Европейская экономическая комиссия

Комитет по внутреннему транспорту

Рабочая группа по внутреннему водному транспорту

Рабочая группа по унификации технических предписаний и правил безопасности на внутренних водных путях

Сорок третья сессия
Женева, 26−28 июня 2013 года
Пункт 7 b) предварительной повестки дня
Введение общих принципов и технических требований для Общеевропейской речной информационной службы (РИС): Руководящие принципы и рекомендации для речных информационных служб (РИС) (пересмотренная Резолюция № 57)

Предложения по поправкам

Представлено Российской Федерацией

1.   Российская Федерация предлагает дополнить Резолюцию № 57 новым приложением, **Термины и определения РИС (RIS related terminology and definitions),** и при будущей работе считает целесообразным учесть этот документ.

2.   В качестве основы данного приложения Российская Федерация полагает целесообразным учесть документ Рабочей группы № 125 Постоянной международной ассоциации конгрессов по судоходству (ПМАКС) «Определения, относящиеся к речным информационным системам (РИС), февраль 2011 (Издание 1)» («RIS related definitions. Edition 1, February 2011», приведенный в приложении, и определиться в необходимости его принятия или использования в работе при обновлении Резолюции № 57.

3.   Данное предложение обусловлено тем, что имеющиеся в основном тексте Резолюции № 57 Глава 2 «Определения» недостаточно полно (по мнению Российской Федерации) разъясняют обширную на сегодня терминологию РИС, что затрудняет единообразный подход при внедрении РИС.

International Navigation Association

Inland Navigation Committee (InCom)

Permanent Working Group 125

RIS related definitions

Edition 1
February 2011

<u>Content</u>

1. <u>Introduction</u>

1.1. <u>Development of RIS in the last decade</u>

In 1998 the concept of River Information Services (RIS) was developed and detailed in research projects like INDRIS[1] and COMPRIS[2]. The potential of RIS to bring inland navigation to a better position in the transport chain was also recognized by international organizations like the UNECE, river Commissions like Rhine, Danube and the Sava Commission and the International Association for Navigation (PIANC). PIANC established a working group that developed in 2002 the Guidelines for River Information Services which are still an important pillar in the implementation phase of River Information Services. In 2004 the first revision of these Guidelines were drafted and published.
With the support of several European Member States, the European Commission took in 2003 the initiative for a Directive on River Information Services which came into force in 2005. The PIANC Guidelines, revision 2004, are one of the basic regulations[3] of this Directive[4].

> *River Information Services were formally recognized as a concept for harmonized information services to support traffic and transport management in inland navigation, including interfaces to other transport modes*

The RIS Directive did put formal requirements to the European Member States to implement services according to European standards but also to implement several basic services in their parts of the waterway network. These services are electronic navigational charts, Notice to Skippers and Electronic Reporting shall be implemented according to defined RIS standards.
In the European context the development and formalization of River Information Services is seen as *the* example for other transport modes towards a successful implementation of IT related traffic and transport services.

1.2. <u>Development of River Information Services</u>

Since the first initiatives in Europe on River Information Services, this concept on information exchange to support traffic and transport management in inland navigation, has found his way throughout the world. River Information Services are in an implementation stage in North and South America, Europe, Asia and Africa.
The development and in special the implementation of River Information Services has been considerably in the last years.
The added value of River Information Services have found recognition throughout the world Standardization on e.g. Inland ECDIS, Inland AIS, Electronic Reporting and Notices to Skippers became mature and several standards have found a formal basis in Europe

The first step towards the development of RIS standards was undertaken by a European RIS Platform; a platform for participation of a large part of the European (EU and non-EU) national authorities to promote the standardised and harmonised implementation of RIS. The European RIS platform supported in the early 2000's the installation of RIS Expert Groups aiming at the standardisation and harmonisation of the RIS key technologies.
Since that period Expert Groups played a major role in the development of standards. The RIS Expert Groups are international technical platforms ensuring the harmonized development and maintenance of RIS standards. The RIS expert groups act as advisory bodies of institutions like the European Commission, the Central Commission for Navigation on the Rhine (CCNR), the Danube Commission

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[1] INDRIS was a research project on the development of River Information Services in the 4th Framework Program of DG Energy and Transport of the European Commission (EC)
[2] COMPRIS was a research project in the 5th Framework Program of DG Energy and Transport of the EC
[3] Commission Regulation (EC) No 414/2007 of 13 March 2007
[4] Directive 2005/44/EC of the European Parliament and of the Council of 7 September 2005
on harmonized river information services (RIS) on inland waterways in the Community

(DC) and United Nations Economic Commission for Europe (UNECE) on RIS standardisation processes.

The first standards for the RIS key technologies Inland ECDIS, Notice to Skippers (NtS), Vessel Tracking and Tracing (VTT) and Electronic Reporting International (ERI) were formally accepted by the CCNR. A major contribution to the standardisation process has been the RIS Framework Directive of the European Commission which entered into force in October 2005. This directive contains binding rules for the authorities on the implementation of RIS services according to agreed standards. According to the RIS directive the Member states have to implement RIS according to the defined standards

1.3.   <u>RIS Definitions</u>

With the development and implementation of RIS arose the need for RIS Definitions.

Much of the work was done by the EU-expert groups, but in projects from the past such as INDRIS, COMPRIS, MARNIS and IRIS-I were also definitions developed. There were also definitions from international organisations such as IOM, ITU, IALA, UN/ECE, CCNR and others, relevant to RIS.

At the start of PIANC-working group 125, based on the various wishes of many stakeholders, the need was expressed to bring together all relevant definitions in 1 document.

To that end many sources and experts were consulted and soon it appeared that some from definitions there were several variations in circulation. This can easily lead to confusion even when the differences were slight.

By the fact that the definitions were collected and sorted in a systematically way, it was possible to have an overview of definitions for the same notation. Having this overview proposals were worked out to select the most appropriate definition.

Redundant definitions were not deleted, but placed in chapter 16.It is expected that in the years to come, in the field of RIS (definitions) some developments can be expected. There may be the possibility that it turns out that a definition being now redundant fits better at that end.

1.4.   <u>The use of these definitions</u>

The definitions brought together in this document cover the whole field of RIS and related systems, like VTMS, VTS and E-Navigation. This also means that the RIS definitions are not limited to river systems worldwide, but that there is a relation with the maritime area.

This signifies that the definitions are not directly linked to any of the (traffic) regulations being used at the various (inland) water systems.

The definitions will be of importance in the planning, implementation/realisation, management and maintenance of RIS systems, but they also give a clear picture of the roles, responsibilities and the various parties, players and stakeholders involved.

In particular the RIS expert groups will be asked that if they are at any moment engaged in an update of the RIS standard to use the definitions gathered in this document. This then contributes to consistency in the use of RIS.

2. **General definitions**

In this chapter all general definitions are brought together. These are general definitions, that are not specific to RIS, but it is of importance that they are part of this document.

Aid to navigation is any device or system, external to a vessel which is provided to help a mariner determine position and course, to warn of dangers or of Obstruction s, or to give advice about the location of a best or preferred route.
(Source: IALA VTS Manual 2008)

Authentication is the process of confirming that a product, document or even person is authentic. (real, genuine, valid, of undisputed origin)
(Source: international Authentication Association)

Availability means the percentage of time that an aid, or system of aids, is performing a required function under stated conditions. Non-availability can be caused by scheduled and/or unscheduled interruptions
(Source: IMO A915 (22))

Barge is a vessel that has no propulsion of its own.
(Source: Standard for electronic ship reporting EU/164/2010)

Base station is the fixed equipment including the radio transmitter and associated antenna(s) as used in wireless telecommunications networks.
(Source: International Electronic technical Commission)

Broadcasting Service means a radio communication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmission .
(Source: International Electronic technical Commission)

Bulk cargo is unpackaged solid which can be discharged.
(Source: ADN)

Cargo (synonym: Freight) means any goods, wares, merchandise, and articles of every kind whatsoever carried on a ship other than mail, ship's stores, ship's spare parts, ship's equipment, crew's effects and passenger s' accompanied baggage.
(Source: IMO FAL Convention 1998 edition)

Channel (synonym: Fairway or Navigation channel)

Commodity means an article of trade often seen as an indication of the type of goods.
(Source: Marnis)

Competence means the ability to perform defined tasks or duties effectively.
(Source: IALA VTS Manual 2008)

Container (Synonym: : Freight Container) means an article of transport equipment (lift-van, movable tank or other similar structure):
- ❑ fully or partially enclosed to constitute a compartment intended for containing goods,
- ❑ of a permanent character and accordingly strong enough to be suitable for repeated use,
- ❑ specially designed to facilitate the carriage of goods, by one or more modes of transport, without intermediate reloading,
- ❑ designed for ready handling, particularly when being transferred from one mode of transport to another,
- ❑ designed to be easy to fill and to empty, and
- ❑ having an internal volume of one cubic metre or more.

(Source: World Custom Organisation)

Convoy means a towed convoy, a pushed convoy or a side by side formation.
(Source: CEVNI: European code for Inland Waterways concept 2009)

Co-operative system is a system which is based on special ship born equipment co-operating with other ship born equipment or shore-based equipment.
(Source: unknown)

Dangerous goods means
- goods classified in the UNDG Code,
- goods classified in the ADN/ADNR Code
- goods classified in the IMDG Code,
- dangerous liquid substances listed in the IBC Code,
- liquefied gases listed in the IGC Code,
- solids referred to in Appendix B of the BC Code.
(Source: Standard for electronic ship reporting EU/164/2010)

Fairway (synonym: Channel or Navigation channel) means that part of the waterway that can actually be used by shipping.
(Source: CEVNI: European Code for Inland Waterways concept 2009)

Freight (synonym: Cargo)

Freight container (synonym: Container)

Functions are a set of processes, procedures and activities contributing to one or more services or activities.
(Source: unknown)

Goods are all materials received from a shipper including any equipment.
(Source: Marnis)

Hazardous cargoes include:
· Goods classified in the IMDG Code,
· Oils, noxious and harmful substances defined in MARPOL,
· Radioactive materials listed in the INF Code.
(Source: IALA VTS Manual 2008)

Heading is the direction in which the longitudinal axis of a craft is pointed, usually expressed as an angular distance from north clockwise through 360 degrees (true, magnetic or compass).
(Source: CCNR Inland ECDIS Standard; Edition 2.0 23/11/2006)

Inland vessel means a vessel intended solely or mainly for navigation on inland waterways.
(Source: directive 2006/87/EC)

Inland waterways are rivers, lakes or other stretches of water, whether linked to the sea or landlocked, which by natural or man-made features are suitable for navigation. In the river estuary the boundary between sea and inland waterways is the baseline established in accordance with international law.
(Source: Inland VTS Guidelines CCNR version 1.0 31/05/2006)

Intermodal Transport is the movement of goods in one and the same loading unit in a door to door transport chain in an integrated manner using successively more than one modes of transport, without the handling of the goods themselves.
(Source: Marnis)

Location means any named geographical place, such as a port, an inland freight terminal, an airport, a container freight station, a terminal or any other place where customs clearance and/or regular receipt or delivery of goods can take place, with permanent facilities used for goods movements associated with international trade/transport and used frequently for these purposes. The location should be recognized as such by a competent national body.
(Source: Standard for electronic ship reporting EU/164/2010)

Monitoring means to follow by means of any of various devices the progress and performance of vessels, and to warn the responsible parties of any deviations from the expected, respectively planned performance.
(Source: Standard for electronic ship reporting EU/164/2010)

Nautical support is support given by tugboats or boatmen to assist in safe navigation and mooring.
(Sources: RIS-Guidelines 2007/414/EC)
Standard for electronic ship reporting EU/164/2010)

Navigation means the process of planning, recording and controlling the movement of a craft from one place to another.
(Source: IMO A915 (22))

Navigation channel (synonym: Fairway or Channel)

Navigational Information is information provided to the skipper on-board to support in on-board decision making.
(Sources: Standard for electronic ship reporting EU/164/2010
Standard Tracking and Tracing EU/415/2007)

Navigational support is support given by pilots on-board or in special circumstances on shore (pilotage from shore) to prevent the development of dangerous vessel, traffic situations.
(Sources: (Source: RIS-Guidelines 2007/414/EC)
Standard for electronic ship reporting EU/164/2010)

Obstruction means in marine navigation, anything that hinders or prevents movement, particularly anything that endangers or prevents passage of a vessel. The term is usually used to refer to an isolated danger to navigation.
(Sources: IHO Dictionary, S-32, 5th Edition, 3503
Encoding Guide of the Inland ECDIS Standard)

Passage plan (synonym: Route plan and Voyage plan)

Passage planning (synonym: Route planning and Voyage planning)

