customers (e.g., RUs, other applicants) are encouraged to join or follow up with similar initiatives on data re-use.
  - Multiparty computation (MPC) is a subfield of cryptography with the goal of creating methods for parties to jointly compute a function over their inputs while keeping those inputs private. Unlike traditional cryptographic tasks, where cryptography assures security and integrity of communication or storage and the adversary is outside the system of participants, the cryptography in this model protects participants' confidentiality from each other.
- Buffer period
  - Data cannot be further processed (i.e. shared with third parties) during a given period of time in order to prevent (likelihood of) harm to a co-generator of data (e.g. 3/5 years)
  - Conditions for the exercise of the buffer period safeguard

        - Identification of the data at stake
        - Identification of the (likelihood of) time-sensitive harm
        - Identification of the appropriate buffer period
    - RNE Members and their customers (e.g., RUs) are encouraged to include this safeguard in their CUI/TAC by setting up of an expiry date of confidentiality of 'old' capacity and traffic management data (e.g., after 3/5 timetable periods all these data shall be considered non-confidential and suitable for further re-use).

- Contractual restrictions imposed by RNE to third parties re-users
    - Restrictions to further use and sharing of data can be inserted in data sharing contracts of RNE, *i.e.*, the prohibition of further sharing, the prohibition of use of data for certain purposes, the obligation to pass on contractual restrictions to further re-users, contractual obligation for the data user to guarantee – vouch for - compliance (including, where appropriate, by downstream re-users), due diligence obligations, etc.
    - As an instrumental measure, data users could be contractually bound to mark the data (via digital watermark) so that data can be identified and followed throughout the data value chain
    - Right of monitoring and audit of data re-users by RNE (possibly by proxy, as delegated to an auditing firm)
- Right of desistance:
    - In case of (likelihood of) harm to a co-generator of data (IM, RU, other stakeholders), the IM RNE Member can temporarily or permanently claim desistance for specific ranges of data, further data processing activities and/or vis-à-vis certain third parties
    - Conditions for the exercise of the right of desistance by the IM:
        - Identification of the data at stake: original data versus derived data
        - Identification of the (likelihood of) harm with reference to a specific further data processing activity
        - Necessity and proportionality of the desistance (demonstration that no less stringent measure is sufficient to prevent the harm).

Governance

- **Decision-making related to the RNE data ecosystem**

In principle, RNE IT systems are sector applications of the rail community in Europe. This fact imposes a large group of stakeholders involved in their governance and development. RNE structure includes the bodies concerned in the governance and management of the IT applications:

- Change Control Boards (CCB): each system has a separate CCB. The main purpose of the CCB is to render advice, assistance and support about the development of the system, including budget proposals.

- Governance Boards (GB): currently only the ERFP has a sector GB having the same mandate as above.

- Technical Boards (TB): some of the systems have a TB (e.g. PCS, ERFP and TIS): analysing change requests, providing specifications and technical advice.

- High Level Group IT (CIOs): discussing the strategic framework and providing input into RNE strategy, proposing projects and supporting implementation of projects` results as first escalation level

- IM IT Strategy (standing working group of RNE): work out proposals for the RNE High Level Group IT (CIOs) in all IT-related matters and prepare the RNE IT strategy

- RNE Managing Board: in charge of small IT projects

- RNE General Assembly: in charge of large IT projects and the budgets' approval of all IT applications as well as mandating the Joint Office in Vienna for various data-driven activities.

- **GA authorisation to the Joint Office on data sharing with third parties in accordance with this policy**

Non-personal data in some RNE applications are, in principle, confidential (e.g., PCS, TIS). Thus, RNE shall respect the commercial confidentiality of information provided in these systems by its Members and their customers (e.g. RUs). However, there are data in several RNE applications that are free of legal entitlements (e.g. confidentiality, trade secrets, IP rights). These are data available in other forms or handled/repeated/replicated in other systems, maintained by different stakeholders or it is factual data from the physical world. For example, data such as:

- the European Rail Facilities Portal (ERFP) regarding the rail service facilities in Europe;
- the Network and Corridor Information (NCI) regarding the network statements of IMs and the corridor information documents of RFCs;
- the TAF TSI Central Reference Database (CRD) regarding company and location codes;
- the Charging Information System (CIS) regarding charges levied by IMs;
- the CIP (Customer Information Platform) regarding rail freight corridors information.

For the above reason and by mean of approval of this non-personal data policy RNE General Assembly shall mandate the RNE Joint Office to apply two approaches as follows:

- For non-confidential data: RNE Joint Office is mandated to share these data with any interested third party applying appropriate licence conditions and signing the respective agreements.
- For confidential data (e.g., in TIS, PCS): RNE Joint Office is mandated to share these data in a strictly anonymised form[8] with the parties as listed in acceptable data re-users such as 1) EU institutions, bodies and agencies (e.g. European Commission, ERA) and national public institutions, bodies and agencies of RNE Members' countries (e.g. MoT); 2) entities mandated by EU and national public institutions, bodies and agencies only (e.g. contractors, consultants); 3) consulting companies' contractors of RNE under EU funding programs (e.g. CEF); 4) universities, researchers, students and interns at RNE and RNE Members; 5) national rail safety authorities and railway regulatory bodies of RNE Members' countries for the sake of general analysis and statistics; 6) CER and EIM and 7) railway museums, applying appropriate licence conditions and signing the respective agreements.

Nonetheless its nature RNE may in both above cases charge for data available in its applications.

- **RNE data help desk**: In order to administratively facilitate requests for data available in RNE applications, it is appropriate to establish a help desk for data within the Joint Office in Vienna; this help desk shall:
  - provide information and give clarifications concerning RNE non-personal data policy, data assets and service catalogue;
  - receive, coordinate and manage all data requests directed to RNE;
  - keep a register of the fulfilled and not fulfilled data requests;
  - inform in a written form the respective CCB, the RNE MB and GA about the data requests fulfilled and not fulfilled since their previous meetings.
  - provide overview to the MB and GA on data requests.

The data help desk shall consist of experts from Legal, Sales, relevant Business area and IT teams. For avoidance of doubt, it shall not have decision-making power over the requests. Its activities shall be subject to the control of the Secretary General, Chief Information Officer, the MB and the GA.

- **RNE data web shop:** optional (e.g., a section on RNE website dedicated to RNE data-driven services in which after registration one will be able to purchase selected datasets, bulk downloads, etc.)

[8] Data anonymisation is an irreversible process of modifying the dataset by erasing identifiers (e.g. name, code, country of registration, address, etc.) that connect a company to stored data.

Entry into force and application

This policy shall enter into force on 6 December 2022 with its approval by the RNE General Assembly and shall replace the RNE Big Data Governance Framework.

It shall apply from 1 January 2023.

This Policy is without prejudice to:

(a) specific provisions in Union or national law regarding the access to or re-use of certain categories of data; and

(b) the obligations of RNE and RNE members under Union or national law to allow the re-use of data or to requirements related to processing of non-personal data.

Where sector-specific Union or national law requires RNE members to comply with specific additional technical, administrative or organisational requirements, those provisions of that sector-specific Union or national law shall also apply.

Publication

This Policy shall be published and kept up to date on RNE website (rne.eu).

Annex I

RNE Non-personal Data Inventory

(as approved by the RNE's General Assembly on 6 December 2022 and amended on 10 December 2024)

Introduction

This document is the first attempt in RNE's data ecosystem for classifying non-personal data in a data inventory. Please note that no specific publicly available and/or officially approved template has been used.

Personal data and entitlements related to non-personal data are out of the scope of this exercise. The IT applications/data assets are listed **alphabetically**, and no other business/process-related logic in the railways has been applied to the order.

The general assumption is that all RNE data have manually and/or automatically been co-generated by RNE members, their customers (e.g., railway undertakings) and RNE.

Each IT application/data asset is included in a separate table below and the following items have been recorded:

Data asset number	Legal framework concerning creation and management	Brief description of the data available in the application[1]	Type of data[2]	Type of data (co)-generation[3]	Format of data[4]	Location[5]	Creation/go-live date

[1] What is the core information collected in the system?
[2] What type of data is it, e.g., text, numbers, statistics, images, a database, etc.?
[3] Manually/human-generated or automatically/machine generated or imported or a mix of them.
[4] What format is the data in, e.g., XML, CSV, SQL DB, ODS, JSON, GEOJSON, XLS, XSLX, JPEG, etc.?
[5] What is the physical location of the server/cloud?