Passenger vessel, is a day trip or cabin vessel constructed to carry more than 12 passengers.
(Source: CEVNI: European Code for Inland Waterways concept 2009)

Pre arrival notification is the advance information giving particulars about a vessel and her cargo in advance of the vessel's arrival at a certain port.
(Source: unknown)

Polluting goods means;
- oils as defined in Annex I to the MARPOL Convention,
- noxious liquid substances as defined in Annex II to the MARPOL Convention,
- harmful substances as defined in Annex III to the MARPOL Convention NE4 1/75L
(Source: Standard for electronic ship reporting EU/164/2010)

Port means any location with permanent facilities at which vessels can load or discharge cargo moving in maritime traffic.
(Source: Marnis)

Procedures are the steps to be followed in order to comply with a formality, including the timing, format and transmission method for the submission of required information.
(Source: Standard for electronic ship reporting EU/164/2010)

Quality of Service means the collective effect of service performance that determines the degree of satisfaction of a user of the service.[5]
(Source: International Electronic technical Commission)

Radar means any of several systems or devices using transmitted and reflected radio waves for detecting a reflecting object, such as a vessel and determining its direction, distance, speed and heading. It can be used for navigation and detection.
(Source: Standard for electronic ship reporting EU/164/2010)

Risk in the view of Customs means the likelihood of an event that may occur in the international movement and trade of goods threatening the community's security and safety, posing a risk to public health environment and consumers.
(Source: Standard for electronic ship reporting EU/164/2010)

Risk management in the view Customs means the systematic identification and implementation of all measures necessary for limiting exposure of risks. This includes activities such as collecting of data and information, analysing and assessing risk prescribing and taking action and regular monitoring and review of the process and its outcomes, based on international, community and national sources and strategies.
(Source: Standard for electronic ship reporting EU/164/2010)

Role is the task of an actor in IT'S or user of a traffic of transport service. An actor or user can play different roles.
(Source: STIS)

Route plan (synonym: Voyage plan and Passage plan)

Route planning (synonym: Voyage planning and Passage planning)

Safety is the relative freedom from danger, risk, or threat of harm, injury, or loss to personnel and/or property, whether caused deliberately or by accident.
(Source: Business Dictionary)

Security is the prevention of and protection against assault, damage, fire, fraud, invasion of privacy, theft, unlawful entry, and other occurrences caused by deliberate action.
(Source: Business Dictionary)

Sailing Plan is a report to be sent before departure from a port within a system or when entering the area covered by a system normally including ETA or ETD, maybe amplified at request of a VTS.
(Source: IMO 857 (20))

Ship (synonym: Vessel) means any kind of vessel which is used in navigation by water.
(Source: IMO A.849 (20))

Side by side formation means a group consisting of vessels, coupled side by side, none of which is placed in front of the motorized vessel propelling the formation.
(Source: CEVNI: European Code for Inland Waterways concept 2009)

Vessel (synonym: Ship) means an inland waterway vessel or seagoing ships. In inland navigation this term includes also small crafts, ferry boats and floating equipment.
(Source: Standard for electronic ship reporting EU/164/2010)

Vessel support services are services given to the skipper by e.g. bunker stations and repair organization.
(Source: Standard for electronic ship reporting EU/164/2010)

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[5] It is characterized by the combined aspects of performance factors, applicable to all services such as: service operability performance, service accessibility performance, service retain ability performance and service integrity performance.

Vessel traffic monitoring is providing important information relating to the movements of relevant ships in a RIS area. This includes information about ships identity, position, (type of cargo) and port of destination.
(Source: Standard Tracking and Tracing EU/415/2007)

Voyage is a movement of a ship between the harbour of departure and the next harbour of destination.
(Source: VTMIS Glossary of terms)

Voyage plan synonym: Passage plan and Route plan) is the description of a vessel's, journey from start to finish.
(Source: unknown)

Voyage planning (synonym: Route planning and Passage planning) is the procedure to develop a complete description of the journey of a vessel, from start to finish.
(Source: IMO SOLAS)

Way point is a virtual or defined point or an indicated exit respectively entry point, on the route of a means of transport, where the traffic flow changes its direction and or speed.
(Source: Marnis)

Waterway means any inland water open to navigation.
(Source: CEVNI: European Code for Inland Waterways concept 2009)

3. **Players**

In this chapter the various for RIS relevant parties are brought together. This can be both functions and organisations. This chapter involves all stakeholders, such as governments, logistic parties, the shipping branch and the responsible waterway authorities. Some of these definitions are also used in other chapters. This is done to have a complete picture off all relevant definitions for that specific chapter.

Agency in charge of collecting statistical data collects processes and distributes statistical data.
(Source: IRIS-Europe II)

Agent means any person mandated or authorised to act for or to supply information on behalf of the operator of the vessel.
(Source: Standard for electronic ship reporting EU/164/2010)

Berth Operator is the person who monitors and controls the fluent and safe progress of traffic around a berth and who is responsible for the use of a berth.
(Source: IRIS-Europe II)

Boat master (synonym: Master, Master in charge, Shipmaster, Captain and Skipper)

Bridge operator is the person who monitors and controls the fluent and safe progress of traffic around a moveable bridge and who is responsible for the operation of a movable bridge.
(Sources: Standard Tracking and Tracing EU/415/2007
        IRIS-Europe II)

Captain (synonym: Master, Master in charge, Boat master, Shipmaster and Skipper)

Carrier is the person actually transporting or in charge of or responsible for the operation of the means of transport.
(Source: World Customs Organisation)

Cargo owner is the legal Owner of the goods as mentioned in the transport document. The party indicated as such has the right of control and is the only party entitled to give the carrier instructions in relation to the contract of carriage
(Source: CMI Uniform rules for Bills of Loading)

Cargo shipper (synonym: ConsignorShipper and Sender)

Competent Authority means the authorities and organisations authorised by the Governments to receive and pass on information reported pursuant to this standard.[6]
(Source: Standard for electronic ship reporting EU/164/2010)

Competent Authority (RIS) is the authority made responsible for safety whole or in part, by the Government, including environmental friendliness and efficiency of vessel traffic.The Competent Authority usually has the tasks of planning, arranging funding and of commissioning of RIS.
(Sources: RIS-Guidelines 2007/414/EC)
        Standard Tracking and Tracing EU/415/2007)

Competent Authority (VTS) is the authority made responsible, in whole or in part, by the government for the safety environmental safety, and efficiency of vessel traffic and the protection of the environment.
(Sources: IMO A.857 (20)
        IALA VTS Manual 2008
        Inland VTS Guidelines CCNR version 1.0 31/05/2006)

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[6] Standard for electronic ship reporting EU/164/2010

Competent Authority for traffic management is the authority who controls the access to the control area, monitors the movements of specific vessels, and their cargo (target groups) in this control area and supports Rescue and Emergency Services Providers with detailed information in case of emergencies and calamities.
(Source: IRIS-Europe II)

Conning skipper (synonym: Navigating skipper) is the person who navigates the vessel, according to voyage plan instructions of the shipmaster.
(Source: Standard Tracking and Tracing EU/415/2007)

Consignee is the party such as mentioned in the transport document by whom goods, cargo or containers are to be received.
(Sources: Standard Tracking and Tracing EU/415/2007
        Standard for electronic ship reporting EU/164/2010
        IRIS-Europe II)

Consignor (synonym: s, Shipper and Sender) is the merchant (person) by whom, in whose name or on whose behalf a contract of carriage of goods has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage.
(Sources: Standard Tracking and Tracing EU/415/2007
        IRIS-Europe II)

Crew a crew member is any person actually employed for duties on-board during a voyage in the working or service of a ship, and included in the crew list.
(Source: IMO FAL convention Section 1)

Customs is the Government Service which is responsible for the administration of Customs law andthe collection of import and export duties and taxes and which also has responsibility for the application of other laws and regulations relating, inter alia, to the importation, transit and exportation of goods.
(Source: World Customs Organisation)

Environmental Authority is the Law enforcement agency for pollution of the environment: Observes pollution to the environment and detects and fines / summons violations.
(Source: IRIS-Europe II)

Fire Brigade are the Rescue and Emergency Services Providers, responsible for the search and rescue and emergency services. (deals with a calamity   and takes care of the people, animals, cargo and vessels , involved)
(Source: IRIS-Europe II)

Fleet manager is the person planning and observing the actual (navigational) status of a number of vessels, moving or working under one command or ownership.
(Sources: Standard Tracking and Tracing EU/415/2007
        COMPRIS WP 4
        IRIS-Europe II)

Forwarder (synonym: Freight broker and Freight forwarder) is the party arranging the carriage of goods including connecting services and/or associated formalities on behalf of shipper and consignee.
(Source: Standard for electronic ship reporting EU/164/2010)

Forwarding agent is the representative of a forwarder.
(Source: COMPRIS WP5/logistics)

Freight broker (synonym: Forwarder and Freight forwarder) is the person responsible on behalf of the transport supplier for the physical transport of the goods to be executed. The freight broker offers transport capacity to shipper s on behalf of the transport supplier and is this way mediator between supply forwarder and shipmaster.
(Source: Standard Tracking and Tracing EU/415/2007)

Freight forwarder (synonym: Forwarder and Freight broker)

Law enforcement agency for cargo inspection performs cargo inspection (customs, veterinary, phytosanitary) and detects and fines / summons violations.
(Source: IRIS-Europe II)

Law enforcement agency for immigration control performs immigration control and detects and fines / summons violations.
(Source: IRIS-Europe II)

Law enforcement agency for traffic rules detects and fines / summons violations of traffic rules.
(Source: IRIS-Europe II)

Licensing Authority (synonym: Technical Certification authority)

Lockmaster (synonym: Lock operator)

Lock operator (synonym: Lockmaster) is the person who monitors and controls the smooth and safe progress of traffic around and through a lock and who is responsible for the locking process in itself.
(Source: IRIS-Europe II)

Master (synonym: Boat master, Master in charge, Shipmaster, Skipper Captain and even "The old Man") is the captain of a merchant ship, this is the person who rules the ship and has control, authority and power to commend the ship and has the final responsibility over ship and cargo.
(Source: Webster)

Master in charge (synonym: Boat master, Master, Shipmaster, Skipper, Captain and even "The old Man")

Navigating skipper synonym: Conning skipper) is the person who navigates the vessel, on voyage plan and/or instructions of the Master in charge.
(Source: IRIS-Europe II)

Operator in Calamity of Emergency Services is the person who monitors, controls and organises the safe and smooth fighting of accidents, incidents and calamities
(Source: Standard Tracking and Tracing EU/415/2007)

Operator is the party responsible for the day to day operational management of certain premises such as ware-house operator, terminal operator, and barge operator.
(Source: COMPRIS WP5/logistics)

Passenger is a person travelling in a ship, and not being involved in operating the conveyance and included in the passenger list
(Source: Webster)

Port Authority is the official authority responsible for traffic safety and in the port.
(Source: IRIS-Europe II)

Port operator is a commercial user responsible for the commercial business within the port
(Sources: COMPRIS
IRIS-Europe II)

Primary Stakeholder are those stakeholders who have the capabilities and authority (legal basis) to make the decisions for RIS. They contain at least the authorities that will be responsible for the RIS centre(s) and the organization of it.
(Source: PIANC RIS Guidelines 2011)

Public Authorities are the agencies or officials in a state responsible for the application and enforcement of the laws and regulations of that state which relate to any aspects of the procedures on the arrival, stay and departure of ships.
(Source: IMO FAL Convention)

Rescue Unit is a unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.
(Source: Sar.2/Circ 5)

Rescue and Emergency Services Providers is the organisation responsible for the search and rescue and emergency services. (deals with a calamity and takes care of the people, animals, cargo and vessel, involved)
(Source: COMPRIS)

RIS Authority is the authority with the responsibility for the management, operation and co-ordination of the RIS, the interaction with participating vessels, and safe and effective provision of the service.
(Source: RIS Guidelines 2007/44/EC
Standard Tracking and Tracing EU/415/2007))

RIS Key actors are the primary and secondary stakeholders.
(Source: PIANC RIS Guidelines 2011)

RIS operator is a person performing one or more tasks contributing to the services of RIS.
(Source: Standard Tracking and Tracing EU/415/2007)

RIS provider is the organisation or organisational unit assigned to operate the RIS-System and to provide RIS-Services.
(Source: IRIS-Europe II)

RIS users means all different user groups including boat masters, RIS operators, lock and/or bridge operators, waterway authorities, port and terminal operators, operators in calamity centres of emergency services, fleet managers, cargo shippers and freight brokers.
(Source: RIS-directive 2005/44/EC)

Secondary Stakeholder are those stakeholders involved in the realisation for RIS, but do not have the authority to take decisions.(e.g. the skippers, providers of hydrographical, hydrological and meteorological data)
(Source: PIANC RIS Guidelines 2011)

Sender (synonym: Cargo shipper, Shipper and Consignor)

Shipmaster (synonym: Captain, Skipper, Boat master, Master in charge and Master) is the person on-board of the ship, being, in command and having the Authority to take all decisions pertaining to navigation and ship management.
(Source: Standard for electronic ship reporting EU/164/2010)

Ship-owner is the one who owns or operates a ship, whether a person, a corporation or other legal entity, and any person acting on behalf of the owner or operator.
(Source: IMO FAL convention)

Shipping Agent is a person or organisation authorised to act for or on behalf of another person or organisation, such as forwarding agent, the Customs agent and the carrier agent.
(Source: IRIS-Europe II)

Shipper (synonym: Cargo shipper, Consignor, and Sender) The merchant (person) by whom, in whose name or on whose behalf a contract of carriage has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage.
(Source: P&O Nedlloyd A-Z of shipping terms)

Skipper (synonym: Boat master, Shipmaster, Master, Master in charge and Captain
Stakeholder is any individual, group, or organization able to affect, be affected by, or believe it might be affected by a decision or activity. The decision maker(s) is a stakeholder.
(Source: IALA VTS Manual 2008)

Stevedore (synonym: Terminal Operator) means a party running a business of which the functions are loading, stowing and discharging of the cargo of a ship.
(Source: P&O Nedlloyd A-Z shipping terms)

Supply Forwarder is the person who is responsible on behalf of the shipperfor the organisation of the physical transport of the goods that shall be exchanged. The supply forwarder offers cargo to transporters on behalf of the shipper.
(Source: Standard Tracking and Tracing EU/415/2007)

Technical Certification Authority (synonym: Licensing Authority) is the Competent Authority for the issuing of the vessels, certificates.
(Source: IRIS-Europe II)

Terminal operator (synonym: Stevedore) is a party responsible for the execution of loading, stowing and discharging (unloading) of vessels.
(Source: Standard Tracking and Tracing EU/415/2007)

User is a person or organization that requires one or more traffic and transport services in order to fulfil his task or role in the transport process.
(Source: unknown)

VTS Authority is the authority with the responsibility for the management, operation and coordination of the VTS, the interaction with participating vessels and efficiency of the vessel, traffic and the protection of the environment.
(Source: IALA VTS Manual, 2008)

VTS Operator is an appropriately qualified person performing one or more tasks contributing to the services of the VTS.
(Sources: IMO.A.857 (20))

VTS users are vessels using the VTS and other users (allied services, emergency services, adjacent VTS, other related organizations)
(Source: unknown)

Water manager is the person who supplies a certain water level and therefore monitors the water quality and quality and balances the water level where possible.
(Source: IRIS-Europe II)

Waterway manager is the person who supplies the fairway and therefore monitors the condition of the waterway infrastructure, collects dues for the use of the waterway infrastructure (for transport), plans and executes construction works and assists with calamity abatement.
(Source: IRIS-Europe II)

4. <u>Information Technology</u>

In this chapter all definitions in the field of information technology, being of interest for RIS in one way or another way are brought together. This may be directly or otherwise indirectly

<u>Architecture</u> is defined by the recommended practice as the fundamental organisation of a system, embodied in its components, their relationship to each other and the environment and the principles governing its design and evolution.
(Source: ANSI/IEEE STD 1471-2000)

<u>Cargo Community System (CCS)</u> is a community system which, based on an integrated series of procedures, rules, standards, and ICT tools supports the automatic exchange of data, information and documents related to the handling, storage and transport of cargo.
(Source: Marnis)

<u>Code</u> means a character string used as an abbreviated means of
   a)   recording or identifying information,
   b)   to represent or identify information using a specific symbolic form that can be recognised by computer.
(Source: Standard for electronic ship reporting EU/164/2010)

<u>Compatibility</u> is the degree to which devices may be interconnected and used, without modification, when designed as defined throughout this standard. (for example, mechanical, electrical, or functional)
(Source: International Electronic technical Commission)

<u>Data</u> is a representation of facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing by human beings or by automatic means.
(Source: ISO 2382/1).

<u>Data dictionary</u> is a centralised storage of information or data such as the meaning, the links with other data, the source, the usage and the classification. The dictionary is used for the efficient planning, managing and evaluating the collection, recording and usage of data. The data dictionary or lexicon is primarily and originally a book containing words arranged in alphabetical order with definitions, etymologies and other information.
(Source: unknown)

<u>Data element</u> is a unit of data for which the identification, description and value representation have been specified.
(Source: ISO 9735)

<u>Data Flow</u> are the data that are transferred between processes or between a process and a terminator in the Logical Architecture.
(Source: US National ITS Architecture)

<u>Data Flow Diagrams</u> are the diagrams in the Logical Architecture that show the functions that are required for ITS and the information that moves between these functions.
(Source: US National ITS Architecture)

<u>Data integrity</u> is the ability of a Communication system deliver data from its originator to its destinations with an acceptable residual error rate.
(Source: International Electronic technical Commission)

<u>Data Representation of facts</u> are concepts or instructions in a matter suitable for communication, interpretation or processing by human, manual, semiautomatic and fully automatic means.
(Source: College Engineering University of Michigan)

Data repository is a repository is in essence a place where things are stored or may be found, so e.g. a warehouse. Quite often the term data warehouse is used to indicate the place of storage of common data. The data repository is used in the development of XML and ebXML (electronic business XML) to indicate the place of storage of the so-called core components.
(Source: COMPRIS WP8)

Data store is used to represent a collection of data that can be accessed by one or more functions, and thus forms part of the Functional Architecture.
(Source: KAREN)

Data security is the protection of data against unauthorised disclosure, alteration or destruction.
(Source: unknown)

Electronic Data Interchange (EDI) means the transfer of structured data by agreed standards from applications on the computer of one party to applications on the computer of another party by electronic means.
(Source: Standard for electronic ship reporting EU/164/2010)

Enumeration is a specification for the structure and organization of data to facilitate exchange between computer systems.
(Source: CCNR Inland ECDIS Standard; Edition 2.0 23/11/2006)

Exchange format is a specification for the structure and organization of data to facilitate exchange between computer systems.
(Source: CCNR Inland ECDIS Standard; Edition 2.0 23/11/2006)

External Data exchange means the data exchange with other (neighbour) RIS organisations.
(Source: PIANC RIS Guidelines 2011)

Functional Architecture describes the structure and logical behaviour of the system, in terms of what functionality is needed in order to meet its requirements and the inter-relationships between the various functions.
(Source: US National ITS Architecture)

Information (general) the meaning that humans or machines assign to data using certain conventions for the representation and interpretation of data.
(Source: College Engineering University of Michigan)

Information Architecture describes the data needed by the system by defining the structure of the data sets and showing the relationships between them. The Information Architecture may be influenced by the requirements of the other Architecture-types in terms of the availability.
(Source: US National ITS Architecture)

Information Technology system (IT system) is the totality of human resources, hardware, software, communication means and regulations in order to fulfil the task of processing information.
(Source: RIS-Guidelines 2007/414/EC)

Intelligent transportation systems (ITS) are the applications of advanced communications, information processing, and control and electronics technology to improve the transportation system in order to save lives, time and money.
(Source: US National ITS Architecture)

Integrity is the property of a system to inform its users that the information it provides is valid.
(Source: unknown)

Internal Data exchange means the data exchange with organisations that feed the different systems used for the implementation of RIS. (e.g. hydrometeo organisations that provide information on water levels)
(Source: PIANC RIS Guidelines 2011)

Interoperability is the ability of two or more devices to exchange information and use that information for correct co-operation.
(Source: International electronic technical commission)

Logical Architecture defines the activities or functions that are required to satisfy the user services. It identifies system functional processes and information flows grouped to form particular transportation functions.
(Source: US National ITS Architecture)

Management Architecture (synonym: Organisational Architecture)

Message code is a unique six character alphabetic reference identifying a message type.
(Source: Standard for electronic ship reporting EU/164/2010)

Organisational Architecture (synonym: Management Architecture) covers the organizational structure of the system, in terms of who is responsible for what.
(Source: US National ITS Architecture)

Physical Architecture groups the functions into physical units (or "market packages") and describes the communication links between them. It may show the physical locations of the various elements of the system and associated links. It should normally be technology and/or manufacturer independent.
(Source: WATERMAN-TS)

 Port Community System (PCS) is a community system which is based on an integrated series of procedures, rules, standards and ICT solutions supports the automatic exchange of data and documents related to the clearance of ships and cargo upon arrival, stay and departure of vessels.
(Source: Marnis)

Process (in architectural context) is a function or activity identified in the Logical Architecture that is required to support the user services.
(Source: US National ITS Architecture)

Qualifier means a data element whose value shall be expressed as a code that gives specific meaning to the function of another data element or a segment. [ISO 9735]
(Source: Standard for electronic ship reporting EU/164/2010)

Quality of information means the degree of excellence which the provided information possesses in relation to the desired standards.
(Source: unknown)

Reference data are the data used as a reference with which to compare future observations
(Source: Encarta Dictionary)

Reference Number serves to refer to or mention a relation or where applicable a restriction.
(Source: Standard for electronic ship reporting EU/164/2010)

Reference codes and tables are the elements of RIS reference data of the same nature (e.g. codifications of dangerous goods).
(Source: unknown)

Reference table means a summary where all reference pertaining to a certain subject can be found.
(Source: unknown)

Segment (EDI) is a predefined and identified set of functionally related data elements values which are identified by their sequential positions within the set. A segment starts with a segment tag and ends with a segment terminator. It can be a service segment or a user data segment.
(Source: Standard for electronic ship reporting EU/164/2010)

Segment code is a code which uniquely identifies each segment as specified in a segment directory.
(Source: Standard for electronic ship reporting EU/164/2010)

System Architecture is the way components are designed to fit together to fulfil the functional requirements of the system. This definition applies to the physical characteristics of the system and to how the information is handled.
(Source: THEMIS)

System Security is the capability of a computer based system to provide adequate confidence that unauthorised persons and systems can neither modify the software and its data nor gain access to the system functions, and yet to ensure that this is not denied to authorised persons and systems.
(Source: International Electronic technical Commission)

Tag is an unique identifier for a segment or data element.
(Source: Standard for electronic ship reporting EU/164/2010)

Unified Modelling Language (UML) is a general-purpose notational language for specifying and visualizing complex software, especially large, object-oriented projects.
(Source: MarNIS)

eXtended Mark-up Language (XML) is designed to enable the exchange of information (data) between different applications and data sources on the World Wide Web. XML is a simplified subset of the Standard Generalized Mark-up Language (SGML). XML allows construction of structured data (trees) which rely on composition relationships. XML schemas are used to define data models.
(Source: UN/CEFACT Glossary of terms)

5. <u>RIS</u>

In this chapter al RIS related definitions are brought together. First there are the general RIS definitions and in the paragraphs following the eight RIS services are presented.