1.	TAF TSI Central Reference File Database (CRD) https://crd.rne.eu/CRD/Login.action (registration is required)							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the system**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlement (e.g., confidential data)	Data free of legal entitlements					
	- Chapter 4.2.10.1. of TAF TSI Regulation No 1305/2014 (TAF TSI) - Data provision and access are subject to a set of different licence agreements designed for different actors (IMs, RUs, wagon keepers, etc.)	No	-List of countries (ISO 3166) -Locations codes (e.g., stations, customer sidings, loading places) -Company codes of all rail actors who exchange information	database	- Manually generated - Company codes are imported from UIC file based on a contractual arrangement between RNE and UIC		RNE cloud in Vienna	- 2012 with UIC - in RNE portfolio since 1 January 2015
			Other place/form where the same data is available: Based on Art. 3 of the TAF TSI Regulation the same database is publicly available on ERA website: https://teleref.era.europa.eu/. Due to historical reasons company codes					

			can also be found on UIC website here: https://uic.org/support-activities/it/rics					
2.	**Charging Information System (CIS) https://cis-online.rne.eu/cis/welcome (registration is not required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - No internal RNE legal basis for data provision eighter	No	- railway infrastructure charges of more than 20 IMs in Europe - based on given parameters it estimates the price for the use of international train paths in EUR within minutes - In addition, providing charge estimates for shunting and station use	Database	- Manually generated by IMs and Allocation Bodies - All calculations are done automatically by the application		RNE cloud in Vienna	2010
			Other place/form where the same data are available: the same individual per IM/AB data regarding charges are available					

			in the Network Statements of the IMs/ABs.					
3.	**Customer Information Platform (CIP)** **https://cip.rne.eu/apex/f?p=212:65 (registration is not required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision is legally regulated by CIP User Agreements signed between RNE and respective RFC.	No (Note: the projects and the investment plans of the RFC are out of the scope of the inventory)	- routing - terminals - specific track properties - infrastructure investment projects - international contingency management lines and their re-routing options of the RFCs - geo coordinates CIP displays information on railway infrastructure in 26 European countries, covering the complete network of all 11 RFCs.	Database/interactive map	Manually included by the RFCs and extracted by RNE Geo Editor (e.g. topology data)	Geometry information of nodes, segments and terminals described with Oracle Spatial SDO_GEOMERTY type.	RNE cloud In Vienna	-2013 with RFC 1 - in RNE portfolio since 1 July 2015

			Other place/form where the same data is available: Same data in different format/display is available in the network statements of the IMs (e.g., as annexes to the network statements) as well as on their websites.					
4.	**European Capacity Management Tool (ECMT)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision's legal instrument will be identified soon (e.g., RNE template)	Capacity needs announcements (CNA)[6] which would be submitted by the applicants would be confidential data, visible only to their creators and respective IMs (i.e., related to CNAs requests)	Published capacity models[7] and capacity supply[8] might be given by IMs from their own national application.	Database	At this stage of development, it is manual by the IMs, in later stages it would be mix of both manual and automatic.	XML – SQL Database	RNE IT supplier server	Started in 2021, estimate go live date is in 2022 (with limited set of functionalities)

[6] CNAs are element of the TTR project with no explicit legal basis in the current EU legislation.
[7] Same as above.
[8] Same as above.

			Other place/form where the same data is available: same data would be available in IMs own applications.					
5.	**European Rail Facilities Portal (ERFP)** **https://railfacilitiesportal.eu (registration is not required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- Art. 5(1)(a) of Regulation 2017/2177 on access to service facilities and rail-related services - Data provision will legally be regulated by the ERFP's website terms of use (to be fully redrafted in Q1 of 2022).	No	- Type of service facility (SF) - Addresses (postal and geo-coordinates) - Contact information of the operator - Owner type - Provided services - Technical characteristics of SF - Opening times - Access infrastructure - Loading parameter and conditions - Cargo handling - Legal and contractual information	Numbers, texts, geo-coordinates, URLs, documents	- All data is uploaded manually or created manually data record.	Excel sheets and being shown on the screen	RNE cloud in Vienna	- pilot in 2015 and official launch in June 2019 with the European Commission - in RNE portfolio since 1 June 2020
			Other place/form where the same data is					

			available: internal IT systems of IMs and SFO, partly in IMs' network statement, partly in their own IT applications.					
6.	**Geo Editor (formally RNE Big Data)** **https://geoeditor.rne.eu/frontend/login (registration is required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision is legally arranged in Geo Editor Membership Regulation approved by RNE General Assembly in December 2019. - Geo Editor is capable of handling detailed lines geometry in the form of a polylines for the provided segments. They are	No	Geo Editor is an IT tool designed by RNE to simplify network topology data acquisition, sharing and manipulation. This tool comprises - database that contains all the relevant data including network topology data, user data and other data necessary for normal application functioning and is used to provide	Database	- Locations are replicated every day from TAF TSI CRD, initially provided by IMs and RUs - Segments are directly imported from CRD (IMs) and manually from RINF (IMs) - Sections are manually provided by IMs and RFCs		RNE cloud in Vienna	