5.1. <u>General RIS definitions</u>

<u>Competent Authority (RIS)</u> is the authority made responsible for safety whole or in part, by the Government, including environmental friendliness and efficiency of vessel, traffic. The Competent Authority usually has the tasks of planning, arranging funding and of commissioning of RIS
(Sources: RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007)

<u>Interoperability</u> is the ability of two or more devices to exchange information and use that information for correct co-operation
(Source: International electronic technical commission)

<u>Levels of RIS Information</u>; River Information Services work on the basis of different Information levels. Fairway information contains the data of the waterway only. Traffic Information has the information on vessels, in the RIS area. Traffic Information can be divided into Tactical Traffic Information (TTI) and Strategic Traffic Information (STI). Traffic Information is provided by traffic images.
(Source: RIS-Guidelines 2007/414/EC)

<u>RIS application</u> means the provision of River Information Servicesthrough dedicated systems.
(Source: RIS-directive 2005/44/EC)

<u>RIS Architecture</u> is the systematic transformation of policy objectives into the development of services, systems and applications.
(Source: Draft RIS directive of the European Union (30/09/03)

<u>RIS area</u> is the formally described area, where RIS are active. A RIS area may comprise the waterway s in a geographical river basin, including the territories of one or more countries. (e.g. in a situation where a waterway forms the borderline between two countries)
(Source: RIS-Guidelines 2007/414/EC)

<u>RIS Authority</u> is the authority with the responsibility for the management, operation and co-ordination of the RIS, the interaction with participating vessels and safe and effective provision of the service.
(Sources: RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007))

<u>RIS centre</u> means the place where the services are managed by operators.
(Source: RIS-directive 2005/44/EC)

<u>RIS Directive</u> is a European Directive on harmonized River Information Services (RIS) on inland waterways in the European Community.
(Source: unknown)

<u>RIS Guidelines</u> are Guidelines and recommendations for River Information Services established and kept current by a Working Group of PIANC.
(Source: PIANC)

<u>RIS index</u> is a methodology to encode geographical entities for the purpose of unique identification of such entities in the electronic exchange of information.
(Source: AdL)

River Information Services (RIS) means the harmonised information services to support traffic and transport management in inland navigation, including, wherever technically feasible, interfaces with other transport modes, RIS do not deal with internal commercial activities between one or more of the involved companies, but are open for interfacing with commercial activities.
(Source: RIS-directive 2005/44/EC)

RIS key technology means a technology that holds a central position in the services to be provided in the RIS arena. The RIS key technologies are Inland ECDIS, Electronic Reporting, Inland AIS and Notice to Skippers.
(Source: IRIS-Europe II)

RIS operator is a person performing one or more tasks contributing to the services of RIS.
(Source: Standard Tracking and Tracing EU/415/2007)

RIS provider is the organisation or organisational unit assigned to operate the RIS-System and to provide RIS-Services.
(Source: IRIS-Europe II)

RIS system For the purpose of RIS, modern River Information Services systems consist of one or more harmonised IT systems. An IT system (Information Technology system) is the totality of human resources, hardware, software, communication means and regulations in order to fulfil the task of processing information.
(Source: RIS-Guidelines 2007/414/EC)

RIS users are the users of the services can be described in a number of different groups: skippers, RIS operators, lock/bridge operators, waterway authorities, terminal operators, operators in calamity centres, fleet managers, cargo shipper's consignors, consignees, freight brokers, and supply forwarders.
(Source: RIS-Guidelines 2007/414/EC)

5.2. RIS functions

5.2.1. Fairway Information Services

Fairway Information (FI) contains geographical, hydrological, and administrative information regarding the waterway(fairway) in the RIS area that is required by the RIS users to plan, execute and monitor a voyage. Fairway information is one-way information: shore to ship or shore to office (users' office).
(Source: RIS-Guidelines 2007/414/EC)

Fairway Information Services (FIS) means geographical, hydrological, and administrative information regarding the waterway (fairway). Fairway Information is one-way information: shore to ship or shore to office.
(Source: RIS-directive 2005/44/EC)

5.2.2. Strategic Traffic Information

Strategic Traffic Information means the information affecting the medium and long-term decisions of RIS users.
(Source: RIS-directive 2005/44/EC)

5.2.3. Tactical Traffic Information

Tactical Traffic InformationTTI) means the information affecting immediate navigation decisions in the actual traffic situation and the close geographic surroundings.
(Source: RIS-directive 2005/44/EC)

Tactical Level is a Level involving actual features of the navigation of a vessel. (short time period.
[Source: COST 301]

5.2.4.   **Calamity Abatement Support**

Accident is an unintended event resulting either in fatality, injury, ship loss or damage, property loss or damage, or environmental damage.
(Source: IALA VTS Manual 2008)

Accident and Incident Investigation Body is an independent body or entity responsible for investigations on the causes and possible consequences of accidents and incidents within inland navigation with the purpose of elaborating recommendations for the prevention of similar accidents and incidents in the future. Next to the elaboration of investigation reports the creation of anonymous accident and incident statistics might be the task of this body or entity.
Source: IRIS-Europe II)

Calamity can be defined as an unexpected situation in which a serious threat for general safety, in which life and health of people, the environment (water) infrastructure or large material objects are seriously threatened.
(Source: IRIS Europe I)

Calamity Abatement Support means the supporting actions necessary to limit the consequences of a calamity.
(Source: unknown)

Collision between ships is the contact of two or more vessels underway, drifting, under towage, i.e. the vessel not being immobilised.
(Source: IRIS Europe I)

Fire Brigade are the Rescue and Emergency Services Providers, responsible for the search and rescue and emergency services (deals with a calamity and takes care of the people, animals, cargo and vessel, involved).
(Source: IRIS-Europe II)

Incident means an occurrence or event being caused by, or in connection with, the operations of a ship, by which the ship or any person is imperilled, or as a result of which serious damage to the ship or structure or the environment might be caused.
(Source: IMO Res.A.849 (20))

Operator in Calamity Centres of Emergency Services is the person who monitors, controls and organises the safe and smooth fighting of accidents, incidents and calamities.
(Source: Standard Tracking and Tracing EU/415/2007)

Rescue Unit is a unit composed of trained personnel and provided with equipment suitable for the expeditious conduct of search and rescue operations.
(Source: Sar.2/Circ 5)

Rescue and Emergency Services Providers is the organisation responsible for the search and rescue and emergency services. (deals with a calamity and takes care of the people, animals, cargo and vessel, involved)
(Source: COMPRIS)

5.2.5.   **Logistics**

Agent means any person mandated or authorised to act for or to supply information on behalf of the operator of the vessel.
(Source: Standard for electronic ship reporting EU/164/2010)

Cargo Declaration (synonym: Freight declaration), applied to the documents providing the particulars required by the Customs concerning the cargo (freight) carried by commercial means of transport.
(Source: World Customs Organisation)

Cargo Manifest a listing of the goods comprising the cargo (freight) carried in a means of transport, or in a transport-unit. The Cargo manifest which gives the commercial particulars of the goods, such as transport document numbers, consignors consignees, marks and numbers, number and kind of packages, descriptions and quantities of the goods, may be used in place of the Cargo Declaration.
(Source: World Customs Organisation)

Cargo Owner is the legal owner of the goods as mentioned in the transport document. The party indicated as such has the right of control and is the only party entitled to give the carrier instructions in relation to the contract of carriage.
(Source: CMI Uniform rules for Bills of Lading)

 (synonym: Consignor, Shipperand Sender)

Carrier is the person actually transporting or in charge of or responsible for the operation of the means of transport.
(Source: World Customs Organisation)

Clearance of goods is the accomplishment of the Custom formalities necessary to allow goods to be exported, to enter home use to be replaced under another Customs procedure.
(Source: World Customs Organisation)

Consignment (synonym: Shipment) is a separate identifiable number of goods (available to be) transported from one consignor to one consignee via one or more than one modes of transport, and specified in one single transport document.
(Source: Marnis)

Consignee is the party such as mentioned in the transport document by whom goods, cargo or containers are to be received.
(Sources: Standard Tracking and Tracing EU/415/2007
        Standard for electronic ship reporting EU/164/2010
        IRIS-Europe II)

Consignor (synonym: Cargo Shipper, Shipper and Sender) is the merchant (person) by whom, in whose name or on whose behalf a contract of carriage of goods has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage.
(Sources: Standard Tracking and Tracing EU/415/2007
        IRIS-Europe II)

Customs is the Government Service which is responsible for the administration of Customs law and the collection of import and export duties and taxes and which also has responsibility for the application of other laws and regulations relating, inter alia, to the importation, transit and exportation of goods.
(Source: World Customs Organisation)

Customs Declaration means any statement or action, in any form prescribed or accepted by the Customs, giving information or particulars required by the Customs.
(Source: World Customs Organisation)

Facilitation is the implementation of measures leading to the simplification, standardization and harmonization of the formalities, procedures, documents and operations inherent to international trade transactions.
(Source: Marnis)

Fleet manager is the person planning and observing the actual (navigational) status of a number of vessels, moving or working under one command or ownership.
(Sources: Standard Tracking and Tracing EU/415/2007
        COMPRIS WP 4
        IRIS-Europe II)

Forwarder (synonym: Freight broker and Freight forwarder) is the party arranging the carriage of goods including connecting services and/or associated formalities on behalf of shipper and consignee.
(Source: Standard for electronic ship reporting EU/164/2010)

Forwarding Agent is the representative of a forwarder.
(Source: COMPRIS WP5/logistics)

Freight broker (synonym: Forwarder and Freight forwarder) is the person responsible on behalf of the transport supplier for the physical transport of the goods to be executed. The freight broker offers transport capacity to shippers on behalf of the transport supplier and is this way mediator between supply forwarder and shipmaster.
(Source: Standard Tracking and Tracing EU/415/2007)

Freight forwarder (synonym: Forwarder and Freight broker)

Logistics is the planning, execution and control of the movement and placement of people and/or goods and the supporting activities related to such movement and placement within a system organised to achieve specific objectives.
(Sources: Standard Tracking and Tracing EU/415/2007
*   Standard for electronic ship reporting EU/164/2010)*

Manifest means a document listing the specifications of goods including equipment loaded in a means of transport. A manifest often represents an accumulation of Bills of Lading for official and administrative purposes.
(Source: Standard for electronic ship reporting EU/164/2010)

Means of transport represents the type of vehicle used for the transport of goods such as barge, truck, vessel, or train.
(Source: Standard for electronic ship reporting EU/164/2010)

Mode of Transport means the method of transport (such as air, road, sea, rail, inland river) used for the carriage of goods, persons or any other subjects.
(Source: Marnis)

Multimodal transport means the carriage of goods (containers) by at least two different modes of transport.
(Source: Standard for electronic ship reporting EU/164/2010)

Place of acceptance (synonym: Place of receipt)

Place of delivery is the location where a consignment (shipment) is delivered to the consignee viz. the place where the carrier's liability ends for the transport venture.
(Source: unknown)

Place of receipt synonym: Place of acceptance) is the location where a consignment (shipment) is received by the carrier from the shipper viz. the place where the carrier's liability transport venture commences.
(Source: unknown)

Sender (synonym: Cargo shipper, Shipper and Consignor)

Shipment (synonym: Consignment)

Shipping Agent is a person or organisation authorised to act for or on behalf of another person or organisation, such as forwarding agent, the Customs agent and the carrier agent.
(Source: IRIS-Europe II)

Shipper (synonym: Cargo shipper, Consignorand Sender) The merchant (person) by whom, in whose name or on whose behalf a contract of carriage has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the carrier in relation to the contract of carriage.
(Source: P&O Nedlloyd A-Z of shipping terms)

Stevedore (synonym: Terminal Operator) means a party running a business of which the functions are loading, stowing and discharging of the cargo of a ship.
(Source: P&O Nedlloyd A-Z shipping terms)

Supply Forwarder is the person who is responsible on behalf of the shipper for the organisation of the physical transport of the goods that shall be exchanged. The supply forwarder offers cargo to transporters on behalf of the shipper.
(Sources: Standard Tracking and Tracing EU/415/2007
        IRIS-Europe II)

Terminal covers that area on shore that provides buildings and constructions for the transfer of cargos from and to ships
(Source: Encoding Guide for Inland ENCs)"

Terminal operator (synonym: Stevedore) is a party responsible for the execution of loading, stowing and discharging (unloading) of vessels.
(Source: Standard Tracking and Tracing EU/415/2007)

Transport notification is the announcement of an intended voyage of a ship to a Competent Authority.
(Source: CCNR Standard for Electronic Ship Reporting)

5.2.6. Law enforcement

Law enforcement agency for Cargo Inspection performs cargo inspection (customs, veterinary, phytosanitary) and detects and fines / summons violations.
(Source: IRIS-Europe II)

Law enforcement agency for Immigration Control performs immigration control and detects and fines / summons violations.
(Source: IRIS-Europe II)

Law enforcement agency for traffic rules detects and fines / summons violations of traffic rules.
(Source: IRIS-Europe II)

5.2.7. Statistics

Agency in charge of collecting statistical data collects, processes and distributes statistical data.
(Source: IRIS-Europe II)

Statistics is the science of making effective use of data relating to cargo, goods, means and modes of transport, and groups of individuals. It deals with all aspects of this, including not only the collection, analysis and interpretation of such data, but also the planning of the collection of data, in terms of the design of surveys and as the fundament for rules and regulations.
Source: AdL after Wikipedia)

5.2.8. Waterway charges and harbour dues

6. <u>Inland VTS</u>

In this chapter al Inland VTS related definitions are brought together. In the first paragraph the general definitions for Inland VTS are presented. In the second paragraph following the Inland VTS services are presented.

6.1. <u>General Inland VTS definitions</u>

<u>Advice VTS-VHF</u> message marker, indicating that the following message implies the intention of the sender to influence others by recommendation. The decision to follow stays with the recipient.
(Source: IALA Inland VTS guidelines)

<u>Competent Authority (VTS)</u> is the authority made responsible, in whole or in part, by the government for safety, including environmental safety, and efficiency of vessel traffic and the protection of the environment
(Sources: IMO A.857 (20)
*   IALA VTS Manual 2008*
*   Inland VTS Guidelines CCNR version 1.0 31/05/2006)*

<u>Guidelines for Vessel Traffic Services</u> are Guidelines and recommendations for
River Information Services established and kept current by a Working Group of IALA.
(Source: IALA)

<u>Inland Vessel Traffic Services (Inland VTS)</u> are a service, implemented by a Competent Authority, designed to improve the safety and efficiency of vessel traffic and to protect the environment The service should have the capability to interact with the traffic and to respond to traffic situations developing in the VTS area.
(Source: RIS-Guidelines 2007/414/EC)

<u>Instruction</u> mans in a VTS context a message given to a vessel with the purpose to achieve a result in the traffic flow.
(Source: unknown)

<u>Navigational Information</u> is information provided to the skipper on-board to support in on-board decision making.
(Source: IALA VTS Guidelines)

<u>Navigational support</u> is support given by pilots on-board or in special circumstances on shore (LOA - pilotage from shore) to prevent the development of dangerous vessel, traffic situations.
(Source: IALA VTS Guidelines)

<u>Sailing Plan</u> is a Report to be sent before departure from a port within a system or when entering the area covered by a system normally including ETA or ETD, maybe amplified at request of a VTS.
(Source: IMO A.857 (20))

<u>Traffic image</u> is the surface image of vessels, and their movements in an area (fairway situation, traffic situation), resulting from data collection.
(Source: unknown)

<u>Traffic Information</u> is in VTS context information provided by an authorized person to one or more vessels, about a shipping route or a part thereof or about the shipping traffic or individual vessels.
(Source: INDRIS)

<u>Traffic Instruction</u> is an order issued by an authorized person to one or more vessels, intended to achieve a specific result.
(Source: unknown)

Vessel Traffic Services (VTS) is a service implemented by a Competent Authority, designed to improve the safety efficiency of vessel traffic and to protect the environment. The service should have the capability to interact with the traffic and to respond to traffic situations developing in the VTS area.
(Sources: IALA VTS Manual 2008
IMO A.857 (20)
Inland VTS Guidelines CCNR version 1.0 31/05/2006
Standard for electronic ship reporting EU/164/2010
Standard Tracking and Tracing EU/415/2007)

VTS-area is the delineated, formally declared service area of a VTS. A VTS area may be subdivided in sub-areas or sectors.
(Sources: IALA VTS Manual 2008
IMO A.857 (20)
Inland VTS Guidelines CCNR version 1.0 31/05/2006
RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007
Standard for electronic ship reporting EU/164/2010)

VTS Authority is the authority with the responsibility for the management, operation and co ordination of the VTS, the interaction with participating vessels, and efficiency of the vessel traffic and the protection of the environment.
(Source: IALA VTS Manual, 2008)

VTS Centre is centre from which the VTS is operated. Each subarea of the VTS may have its own sub-centre.
(Sources: IMO.A.857 (20)
IALA VTS Manual, 2008
Inland VTS Guidelines CCNR version 1.0 31/05/2006
RIS-Guidelines 2007/414/EC)

VTS Communication is the link between VTS and VTS users, can be verbal or non-verbal.
(Source: unknown)

VTS Functions are fundamental VTS functions to be performed: data collection, data evaluation, data dissemination.
(Source: IMO.A.857 (20))

VTS Operator is an appropriately qualified person carrying out VTS operations on behalf of a VTS Authority.
(Source: IALA VTS Manual 2008)

VTS Operator position is a position in a specific VTS from which the VTS Operator carries out the VTS functions as defined for the purposes of the Guidelines for Vessel Traffic Services.
(Source: IMO A.857 (20))

VTS sailing plan is a plan which is mutually agreed between a VTS Authority and the master of a vessel concerning the movement of the vessel in a VTS area.
(Sources: IMO A.857 (20)
Inland VTS Guidelines CCNR version 1.0 31/05/2006
IALA VTS Manual 2008)

VTS sector; a VTS area can be divided into sectors, a VTS sector is a part of the VTS area supervised by one VTS operator.
(Source: unknown)

VTS traffic image is the surface picture of vessels and their movements in a VTS area.
(Sources: IMO A.857 (20)
IALA VTS Manual 2008
Inland VTS Guidelines CCNR version 1.0 31/05/2006)

VTS users are vessels using the VTS and other users (allied services, emergency services adjacent VTS, other related organizations)
(Source: unknown)

6.2. <u>Inland VTS Services</u>

Allied Services are services actively involved in the safe and efficient passage of a vessel through a VTS area
(Sources: IMO 857(20)
IALA VTS Manual 2008
Inland VTS Guidelines CCNR version 1.0 31/05/2006)

Information Service is a service to ensure that essential information becomes available in time for on-board navigational decision making
(Source: IMO 857(20)
IALA VTS Manual 2008
Inland VTS Guidelines CCNR version 1.0 31/05/2006
RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007)

Inland VTS Services are services, implemented by a Competent Authority, designed to improve the safety efficiency of vessel, traffic and to protect the environment. The service should have the capability to interact with the traffic and to respond to traffic situations developing in the VTS area.
(Source: RIS-Guidelines 2007/414/EC)

Navigational assistance service (VTS) is a service to assist on-board navigational decision making and to monitor its effects.
(Source: IMO A. 857(20)
IALA VTS Manual 2008
Inland VTS Guidelines CCNR version 1.0 31/05/2006
RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007)

Traffic organisation service (VTS) is a service to prevent the development of dangerous maritime traffic situations and to provide the safe and efficient movement of vessels, traffic within the VTS area.
(Source: IMO.A. 857(20)
IALA VTS Manual 2008)

VTS Services a VTS shall comprise at least an information service and may also include others, such as a navigational assistance service or a traffic organisation service, or both.
(Sources: IMO.A. 857(20)
IALA VTS Manual 2008
Inland VTS Guidelines CCNR version 1.0 31/05/2006
Standard Tracking and Tracing EU/415/2007)

7. **Tracking and Tracing**

Tracking and Tracing is one of the four RIS Key technologies and all T&T related definitions are brought together in this chapter.

Automatic Identification System (AIS) is an automatic communication and identification system intended to improve the safety of navigation by assisting in the efficient operation of vessel traffic services (VTS), ship reporting, ship to ship and ship-to-shore operations.
(Sources: IMO Performance Standards for AIS,
CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Inland AIS is AIS for the use in inland navigation and interoperable with (maritime) AIS-technically enabled by amendments and extensions to the (maritime) AIS.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Track and Trace is the process of monitoring and recording the past and present whereabouts of a ship shipment, as it passes through different handlers on its way to its destination, through a network. Tracing refers to where the product has been, while tracking refers to where it is going next.
(Source: international Authentication Association)

Tracing is the action of retrieving information concerning the whereabouts of cargo, cargo items, consignments or equipment.
(Sources: Standard for electronic ship reporting EU/164/2010
P&O Nedlloyd A-Z of shipping terms)

Track is the path followed or to be followed between one position and another
(Source: MSC74/Add1/Annex 22)

Tracking is the function of maintaining status information, including current location, of cargo, cargo items, consignments or containers either full or empty.
(Sources: Standard for electronic ship reporting EU/164/2010
P&O Nedlloyd A-Z of shipping terms)

Vessel tracing means the retrieving of information concerning the whereabouts of the vessel and - if needed - information on cargo, consignments and equipment.
(Sources: RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007)

Vessel tracking means the function of maintaining status information of the vessel, such as the current position and characteristics, and - if needed - combined with information on cargo and consignments.
(Sourcse: RIS-Guidelines 2007/414/EC
Standard Tracking and Tracing EU/415/2007)

8. <u>Inland ECDIS</u>

Inland Ecdis is one of the four RIS Key technologies and all T&T related definitions are brought together in this chapter.

<u>Acronym</u> is a character code of the feature/of the attribute.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>All information density (all display)</u> means the maximum amount of SENC information. Here, in addition to the standard display, also all other objects are displayed, individually on demand.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Attribute</u> is a defined characteristic of an entity (e.g. the category of a light, the sector limits, the light characteristics etc.).
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Attributes copied</u> are S-57 attributes (with their complete list of attribute values) which were extended according to the requirements of Inland ECDIS. All new attributes have the same name like their source: but written in small case letters.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Attribute value</u> (synonym: Enumeration)

<u>Cartographic object</u> is needed to satisfy certain presentation requirements mostly associated with a real world object. The attributes of a cartographic object (if any) provide additional drawing instructions. Examples: anchorage symbol associated with an anchorage area; textual annotations.
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

<u>Cell (chart cell)</u> a cell is a geographical area containing Inland ENC data.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>CIE colour calibration</u> is a procedure to confirm that the colour specified in IHO S-52 is correctly reproduced on the ECDIS display.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Collection feature (synonym: Collection object)</u> is a type of feature containing information about the relationships between other features.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Collection object</u> (synonym: Collection feature)

<u>Compilation scale</u> is the scale with which the chart information meets the IHO requirements for chart accuracy. It is established by the producing Hydrographic Office and encoded in the ENC
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Datum</u> is a set of parameters specifying the reference surface or the reference coordinate system used for geodetic control in the calculation of coordinates of points on the earth. Commonly datum's are defined as horizontal and vertical datum's separately. For the practical use of the datum it is necessary to have one or more well distinctive points with coordinates given in that datum.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

<u>Datum, horizontal</u> is a set of parameters specifying the reference for horizontal geodetic control, commonly the dimensions and the location of a reference ellipsoid. (The horizontal datum must be WGS 84.)
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Datum, vertical is a surface to which elevations and/or depths (soundings and tide heights) are referred. For elevations commonly a level (equipotential) surface, approximately the mean sea level is used, for depths in many cases low water.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Display base is the Minimum information density; that means the minimum amount of SENC information that is presented and which cannot be reduced by the Operator, consisting of information that is required at all times in all geographic areas and under all circumstances.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Display scale is the ratio between a distance on the display and a distance on the ground, normalized and expressed as a ratio, e.g. 1:10 000.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Edge is a one-dimensional spatial object, located by two or more coordinate pairs (or two connected nodes) and optional interpolation parameters.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Electronic Chart is a very broad term to describe the data, the software, and the electronic system, capable of displaying chart information. An electronic chart may or may not be equivalent to the paper chart required by SOLAS.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Electronic Chart Display and Information System (ECDIS) is a navigation information system which can be accepted as complying with the up-to-date chart required by regulation V/20 of the 1974 SOLAS Convention, by displaying selected information from a System Electronic Navigational Chart (SENC) with positional information from navigation sensors to assist the mariner in route planning and route monitoring, and if required display additional navigation-related information. The performance requirements for ECDIS are defined in the Performance Standard for ECDIS developed by IMO/IHO HGE (Harmonized Group on ECDIS)
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Electronic Navigational Chart (ENC) is the data base, standardized as to content; structure and format, issued for use with ECDIS on the Authority of Government authorized Hydrographic Offices. The ENC contains all the chart information necessary for safe navigation and may contain supplementary information in addition to that contained in the paper chart (e.g. sailing directions) which may be considered necessary for safe navigation.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

ENC cell is the geographic division of ENC data for distributing purposes.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Enumeration (synonym: Attribute value) means a specific quality of quantity assigned to attribute. (e.g. leading lights, the limited angels, the code specifying the light colour attribute)
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Exchange format is a specification for the structure and organization of data to facilitate exchange between computer systems.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Exchange set is a set of files representing a complete, single purpose (i.e. product specific) data transfer. For example, the ENC product specification defines an exchange set which contains one catalogue file and at least one data set file.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Face is a two dimensional spatial object. A face is a continuous area defined by a loop of one or more edges which bound it.
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

Feature is an identifiable set of information. A feature may have attributes and may be related to other features. A digital representation of all or a part of an entity by its characteristics (attributes), its geometry, and (optionally) its relationships to other features (e.g., the digital description of a light sector specifying, amongst others, sector limits, the colour of the light, the visibility range, etc., and a link to a light tower, if any).
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Feature catalogue is the comprehensive list of currently identified features, attributes and enumerations which are allowed for the use in Inland ENC.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Features copied are S-57 features (with their complete set of attributes) which were extended according to the requirements of Inland ECDIS. All new features have the same name like their source: but are written in small case letters.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Feature Data Dictionary is a feature data dictionary specifies independent sets of features and attributes that may be used to describe geographic information in a particular context. A feature data dictionary may be used to develop a feature catalogue.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

File (Inland ECDIS) is an identified set of S-57 records collected together for a specific purpose. The file content and structure must be defined by a product specification.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Geo Feature is a type of feature containing the descriptive characteristics of a real world entity.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Geometric Primitive is one of three basic geometric units of representation: point, line and area.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Head-up display is the information shown on the display (radar or ECDIS) is directed so that the vessel's heading is always pointing upward. This orientation corresponds to the visual view from the bridge in direction of the ship's heading. This orientation may require frequent rotations of the display contents. Changing the ship's course, or yawing of the vessel may render this unstabilised orientation mode unreadable.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

HO information is the information content of the SENC originated by Hydrographic Offices. It consists of the ENC content and updates to it.
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

IHO registry is a "registry" is the entire information system (or location) in which a collection of registers is located. In the case of S-100 IHO hosts a registry that provides a facility to store various registers of hydrographic related information. This will include feature concept dictionary, portrayal, metadata, product specification and data producer code registers. In the feature concept dictionary register there will be domains for Hydrographic Information, Dynamic Ice Coverage, Additional Military Layers (AMLs), and Inland ENC. For each domain there is an organization that will be responsible for its content and management.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

IHO-S-52; Specifications for chart content and display aspects of ECDIS.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

IHO-S-57; IHO Transfer standard for digital hydrographic data.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

IHO-S-62; ENC Producer codes
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Information Mode means the use of the Inland ECDIS for information purposes only without overlaid radar image.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Inland Electronic Chart Display and Information System (Inland ECDIS) is an Electronic Chart Display and Information System (ECDIS) for inland navigation, displaying selected information from an Inland System Electronic Navigational Chart (Inland SENC) and, optionally, information from other navigation sensors.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Inland Electronic Navigational Chart (Inland ENC) means the database, standardized as to content, structure and format, for use with inland electronic chart display and/ or information systems operated onboard of vessels, transiting inland waterways. An Inland ENC is issued by or on the authority of a competent government agency, and conforms to standards [initially] developed by the International Hydrographic Organization (IHO) and [refined by] the Inland ENC Harmonization Group. An Inland ENC contains all the chart information necessary for safe navigation on inland waterways and may contain supplementary information in addition to that contained in the paper chart (e.g. sailing directions, machine-readable operating schedules, etc) which may be considered necessary for safe navigation and voyage planning."
(Source: the Inland ENC Harmonization Group).