	used by other RNE IT systems for a better visual representation and a more accurate distance calculation between locations		data to other RNE IT tools - Geo Editor WEB application that is used for manipulating network topology					
7.	**Language Tool related data**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Contract with external companies providing translation of the verbal and written communication	- Translation as a service itself - Predefined messages - List of messages in different languages - Railway jargon vocabularies - List of word constants and variables used in communication - List of variables - Translation modules or		Database	Translated sentences, Logs from communication	Text and audio formats	- Language tool - Recording system - Internal databases, - RNE OneDrive - https://translate4rail.eu/	2021

		systems in any RNE IT tool - Data containing logs from communication and dialogs itself						
8.	**Network and Corridor Information (NCI)** **https://nci-online.rne.eu (registration is not required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- Art. 27(1) of Directive 2012/34 - Data provision will be legally regulated by the NCI's website terms of use.	No	- All network statements (NS) of IMs and corridor information documents of RFC in one single place - Information in NS: • Infrastructure • Capacity allocation • Access conditions • Services and charges online. - Information in CID:	text	manual	MS-Word documents .DOCX (for upload) and .PDF (for download)	RNE cloud in Vienna	14.01.2022

			• Network statements excerpts • Terminal description • Procedure for capacity, traffic, and train performance management					
9.	**Path Coordination System (PCS)** **https://pcs-online.rne.eu/pcs/#/login (registration is required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision is legally based on a template approved by the RNE General Assembly (i.e. PCS User agreement)	- Data within one dossier in production/official environment. - All agencies involved in one dossier can see the data (Applicants, IMs, RFCs). - Data visibility also depends on the phase of the dossier and role;	All dossiers created in the test 1 and test 4 environments are available to all users who log in with the test accounts.	Text, numbers, statistics, all saved in a database.	Mix of both	XML, SQL DB, XLS, XSLX, PDF	RNE cloud in Vienna	- 2003 with SBB AG, Switzerland - in RNE portfolio since 1 June 2004

		by data = Name and contact of the person working on a dossier & data needed for dossier creation. - List of users added to every agency registered in the system.						
10.	**Temporary Capacity Restrictions (TCR)** **https://tcr-online.rne.eu (registration is required)**							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision among RNE members is legally arranged in TCR Membership Regulation approved by RNE General Assembly in May 2018.	Temporary capacity restriction data are visible to the IM on which network the TCR is, and the neighbouring IMs with whom he needs to coordinate with.	After TCR publication, data is available to all parties registered in the tool.	Database	Manually created, imported via Excel/XML files or created by using the system-to-system interface	XML, Excel, TAF TSI interface, Oracle database	RNE cloud in Vienna	01.01.2021

11.	Train Information System (TIS) https://tis-prod.rne.eu (login is required)							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision is legally based on the TIS Membership Regulation approved by RNE General Assembly in December 2013.	**Timetable information:** - Sender - Planned transport identifiers - Planned journey location - Timing at location - Responsible IM - Responsible RU - Operational Train Number **Actual information:** - Sender - Train Operational identification - Operational Train Number Identifier		Database	Automatically, machine generate, manual input (IMT)	XML	RNE cloud in Vienna	- 2004 as Europtirails by consortium of six IMs on corridor Rotterdam-Milano - In RNE portfolio since 2007 - IMT introduced with TIS 2020

		- Reference OTN - Location - Train Delay - Transfer Point Forecast information: - Sender - Train Operational identification - Operational Train Number Identifier - Train Location Report - Train Delay **Incident Management Tool (IMT) information:** - Data presented via TIS UI and derived data from them prepared by TIS or reporting system Location - Reference Train Number - Number of affected trains - Affected IMs, RUs and RFCs - Affected Train Types						

		- Sender (of interruption) - Interruption Reason						
	Traffic management and train performance data							
	Data prepared by RNE based on surveys and derived activities		Traffic management information (TMI): • Border Agreement (Level 1/Level 2) • Border Section Information • Operational Information • Exceptional Transport • Dangerous Good Priority rules in operation (PRO) • National Law • Internal IM regulation • Partially national law • (Other)	Database/Excel file	Manual Input	Excel/Pdf	- RNE OneDrive - RNE website: https://rne.eu/wp-content/uploads/RNE_OverviewOfthePriorityRulesInOperation.pdf	- TMI 2015 (yearly update - PRO 2012 (yearly update)