Inland ENC domain is a domain within the registry of IHO dedicated for Inland ENC – related entries.
(Source IHO)

Inland System Electronic Navigation Chart (Inland SENC) is a database, resulting from the transformation of the Inland ENC by Inland ECDIS, for appropriate use, updates to the ENC by appropriate means and other data added by the skipper. It is this database that is actually accessed by the inland ECDIS for the display generation and other navigational functions. The inland SENC may also contain information from other sources.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

International Chart 1 (INT 1) is a specification of symbols, abbreviations and terms to be used in the International Chart Series of IHO. (Provides the chart user with a key to symbols, abbreviations and terms used on charts compiled in accordance with the "Chart Specifications of the IHO"). Contains description entries for features and attributes. Can be seen as the reference to the legend of paper charts.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Integrated Display means a head-up, relative-motion picture consisting of the SENC overlaid with the radar-image with matching scale, offset and orientation.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Look-up table is a table giving symbology instructions to link SENC objects to point, line or area symbolization and providing display priority, radar priority, IMO category and optional viewing group.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Meta feature is a feature which contains information about other features.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Minimum Information Density (display base) means the minimum amount of SENC information that is presented and which cannot be reduced by the operator, consisting of information that is required at all times in all geographic areas and under all circumstances.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Navigation Mode means the use of the Inland ECDIS for conning the vessel with overlaid radar image.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

North-up display means Information shown on the display (radar or ECDIS) with the north direction upward.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Object is a digital representation of all or a part of an entity by its characteristics (attributes), its geometry, and (optionally) its relationships to other features (e.g., the digital description of a light sector specifying, amongst others, sector limits, the colour of the light, the visibility range, etc., and a link to a light tower, if any).
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

Object catalogue is the comprehensive list of currently identified object classes (including cartographic objects and composite objects), their appropriate attributes and the full range of allowable attribute values. It can be compared to the International Chart 1 (INT 1) as the legend of the paper chart, a collection of allowed hydrographic object classes
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

Object class is a defined group of entities to be considered equivalent to each other, e.g. the light-vessels.
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

Object class copied are S-57 object classes (with their complete set of attributes) which were extended according to the requirements of Inland ECDIS. All new object classes have the same name like their source, but are written in small case letters.
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

Other Navigational Information is navigational information not contained in the SENC that may be displayed by an ECDIS, such as radar information
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Over scale means displaying data at a larger scale than it was compiled for.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Own ship is the term which identifies the vessel upon which an ECDIS is operating
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006)

Own ship's safety is the contour related to the own ship by the mariner from the contours provided for in the SENC, to be used by ECDIS to distinguish on the display between the safe and the unsafe water, and for generating anti-grounding alarms.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Performance standard for ECDIS is the Performance Standard developed under the Authority of IMO to describe the minimum performance requirements for navigational devices and other fittings required by the SOLAS Convention.
(Source: Annex to IMO A.817 (19))

Pick report (feature report) is the result of querying a displayed point-symbol, line or area for further information from the database which is not represented by the symbol
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Presentation library for ECDIS is a set of mostly digital specifications, composed of symbol libraries, colour schemes, look-up tables and rules, linking every feature and attribute of the SENC to the appropriate presentation of the ECDIS display. Published by IHO as Appendix 2 of its Special Publication No. 52 (S-52).
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Product specification is a defined subset of the entire specification combined with rules, tailored to the intended usage of the transfer data. (The ENC Product specification specifies the content, structure and other mandatory aspects of an ENC.)
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

(Radar) range is the distance from the radar antenna. For inland navigation the radar range has to be sequential switchable according to the CCNR Radar Regulations.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Relative motion display shows the chart information, and radar targets, moving relatively to the vessels position fixed on the screen.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Route planning an ECDIS function in which the area is displayed which is needed to study the intended route, to select the intended track, and to mark the track, its way points and navigational notes.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Route Monitoring is the operational navigational ECDIS function in which the chart information is displayed, under control of the positioning sensor input, according to the vessels present position (either in true motion or relative motion mode).
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

SCAMIN is the minimum scale at which a feature may be used for ECDIS presentation.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

System Electronic Navigational Chart (SENC) is a database resulting from the transformation of the ENC by ECDIS for appropriate use, updates to the ENC by appropriate means and other data added by the mariner. It is this data base that is actually accessed by the ECDIS for the display generation and other navigational functions. The SENC may also contain information from other sources.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Spatial Object is an object which contains locational information about real world entities
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Standard information density (Standard display) means the default amount of SENC information that shall be visible when the chart is first displayed on ECDIS.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

True motion display is a display in which the own vessel, and each radar target moves with its own true motion, while the position of all charted information remains fixed.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

User-defined setting means the possibility to use and store a profile of display and operation controls-settings.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Vector means spatial information whose data model is based on graph theory
(Source: CCNR Inland ECDIS Standard; Edition 1.02/16/10/2003))

WGS 84 WORLD GEODETIC SYSTEM is the geodetic basis for the „Navigational Satellite Timing and Ranging - Global Positioning System"(NAVSTAR-GPS), which enables the surveying of the earth and its entities and was developed by the United States Department of Defence. This global geodetic reference system is recommended by IHO for hydrographic and cartographic use.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

9. <u>Notice to Skippers</u>

Notice to Skippers is one of the four RIS Key technologies and all Notice to Skippers related definitions are brought together in this chapter. However at the moment there is only one.

<u>Notices to Skippers</u> are information messages that can be sent by or on behalf of a Competent Authority to (inland) ships relating to situations or events that may impact the navigation situation on a fairway
(Source: unknown)

10. **Electronic reporting**

Electronic Reporting is one of the four RIS Key technologies and all Electronic Reporting related definitions are brought together in this chapter.

Asynchronous message means a message that can be delivered by the sender without explicitly having to wait for the processing of the message by the receiver. The receiver decides when to process the message.
(Source: Standard for electronic ship reporting EU/164/2010)

Competent Authority means the authorities and organisations authorised by the governments to receive and pass on information reported pursuant to this standard.[7]
(Source: Standard for electronic ship reporting EU/164/2010)

Data element means a unit of data which in certain context, is considered indivisible and for which the identification, description and value representation has been specified.
(Source: Standard Electronic Reporting CCR version 1.2 2006)

EDI number means the electronic address of the sender or receiver of a message (e.g. the sender and receiver of the cargo). This may be an E-mail address, an agreed identifier or e.g. a number of the European Article Numbering Association (EAN number).
(Source: Standard for electronic ship reporting EU/164/2010)

EDIFACT is a guideline for the definition of electronic messages regarding EDI and scenarios of transactions between two parties.
(Source: MarNIS)

Electronic Data Interchange (EDI) means the transfer of structured data by agreed standards from applications on the computer of one party to applications on the computer of another party by electronic means.
(Source: Standard for electronic ship reporting EU/164/2010)

Electronic Port Clearance is a Single Window solution for vessels visiting a port dealing with the administrative procedures enforced by international, national and / or local authorities. Electronic Port Clearance replaces the paper forms currently in use making the exchange of information more efficient and in accordance with the requirements.
(Source: Marnis)

Electronic Reporting International (ERI) means the endeavour to harmonise and facilitate standardised electronic inland ship reporting in Europe, as recommended by the ERI Group in accordance with the publication of the RIS directive (2005/44/EC) and its technical specifications.
(Source: EU-expert group Electronic Reporting)

Implementation Guidelines is a manual describing in detail how a certain standard message will be implemented and which segments, data elements, codes and references will be used and how.
(Source: Standard for electronic ship reporting EU/164/2010)

Locode (synonym: UN-Locode, United Nations Code for Trade and Transport locations, UN Code for ports)

Message code is a unique six character alphabetic reference identifying a message type.
(Source: Standard for electronic ship reporting EU/164/2010)

Reference number serves to refer to or mention a relation or where applicable a restriction.
(Source: Standard for electronic ship reporting EU/164/2010)

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[7] Standard for electronic ship reporting EU/164/2010

Segment (EDI) is a predefined and identified set of functionally related data elements values which are identified by their sequential positions within the set. A segment starts with a segment tag and ends with a segment terminator. It can be a service segment or a user data segment.
(Source: Standard for electronic ship reporting EU/164/2010)

Segment code is a code which uniquely identifies each segment as specified in a segment directory.
(Source: Standard for electronic ship reporting EU/164/2010)

Ship reporting system, is a system according to IMO Res. A. 648(16) where ships make mandatory or voluntary reports
(Source: IMO A. 648(16))

Single Window is an across border, 'intelligent', facility that allows parties involved in trade and transport to lodge standardized information, mainly electronic, with a single entry point to fulfil all import, export and transit related regulatory requirements.
(Source: WCO)

United Nations Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) is a user application protocol, for use within user application systems for data to be interchanged, compatible with the OSI model.
(Source: UNTDID 1990)

UN/EDIFACT are the UN rules for Electronic Data Interchange for Administration Commerce and Transport. They comprise a set of standards, directions and guidelines for the electronic interchange of structured data and in particular that related to trade in goods or services between independent computerised information systems. Recommended within the frame work of the UN, the rules are approved and published by the UN/ECE in the UN trade Data Interchange Directory (UNTDID) and are maintained under agreed procedures.
(Source: CCNR Standard Electronic Reporting version 1.2 19/10/2006)

UN Code for ports (synonym: United Nations Code for Trade and Transport locations, UN-Locode, Locode)

UN-Locode the United Nations Code for Trade and Transport locations(synonym: Locode, UN Code for ports) is the UN recommendation (Nr.16) for a five letter alphabetic code system which is used for purposes of international trade and transport to designate locations such as ports, airports, inland freight terminals and other locations proposed by user communities or governments. This recommendation and the code set it contains is used to indicate ports, places of delivery and acceptance, etc.
(Source: UNECE Recommendation 16)

11. <u>E-Navigation</u>

E-Navigation has already a strong relation with RIS and this relation will be strengthened in the time to come. Therefore there is added a chapter with E-navigation related definitions

<u>E-Navigation</u> is defined as "the harmonized collection, integration, exchange, presentation and analysis of marine information onboard and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment".
(Source: IMO-MSC-85 (A20&21))

<u>E-Maritime</u> represents a set of policies, strategies and capabilities facilitating online or electronic interactions between all different stakeholders involved in the development of an efficient and sustainable Waterborne transport system throughout Europe, fully integrated within the transport logistic chains.
(Source: EU- (COM92009) 8)

<u>E-Navigation Architecture:</u> means a well-structured description of all the entities involved in the E-Navigation concept. The entities to be taken into account by the E-Navigation architecture are users and their requirements, regulations, functions and processes, technical services and systems, interactions, information and data.
(Source: IALA Rec. E-NAV-140, 2009)

<u>E-Navigation concept</u>: a concept devised to provide a comprehensive, standardised ship-to-ship, ship-to-shore, shore-to-ship and shore-to-shore information exchange environment, including the appropriate data exchange and data processing features.
(Source: IALA Rec. E-NAV-140, 2009)

<u>Functional link</u> is the functional implementation of a communication link between two E-Navigation entities .
(Source: IALA Rec. E-NAV-140, 2009)

<u>Operational E-Navigation service </u>is an operational E-Navigation service, or operational service for short, is an activity or a combination of activities, provided by one or more stakeholders within the maritime domain for the benefit of maritime stakeholders to support their mission at all levels, which has been harmonized and brought into accordance with the goals of IMO's E-Navigation concept.[8] An operational service is characterized by providing information to users.
(Source: IALA Rec. E-NAV-140, 2009)

<u>Technical E-Navigation service</u> is a fundamental building block of the common shore-based system. For the technical E-Navigation service there is a generic, engineering model without reference to a specific physical implementation or a specific technology, which exploits the architectural commonalities of various technologies.
(Source: IALA Rec. E-NAV-140, 2009)

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[8] Note: This phrase was generalized using IALA's VTM concept; VTS29-output-8=eNAV6-8-21.