12.	RNE Data Warehouse for Reporting Purposes https://reports.rne.eu and https://report-management.rne.eu (registration is required)							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	- No specific legal basis - Data provision is based on bilateral contract with subjects or based on existing RNE Membership Regulation	- Available to all registered users - Most of historical data from RNE TIS application, partial data from other RNE applications like PCS, CIP, GeoEditor, etc. - Computed data for train performance purposes like punctuality, delays, and dwell time - Computed data for data quality indications	No	Database including text and numbers	Automatically computed by machine based on automatic or manual input	All common formats (sql, xslx, pptx, csv, docx, pdf)	RNE cloud in Vienna	2007

13.	International Train Number Database (ITNDB) https://itndb.rne.eu/itndb/#/auth (registration is required)							
Data asset number	**Legal framework concerning creation and management**	**Brief description of the data available in the application**		**Type of data**	**Type of data (co)-generation**	**Format of data**	**Location**	**Creation/go-live date**
		Data with legal entitlements (e.g., confidential data)	Data free of legal entitlements					
	UIC leaflet 419-2 (numbering of international freight trains) & TAF TSI regulation also handles the issue of identifiers for the object's “path” and “train”. In addition, the TAF TSI working group “Train Transport Identifier” (TTID) has specified some of the terms.	The train numbering ranges defined in the UIC leaflet and registered users contact details	After registering the ranges for the IMs (or carry forwarding for the next TT period) to be used the data are available. Also, RUs can allocate and request train numbers for their path requests which are handled by the 5 admin IMs (ÖBB Infra, SNCF-Reseau, SBB-Infra, MAV and DB-Netz). The booking overviews email notifications sent to the specific IM admin.	Database		Import/export in XLSX format and data stored in the database in tables	RNE cloud in Vienna	February 2016

Annex II

RNE IT Service Catalogue

(as approved by the RNE's General Assembly on 6 December 2022 and amended on 16 May 2024 and 10 December 2024)

This service catalogue is a single point of reference for all RNE software and data-driven services related to data exchange within and data sharing beyond the railway sector. It covers both non-commercial and commercial use and re-use of data. The concrete terms and conditions are subject to various contractual templates of RNE. It can regularly be updated subject to RNE General Assembly (GA) approval.

RNE may revise this Service Catalogue from time-to-time. The revised version will enter into force from the date of the RNE GA and apply from the date of the publication of the revised catalogue on RNE website. Once new/different prices are approved in this catalogue, the templates on RNE IT applications shall automatically be adjusted without additional GA decision as soon as no other material changes, besides fees and charges chapter, have been made in the templates.

The data assets are listed in the order from RNE's Data Inventory. All data assets regard (raw) non-personal (industrial) data.

The service catalogue is structured in six chapters:

1. Interfaces for data transport
2. Access to and use of data
3. Data exchange within the railway sector
4. Data processing and sharing within and beyond the railways sector
5. Derived data and business intelligence
6. Additional support for data and service provision

Note: This document, as updated from time to time by the RNE General Assembly, is the legal basis for all RNE products and their visualisation (e.g. flipbook) and marketing on the RNE website and other channels.

Item number	Item name		Item description	Item price in EUR[1]
Chapter I. Interfaces for data transport				
1.1	**TAF TSI Common Interface (CI)**			
			Set up and 24/7 maintenance of Application Programming Interface (API)	
1.1.1	CI for Railway Undertaking (RU), Wagon Keeper (WK) and Service Facility Operator (SFO)			- Registration fee: 4.600,00 - Annual fee: 2.760,00
1.1.2	CI for RNE member (IM and AB)			- Registration fee: 10.000,00 - Annual fee: included in the annual membership fee in RNE
1.1.3	CI for IT supplier			For the first five sublicences: - Registration fee: 9.200,00 - Annual fee: 5.520,00 For any additional five sublicences: - Registration fee: 0,00 - Annual fee: 2.760,00
1.1.4	CI for testing for 3 months			Free of charge

[1] Please note that all prices are VAT excluded.