12. Vessel Traffic Management

Vessel Traffic Management has already a strong relation with RIS and this relation will be strengthened in the time to come. Therefore there is added a chapter with Vessel Traffic Management related definitions.

Competent Authority for Traffic Management is the authority who controls the access to the control area, monitors the movements of specific vessels and their cargo (target groups) in this control area and supports Rescue and Emergency Services Providers with detailed information in case of emergencies and calamities.
(Source: IRIS-Europe II)

Information Service in the context of a VTM is a service of VTS intended to ensure that essential information and/or advice is made available in time for on-board navigational decisionmaking.**Error! Bookmark not defined.** This information may include both general and traffic information.
(Source: unknown)

Vessel Traffic Management (VTM) is the functional framework of harmonized measures and services to enhance the safety, security, efficiency of shipping and the protection of the marine environment in all navigable waters".
(Source: IALA)

13. Other

13.1. Positioning systems

Coverage provided by a radio navigation system is that surface area or space volume in which the signals are adequate to permit the user to determine position to a specified level of performance.
(Source: IMO A915 (22))

Differential Global Navigation System (DGNSS) is a form of GPS in which the reliability and accuracy are enhanced by broadcasting a time varying correction message from a GPS monitoring receiver (differential mode) at a known position on shore. If available the corrections are fed automatically into the GPS receiver onboard and used to compute an improved position.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006))

Differential system means an augmentation system whereby radio navigation signals are monitored at a known position and the corrections so determined are transmitted to users in the coverage area
(Source: IMO A915 (22))

GALILEO is a satellite radio navigation system, an initiative launched by the European Union and the European Space Agency. GALILEO is based on a constellation of 30 satellites and ground stations providing information concerning the positioning of users in many sectors such as transport (vehicle location, route searching, speed control, guidance systems, etc.), social services (e.g. aid for the disabled or elderly), the justice system and customs services (location of suspects, border controls), public works (geographical information systems), search and rescue, or leisure (direction-finding at sea or in the mountains, etc.).
(Source: EEC)

Global Navigation Satellite System (GNSS)[9] is a satellite system that provides
worldwide position, velocity and time determination for multimodal use. It includes user
receivers, one or more satellite constellations, ground segments and a control organization with
facilities to monitor and control the worldwide conformity of the signals processed by the user
receivers to predetermined operational performance standards.
(Source: IMO Resolution A.915 (22))

Global navigation satellite service. Means the signal in space provided to the user by GNSS space and ground segments.
(Source: IMO A915 (22))

Global Navigation Satellite System Service (GNSS service) means the service relates to the properties of the signal in space provided by the space and ground segments of the GNSS.
(Source: IMO A915 (22))

Global Navigation Satellite System System (GNSS system) means the system relates to the properties of the GNSS service plus the receiver.
(Source: IMO A915 (22))

Global Navigation Satellite System (GLONASS) is a space-based, radio positioning, navigation and time-transfer system operated by the Government of the Russian Federation (in origin military).Completely deployed GLONASS constellation is composed of a constellation of 24 satellites in three orbital planes whose ascending nodes are 120 apart. Civil use is allowed. 10 m horizontal accuracy 99.7% of time
(Source: IMO Resolution A.915 (22))

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[9] Added new abbreviation and definition as GNSS is internationally accepted term and GPS, GLONASS, GALILEO, etc. are just different realizations of GNSS

Global Maritime Distress and Safety System. (GMDSS) a global communication service based upon automated systems, both satellite based and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners.
(Source: Admiralty List of Radio Signals)

Global Positioning System. (GPS) Global Positioning System (GPS). This is a space-based, radio positioning, navigation and time-transfer system operated by the United States Government. (In origin military) with a standard constellation of 24 satellitesCivil use is allowed.
(Sources: ESA,
    IMO Resolution A.915 (22))

Integrated navigation system is a system in which the information from two or more navigation aid s is combined in a symbiotic manner to provide an output that is superior to any one of the component aids.
(Source: IMO A915 (22))

Integrity means the ability to provide users with warnings within a specified time when the system should not be used for navigation.
(Source: IMO A915 (22))

Mobile Station is a station of the mobile service intended to be used while in motion or during halts at unspecified points.
(Source: ITU Radio regulations)

13.2. **Other-2**

European Navigation Identifier (ENI) is the Unique European Vessel Identification Number allocated by the administration consists of eight Arabic numerals and remains unchanged throughout the whole lifetime of the craft.
(Source: unknown)

IMO class is a Group of dangerous or hazardous cargo
(Source: MSC74/Add1/Annex 22)

The MARPOL Convention is the main international convention covering prevention of pollution of the marine environment marine environment by ships from operational or accidental causes. It is a combination of two treaties adopted in 1973 and 1978 respectively and updated by amendments through the years.
(Source: IMO MARPOL 73/78)

Maritime Mobile Service Identity (MMSI) series of nine digits which are transmitted over the radio path in order to uniquely identify ship, stations, coast stations and group calls.
(Source: ITU Radio Regulations)

Mean time between failures (MTBF). The average time between two successive failures of a system or part of a system.
(Source: IMO A915 (22))

Mean time to repair (MTR) the average time to repair a failure of a system or part of a system
(Source: unknown)

Simplification means the limiting of formalities, procedures, documents, information, and operations to the minimum essential requirements, steps, data and tasks acceptable by all parties concerned.
(Source: Marnis)

Standardization means the development of standards whose purpose is to align formalities, procedures, documents, information, and operations. At a national level, this would be alignment with acceptable commercial norms and practices, at an international level it would alignment with identified "best" and/or most accepted practices.
(Source: Marnis)

Unique Vessel Identification Number is the unique identification of each vesselwhich is recognized in an entire waterway network. Only one single Unique Vessel Identification Number can be assigned to one craft. The Unique Vessel Identification Number is issued only once and remains unchanged throughout the whole lifetime of the craft.
Source: Directive laying down technical requirements for inland waterway Vessels: 2008/87/EC)

Service Level Agreement (SLA) is a part of a service contract where the level of service is formally defined. [10].
(Source: Wikipedia)

Wireless Fidelity is an IEEE 802.11 type wireless network protocols and equipment. Note that Wi-Fi actually means that equipment has been certified according to certain technical standards which may exceed IEEE 802.11 in some cases.
(Source: WP22)

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[10] In practice, the term *SLA* is sometimes used to refer to the contracted delivery time (of the service) or performance

14. <u>Organisations</u>

Here one can find the organisations that play a role in the RIS arena.

<u>CCNR</u>:   **Central Commission for the Navigation on the Rhine** is the international commission based on the "Convention of Mannheim". Current Member States are Belgium, France, Germany, The Netherlands and Switzerland
(www.ccr-zkr.org)

<u>DC</u>:   The **Danube Commission** is an international intergovernmental organization, set up by the Convention regarding the regime of navigation on the Danube signed in Belgrade on 18 August 1948.The primary tasks of the Danube Commission activity are provision and development of free navigation on the Danube for the commercial vessels flying the flag of all states in accordance with interests and sovereign rights of the member-states of the Belgrade Convention, as well as strengthening and development of economical and cultural relations of the said states among themselves and with the other countries.
(www.danubecommission.org)

<u>DG MOVE</u>   **The Directorate-General for Mobility and Transport** is a Directorate-General of the European Commission responsible for transport within the European Union.

<u>ECE</u>:   **Economic Commission for Europe** of the United Nations. See UNECE

<u>ETSI</u>:   **The European Telecommunications Standards Institute** produces globally-applicable standards for Information and Communications Technologies (ICT), including fixed, mobile, radio, converged, broadcast and internet technologies.
(www.etsi.org)

<u>EU</u>:   The **European Union** is an economic and political union of 27 member states which are located primarily in Europe
(europa.eu)

<u>IALA</u>:   **International Association of Marine Aids to Navigation and Lighthouse Authorities** IALA is a not for profit making international technical association. Established in 1957, it gathers together marine aids to navigation authorities, manufacturers and consultants from all parts of the world and offers them the opportunity to compare their experiences and achievements. Taking into account the needs of mariners, developments in technology and the requirements and constraints of aids to navigation authorities, a number of technical committees have been established bringing together experts from around the World. The work of the committees is aimed at developing common standards through publication of IALA Recommendations and Guidelines.
(www.ialathree.org)

<u>IANA</u>:   **Internet Assigned Numbers Authority** is responsible for global coordination of the Internet Protocol addressing systems, as well as the Autonomous System Numbers used for routing Internet traffic.
(www.iana.org)

<u>IEC</u>:   **International Electro technical Commission** is an international (non-governmental) organization which produces world standards for electrical and electronically engineering with the objective of facilitating international trade.
(www.iec.ch)

IEEE: **Institute of Electrical and Electronics Engineers** is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities
(www.ieee.org)

IHO: **International Hydrographic Organization** coordinates the activities of national Hydrographic Offices; promotes standards and provides advice to developing countries in the fields of hydrographic surveying and production of nautical charts and publications.
(www.iho.int)

IMO: **International Maritime Organization**: Formerly called IMCO, the IMO is the specialized agency of the United Nations responsible for maritime safety, efficiency of navigation and prevention of marine pollution from ships.
(www.imo.org)

ISO: **International Standards Organization** is a non-governmental organization that forms a bridge between the public and private sectors. On the one hand, many of its member institutes are part of the governmental structure of their countries, or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations.
(www.iso.org)

ITU: **International Telecommunication Union** is the leading United Nations agency for information and communication technology issues, and the global focal point for governments and the private sector in developing networks and services., ITU has coordinated the shared global use of the radio spectrum, promoted international cooperation in assigning satellite orbits, worked to improve telecommunication infrastructure in the developing world, established the worldwide standards that foster seamless interconnection of a vast range of communications systems and addressed the global challenges of our times, such as mitigating climate change and strengthening cyber security
(www.iso.org)

PIANC   **Permanent International Commission for Navigation Congresses** is the global organisation providing guidance for sustainable waterborne transport infrastructure for ports and waterways. PIANC is the forum where professionals around the world join forces to provide expert advice on cost-effective, reliable and sustainable infrastructure to facilitate the growth of waterborne transport. Established in 1885, PIANC continues to be the leading partner for government and private sector in the design, development and maintenance of ports, waterways and coastal areas. As a non-political and non-profit organisation, PIANC brings together the best international experts on technical, economic and environmental issues pertaining to waterborne transport infrastructure.
(www.pianc.org)

UN: The **United Nations** is an international organization founded in 1945 after the Second World War by 51 countries committed to maintaining international peace and security, developing friendly relations among nations and promoting social progress, better living standards and human rights. Due to its unique international character, and the powers vested in its founding Charter, the Organization can take action on a wide range of issues, and provide a forum for its 192 Member States to express their views, through the General Assembly, the Security Council, the Economic and Social Council and other bodies and committees
(www.un.org)

UNECE: **The United Nations Economic Commission for Europe** is one of five regional commissions of the United Nations. Its major aim is to promote pan-European economic integration. To this end, it provides analysis, policy advice and assistance to governments; it gives focus to the United Nations global mandates in the economic field, in cooperation with other global players and key stakeholders, notably the business community. The UNECE also sets out norms, standards and conventions to facilitate international cooperation
(www.unece.org)

WCO: The **World Customs Organization** is the only intergovernmental organisation exclusively focused on Customs matters. With its worldwide membership, the WCO is now recognised as the voice of the global Customs community. It is particularly noted for its work in areas covering the development of global standards, the simplification and harmonisation of Customs procedures, trade supply chain security, the facilitation of international trade, the enhancement of Customs enforcement and compliance activities, anti-counterfeiting and piracy initiatives, public-private partnerships, integrity promotion, and sustainable global Customs capacity building programmes. The WCO also maintains the international Harmonized System goods nomenclature, and administers the technical aspects of the WTO Agreements on Customs Valuation and Rules of Origin.
(www.wcoomd.org)

15. Official accepted RIS documents

15.1. Introduction

The first step towards the development of RIS standards was undertaken by a European RIS Platform; a platform for participation of a large part of the European (EU and non-EU) national authorities to promote the standardised and harmonised implementation of RIS. The European RIS platform supported in the early 2000's the installation of RIS Expert Groups aiming at the standardisation and harmonisation of the RIS key technologies.