1.2	**Path Coordination System (PCS) Interface**					
			Set up and 24/7 maintenance of API			
1.2.1	For RNE full member			For the first interface: - One-time initial set up fee: no fee - 24/7 maintenance annual fee: no fee For any additional interface: - One-time initial set up fee: 3.250,00 - 24/7 Maintenance annual fee: 5.400,00		
1.2.2	For non-RNE full member			For the first interface: - One-time initial set up fee: from 87.50,00 to 1.050,00 - 24/7 Maintenance annual fee: 1.750,00 For any additional interface: - One-time initial set up fee: 1.750,00 - 24/7 Maintenance annual fee: 1.750,00		
1.3	**Train Information System (TIS) Interface**					
		Set up and maintenance of API				
1.3.1	For RNE full member			- Initial set up fee: 6.500,00 - Annual fee: included in the annual membership fee in RNE		
1.3.2	For non-RNE full member (e.g., RUs, non-RU applicants, WKs, SFOs) – individual companies	One-time initial set up fee valid for all packages listed below: 8.000,00 for the first Interface; 4.000,00 for the second Interface.				
		TIS Interface Basic (<	**TIS Interface Small** (< 5.000 trains per month in TIS[2])	**TIS Interface Medium** (< 20.000 trains per month in TIS[2])	**TIS Interface Large** (< 100.000 trains per month in TIS[2])	**TIS Interface XLarge** (> 100.000 trains per month in TIS[2])

		1.000 trains per month[2])								
		One Interface	First interface[3]	Second Interface	First interface	Second interface	First interface	Second interface	First interface	Second interface
1.3.2.1	Maintenance fee per month[4]	300	300	150	500	250	1.000	500	1.500	750
	Fee per type of TAF TIS messages sent from TIS to the user per month[5]									
1.3.2.2	Path Details Message	100	200	100	200	100	200	100	200	100
1.3.2.3	Train Running Information Message	100	500	250	500	250	500	250	500	250
1.3.2.4	Train Running Forecast Message	50	100	50	100	50	100	50	100	50
1.3.2.5	Path Section Notification Message	50	100	50	100	50	100	50	100	50
1.3.2.6	Train Composition Message	50	100	50	100	50	100	50	100	50
1.3.2.7	Train Delay Cause Message	50	100	50	100	50	100	50	100	50
1.3.2.8	Train Running Interruption Message	50	100	50	100	50	100	50	100	50
1.3.2.9	Wagon Performance Message	50	100	50	100	50	100	50	100	50
1.3.3	For non-RNE full member (e.g., RUs, non-RU applicants, WKs, SFOs) – group of applicants	One-time initial set up fee valid for all packages listed below: 8.000,00 for an Interface.								

		TIS Interface Basic (< 1.000 trains per month[2])	**TIS Interface Small** (< 5.000 trains per month in TIS[2])	**TIS Interface Medium** (< 20.000 trains per month in TIS[2])	**TIS Interface Large** (< 100.000 trains per month in TIS[2])	**TIS Interface XLarge** (< 200.000 trains per month in TIS[2])	**TIS Interface XXLarge** (> 200.000 trains per month in TIS[2])
1.3.3.1	Maintenance fee per month[4]	1.000	1.000	2.000	4.000	5.000	Contact RNE Sales
1.3.3.2	Admininstration fee	25 € per company					
	Fee per type of TAF TIS messages sent from TIS to the user per month[5]						
1.3.3.3	Path Details Message	100	200	200	200	200	

[2] The total number of trains per month determines the type of the package. A free 3-month test period applies to all new users to overcome any technical issues and identify the proper number of trains per month based on the 3-month results.

[3] The 1st interface is considered the one with most volume of trains per month.

[4] It covers the maintenance, support and resources of RNE to smoothly operate the data exchange.

[5] In case of messages sent by the user to RNE TIS, a maximum of 50 % discount applies to the prices per message type depending on the proportion of the volume of messages sent to TIS. This discount will be applied for data that are not available in TIS and contribute to the overall TIS data quality

1.3.3.4	Train Running Information Message	100	500	500	500	500	
1.3.3.5	Train Running Forecast Message	50	100	100	100	100	
1.3.3.6	Path Section Notification Message	50	100	100	100	100	
1.3.3.7	Train Composition Message	50	100	100	100	100	
1.3.3.8	Train Delay Cause Message	50	100	100	100	100	
1.3.3.9	Train Running Interruption Message	50	100	100	100	100	
1.3.3.10	Wagon Performance Message	50	100	100	100	100	
1.4	**Rail Infrastructure System (RIS) Interface**						
			Set up and maintenance of API (railML, Linked Data, etc.)				
1.4.1	For RNE full members and SFOs			Free of charge			
1.4.2	For non-RNE full members (RUs, WKs)			To be defined in 2023			
1.4.3	For non-RNE full member (non-RUs, non-WKs)			To be defined in 2023			

Chapter II.
Access to and use of data

2.1	**Access to and use of the TAF TSI Central Reference File Database (CRD)**			
2.1.1	Access to CRD for RU, WK and SFO		Web user interface with view/export function only	Free of charge
2.1.2	Use of CRD for RU, WK and SFO		Update, download and upload of codes in CRD	- Registration fee: 1.400,00 - Annual fee: 900,00
2.1.3	Use of CRD for RNE member (IM and AB)			- Registration fee: 3.000,00

				- Annual fee: included in the annual membership fee in RNE
2.1.4	Use of CRD by IT supplier		Dissemination of CRD licences by IT companies	For the first five sublicences: - Registration fee: 2.800,00 - Annual fee: 1.800,00 For any additional five sublicences: - Registration fee: no fee - Annual fee: 900,00
2.1.5	Use of the CRD data for commercial purposes		Bulk download of datasets of CRD	450 € per dataset
2.2	**Access to the Charging Information System (CIS)**			
2.2.1	For IM RNE Member, RU and non-RU applicant, WK, SFO and the general public			Free of charge
2.3	**Access to the Customer Information Platform (CIP)**			
2.3.1	For IM RNE Member, RU and non-RU applicant, WK, SFO, Rail Fright Corridor (RFC) and the general public			Free of charge
2.3.2	Use of the CIP data for commercial purposes		Bulk download of datasets of CIP	450 € per dataset
2.4	**Access to the European Capacity Management Tool (ECMT)**			
2.4.1	For IM RNE Member, RU and non-RU applicant, WK, SFO and Rail Fright Corridor (RFC)			Free of charge
2.5	**Access to and use of data of the European Rail Facilities Portal (ERFP)**			
2.5.1	Access to the ERFP for IMs, RUs and non-RU applicants, WKs, SFOs, RFCs and the general public			Free of charge

2.5.2	Use of the ERFP data for commercial purposes		Bulk download of service facilities information (e.g., Excel file)	450 € per dataset
2.6	**Access to and use of data of the Rail Information System (RIS)**			
2.6.1	For IM RNE Member and Rail Freight Corridor			Free of charge
2.7	**Access to the Network and Corridor Information (NCI)**			
2.7.1	For IM RNE Member, RU and non-RU applicant, Wagon Keeper (WK), SFO, Rail Fright Corridor (RFC) and the general public			Free of charge
2.8	**Access to the Path Coordination System (PCS)**			
2.8.1	For IM RNE Member, RU and non-RU applicant, WK and SFO			Free of charge
2.8.2	For IM non-RNE member, RU or non-RU applicant without a contract of use of infrastructure signed with an IM, which is a RNE Member or railway company without separation of the railway infrastructure from operations (e.g. OSJD railways from non-EU countries)			- Basic annual fee: 1.000,00 for up to 50 dossiers for one calendar year - Advanced annual fee: 4.000,00 from 51 up to 200 dossiers for one calendar year
2.9	**Access to the TCR (Temporary Capacity Restrictions)**			
2.9.1	For RNE member (IM and AB)			Free of charge
2.9.2	For RU			Free of charge
2.10	**Access to the Train Information System (TIS)**			
2.10.1	For IM RNE Member, RU and non-RU Applicant, WK and SFO			Free of charge
2.10.2	For IM non-RNE member			- One-time initial set up fee: 6.500,00 - Annual operational costs fee: 10.800,00

2.11	**Access to the International Train Number Database (ITNDB)** (Note: the continuation of this application is under consideration)			
	For IMs			tbd
	Chapter III. Data exchange within the railway sector			
3.1	**RNE acting on behalf of a RNE member as an original sender under the TAF TSI Regulation**			
3.1.1	Path Details Message		IM to RU only during operation or preparation of train operation	tbd
3.1.2	Train Running Forecast Message		IM to RU	tbd
3.1.3	Train Running Information Message		IM to RU	tbd
3.1.4	Train Delay Cause Message		IM to RU	tbd
3.1.5	Train Running Interruption Message		IM to RU and next IM	tbd
3.2	**RNE acting on behalf of a RU/IM as an original sender under the TAP TSI Regulation and Regulation (EU) 2021/782 on rail passengers' rights and obligations[6]**			
3.2.1	Train Running Information Message			The prices in chapter 1.3 above shall apply
3.2.2	Train Running Forecast Message			The prices in chapter 1.3 above shall apply
3.2.3	Train Delay Cause Message			The prices in chapter 1.3 above shall apply
3.2.4	Train Running Interruption Message			The prices in chapter 1.3 above shall apply
3.3	**RNE acting on behalf of a RU as an original sender under the TAF TSI Regulation**			
3.3.1	Train Composition Message		RU to next and lead RU, IM(s)	tbd
3.3.2	Wagon Performance Message			tbd

[6] It shall apply from 7 June 2023.

3.3.3	Train Running Forecast Message (ETA)/Network ETA			tbd
3.4	**RNE acting on behalf of a WK and SFO**			
	Tbd		tbd	
Chapter IV. Data processing and sharing within and beyond the railway sector				
4.1	**Data from RNE databases and warehouses (Note: all RNE data assets as listed in the data inventory are concerned under this chapter)**			
			Bulk or tailor-made datasets from databases; these are extractions from RNE databases made available on request of RNE members and external users for further re-use	
4.1.1	Sharing with EU bodies and entities contractors of EU bodies		Confidential historical capacity and running train information of RU(s) in anonymised form	free of charge
4.1.2	Sharing with any third party		Non-confidential data	According to this catalogue per application
4.1.3	Processing of RNE members free of legal entitlements data available in other sources		'Processing' for the purposes of this document means any operation or set of operations which is performed on RNE Members free of legal entitlements data, such as collection, recording, organisation, structuring, merging, synchronisation in and with other applications (e.g.	Free of charge

			RINF), storage, adaptation, retrieval, consultation, use, dissemination, alignment, aggregation, combination, restriction, erasure, or destruction.	
4.1.4	Sharing with RU and SFO		- Historical train running information of RU in original form stored in RNE data warehouse - Quasi real-time train running information of RU relevant for a SFO to be provided at a different hourly range (e.g., every 1 hour, every 6 hours) by email message, on a FTP server or other method of transmission	Setup fee: 900 € per man day In addition, fee per TAF/TAP TSI message: - PDM: number of national trains *0.0008 EUR - TRIM: number of national trains *0.0008 EUR - TRFM: number of national trains *0.0003 EUR - PSNM: number of national trains *0.0002 EUR - TCM: number of national trains *0.0005 EUR - TDCM: number of national trains *0.0003 - TRINTM: number of national trains *0.0002 - WPM: number of national trains *0.0003
Chapter V. Derived Data and Business Intelligence				
5.1	**Provision of original TIS data in an anonymised form for treatment with artificial intelligence by a third party and generation of new data sent back in TIS**			
	The following messages can be sent to a third party without the name of the RU:		The new data not originally transferred and stored in TIS are the so-called Network ETA (i.e., Train Running Forecast Message for all freight trains in Europe)	

5.1.1	Path Details Message	-	- IM to RU message exchanged only during operation or preparation of train operation - This message is not further shared with other parties	tbd
5.1.2	Train Running Forecast Message	-	- IM to RU message - This message is not further shared with other parties	tbd
5.1.3	Train Running Information Message	-	- IM to RU message - This message can further be shared with other parties	tbd
5.2	**Oracle Analytics Server (OAS) Reports**			
5.2.1	Standard package		- Installing, configuring and administering one OAS installation in RNE datacentre and uploading and storing of TIS data into OAS on regular basis - Access on: https://reports.rne.eu to one named OAS account with standard reports included; - Participation to kick-off meeting organised by RNE: • Presenting the reports • Explaining the functions (point lists, train lists, etc.) • Supporting the set-up phase (point lists, train lists, etc.)	- Testing: 500,00 - Annual fee for the first package: 2.000,00 - Annual fee for any other standard package: 1.500,00

			• Data quality issues - Participation to annual user group meeting organised by RNE - 1,5 man-days per year for support, maintenance, updating, etc.; - RNE Help desk for reporting services is available Monday to Thursday 9 AM to 4 PM CET and Friday 9 AM to 3 PM excluding Austrian public holidays	
5.2.4	Additional (tailor-made) report			- Based on the budget offer
Chapter VI. Additional support for data and service provision				
6.1	RNE hourly rate	For organising and attending additional meetings, processing and clarifying of additional applications, requests and notifications, etc.		250 € per man hour