Since that period Expert Groups played a major role in the development of standards. The RIS Expert Groups are international technical platforms ensuring the harmonized development and maintenance of RIS standards. The RIS expert groups act as advisory bodies of institutions like the European Commission, the Central Commission for Navigation on the Rhine (CCNR), the Danube Commission (DC) and United Nations Economic Commission for Europe (UNECE) on RIS standardisation processes.

UNECE, European Union, CCNR and Danube Commission have accepted most of the available standards. In the following chapters an overview is given[11].A major contribution to the standardisation process has been the RIS Framework Directive accepted by the EU in 2005

15.2. The United Nations Economic Commission for Europe

Directive/Regulation	Resolution
Recommendation on electronic chart display and information system for inland navigation (Inland ECDIS)	Resolution No. 48 (ECE/TRANS/SC.3/156/Rev.1)
Guidelines and Recommendations for River Information Services	Resolution No. 57 (TRANS/SC.3/16)
Guidelines and Criteria for Vessel Traffic Services on Inland Waterways	Resolution No. 58 (TRANS/SC.3/166)
Annexes and Appendices International Standards for Notices to Skippers and for Electronic Ship Reporting in Inland Navigation	Resolution No. 60. ECE/TRANS/SC.3/175/Amend.1:
International Standards for Notices to Skippers and for Electronic Ship Reporting in Inland Navigation	Resolution No. 60 (ECE/TRANS/SC.3/175)

15.3. European Commission

Directive/Regulation	Entry into force	Deadline for transposition in the Member States
RIS Directive 2005/44/EC	20-10-2005	20-10-2007
RIS Guidelines 2007/414/EC	24-04-2007	24-10-2009
Tracking and tracing regulation 2007/415/EC	24-04-2007	24-10-2009
Notices to Skippers regulation 2007/416/EC	24-04-2007	24-10-2009
Electronic Reporting regulation 2010/164/EC	25-01-2010	25-07-2012

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[11] Only the official accepted documents

15.4. <u>Central commission for Navigation on the Rhine</u>

Standard	Annex or enclosure to protocol	Formalized
RIS Guidelines and Recommendations for River Information Services, Edition 2.0	2003-I-22	05-02-2004
Standard Electronic Chart display and Information system for inland Navigation, Inland ECDIS, Edition 2.0	2006-II-22	23-11-2006
Clarifications, Corrections and Extension Document to the Inland ECDIS Standard; Transition from Edition 2.0 to Edition 2.1 of the Standard		22-10-2008
Vessel Tracking and Tracing Standard for Inland Navigation, International Standard Edition 1.01	2006-I-21	10-10-2007
Test Standard for Inland AIS, Edition 1.01	2007-I-15	22-1--2008
Technical Clarifications on Vessel Tracking and Tracing and the Test Standard for Inland AIS		22-10-2008
Notice to Skippers for Inland Navigation; International Standard, Edition 3.0,	2004-I-17	27-10-2009
Standard for Electronic Reporting in Inland Navigation, Edition 1.2	2006-II-23	19-10-2006
Guidelines and Criteria for Vessel Traffic Services on Inland Waterways	2006-I-20	31-05-2006

15.5. <u>Danube commission</u>

Directive/Regulation	Resolution
Recommendations for the use of inland AIS 75/20	DK/TAG 75/24
Inland ECDIS Standard Edition 2.1	16.5.2008

The Danube Commission has accepted a decision on its 73th Plenary Session (December 2009) stating that the DC Member States are recommended to use the RIS standards published by the UN-ECE. In the decision the internet link to the UN-ECE RIS-related documents is included. These documents are also linked on the DC website."
This means that the DC will not publish own standards, but it is providing the link to the UN-ECE documents.

16. <u>Important abbreviations and their explanation</u>

In relation to RIS there exist a lot of abbreviations. So there is a need to bring them together. In the following chapter the available abbreviations are placed.

<u>A</u>

<u>ADN</u>:   Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures.

<u>ADNR</u>:   Accord européen relatif au transport international des marchandises Dangereuses par voie de Navigation intérieure du Rhin

<u>AI</u>:   Application identifier

<u>AIS</u>:   Automatic Identification System

<u>AI-IP</u>:   Automatic identification via Internet protocol

<u>ASCII</u>:   American Standard Code for Information Interchange

<u>ATA</u>:   Actual Time of Arrival

<u>ATD</u>:   Actual Time of Departure.

<u>ATIS</u>:   Automatic Transmitter Identification System

<u>A to N</u>:   Aids to Navigation

<u>B</u>

<u>BERMAN</u>:   BERth MANagement message

<u>BICS</u>:   Barge Information and Communication System

<u>C</u>

<u>CAS</u>:   Calamity Abatement Support

<u>CCS</u>:   Cargo Community System

<u>CCNR</u>:   Central Commission for the Navigation on the Rhine.

<u>CCTV</u>:   Closed Circuit TV

<u>CEVNI</u>:   Code européen de voies de la navigation intérieure, (European code for inland waterways

<u>CN</u>:   Combined Nomenclature

<u>CPA</u>:   Closest Point of Approach

<u>COG</u>:   Course Over Ground

CSTDMA: Carrier Sense Time Division Multiple Access

CUSCAR: CUStom CArgo Report

CUSDEC: CUStoms DEClaration

D

DAB: Digital Audio Broadcasting.

DAC: Designated Area Code

DC: Danube Commission

DG: Dangerous Goods

DG TREN: Directorate General for Energy and Transport

DGNSS: Differential Global Navigation Satellite System

DGPS: Differential Global Positioning System.

DSC: Digital Selective Calling

E

EANA: European Article Numbering Association

EBL: Electronic Bearing Line

ECDIS: Electronic Chart Display and Information System

ECE: Economic Commission for Europe of the United Nations.

EDI: Electronic Data Interchange.

EDIFACT: Electronic Data Interchange for Administration, Commerce and Transport

EMMA: European multiservice meteorological awareness system

EMSA: European Maritime Safety Agency

ENC: Electronic Navigation Chart

ENI: European Navigation Identifier (Unique European vessel identification number)

EPC: Electronic Port Clearance

ERI: Electronic Reporting International

ERINOT: ERI NOTification message.

ERIRSP: ERI ReSPonse message.

ERN: Electronic Reporting Number

ETA: Estimated Time of Arrival

ETD: Estimated time of Departure

ETSI: European Telecommunications Standard Institute

EU: European Union

F

FAL: IMO facilitation committee

FATDMA: Fixed Access Time Division Multiple Access

FI: Fairway Information

FI: Function Identifier

FIS: Fairway Information Services

FM: Frequency Modulation

G

GALILEO: European Satellite Navigation System

GEO: Geo-synchronous Earth Orbit

GIS: Geographic Information System

GLONASS   GLObal Navigation Satellite System

GMDSS: Global Maritime Distress and Safety System

GMS: Global Mobile communication System

GNSS: Global Navigation Satellite System.

GPRS: General Packet Radio Service

GNSS: Global Navigation Satellite System.

GPRS: General Packet radio service

GPS: Global Positioning System

GSM: Global System for Mobile Communication

GUI   Graphical User Interface

H

HAZMAT: Hazardous Material Directive

HCC: Harmonised Customs Code

HF: Human Factors

HF:	High Frequency
HGE:	Harmonized Group on ECDIS
HMI:	Human Machine Interface
HO:	Hydrographic Office
HSC:	High Speed Craft
HS Code:	Harmonised commodity description and coding system.

I

IAI:	International Application Identifier
IALA:	International Association of Marine Aids to Navigation and Lighthouse Authorities
IANA:	Internet Assigned Numbers Authority
ID:	Identifier
IEC:	International Electro technical Commission.
IEEE:	Institute of Electrical and Electronics Engineers
IENC:	Inland ENC
IETF:	Internet engineering taskforce
IFTDGN:	International Forwarding and Transport Dangerous Goods Notification (message).
IFTMIN:	Instruction message, from barge operator to skipper (container transport, tank transport).
IHO:	International Hydrographic Organization.
IMDG Code:	International Maritime Dangerous Goods Code
IMO:	International Maritime Organization.
IMO FAL:	IMO's Facilitation of Maritime Traffic Convention 1965, with amendments
Inland ECDIS:	Inland Electronic Chart Display and Information System
Inland SENC:	Inland System Electronic Navigational Chart
INT 1:	International chart 1
IP:	Internet protocol
ISO:	International Standardisation Organization
ISM:	International Safety Management Code
ISPS:	International Ship and Port facility Security (Code)
IT:	Information Technology

ITS: Intelligent Transportation Systems

ITU: International Telecommunications Union

L

LAN: Local Area Network

LBM: Lock and Bridge Management.

LEO: Low Earth Orbit (Satellite)

LOCODE: Location code for ports and freight stations (UNECE code)

LRIT: Long Range Identification and Tracking

M

MEO: Medium Earth Orbit

MIB: Meldungs und Informations System für die Binnenschifffahrt

MHz: Mega hertz

MID: Maritime information digits

MKD: Minimum Keyboard and Display

MMSI: Maritime Mobile Service Identity

MTBF: Mean Time between failures

MTR: Mean Time to repair

N

NAVSTAR: Navigational Satellite Timing and Ranging

NSTR: Nomenclature uniforme de marchandises pour les Statistiques de Transport (Revised)

NTS: Notices to Skippers

O

OEF: Open ECDIS forum

OFS: Official Ship Number.

OFS: Official Shipping Number

OSI: Open System Interconnection Standards

P

PAXLST:	Passenger List Message
PCS:	Port Community System
PI:	Presentation Interface
PIANC:	Permanent International Commission for Navigation Congresses
PSW:	Port Single Window
PTM:	Port and Terminal Management

R

RADAR:	Radio detection and ranging
RAI:	Regional Application Identifier
RAIM:	Receiver Autonomous Integrity Monitoring
RATDMA:	Random Access Time Division Multiple Access
RIS:	River Information Services,
ROT:	Rate of Turn
RTA:	Required Time of Arrival.
RTD:	Required Time of Departure.
RTK:	Real Time Kinematic
RU:	Rescue Unit

S

SAR:	Search and Rescue
SCAC:	Standard Carrier Alpha Code
SENC:	System Electronic Navigational Chart
SIGNI:	Signs and Signals on Inland Waterways,
SMS:	Short Message Service
SOG:	Speed over Ground
SOLAS:	International convention for Safety of Live at Sea
SOTDMA:	Self Organizing Time Division Multiple Access, used for AIS.

SQRT: Square root

STI: Strategic Traffic Information

T

TCP/IP: Transmission Control Protocol/Internet Protocol

TCPA: Time Closest Point of Approach

TDED: Trade data elements dictionary

TDMA: Time Division Multiple Access.

TEU: Twenty Feet Equivalent Unit

TI: Traffic Information

TTI: Tactical Traffic Information

U

UDP: User Datagram Protocol

UML: Unified Modelling Language

UMTS: Universal Mobile Telecommunications System

UN: United Nations

UN/CEFACT: United Nations Centre for Trade Facilitation and Electronic Business

UN/EDIFACT: United Nations Electronic Data Interchange for Administration, Commerce and Transport

UNECE: United Nations Economic Commission for Europe

UNDG: United Nations Dangerous Goods

UN/LOCODE: UN Location Code

UNTDID: United Nations Trade Data Interchange dictionary

URL: Uniform Resource Locator

UTC: Universal Time Coordinated

V

VDL: VHF Data Link

VDR: Voyage Data Recorder

VHF: Very High Frequency

VTMIS:	Vessel Traffic Management and Information services
VTM:	Vessel Traffic Management
VTMIS	Vessel Traffic Management Information Services
VTMS:	Vessel Traffic Management System
VTS:	Vessel Traffic Services
VRM:	Variable Range Marker.

W

WAP:	Wireless Application protocol
WCO:	World Customs Organisation.
WGS:	World Geodetic System
Wi-Fi:	Wireless Fidelity.
WLAN:	Wireless Local Area Network
WMS:	Web Mapping Service
WWRNS:	World Wide Radio Navigation System

X

| XML: | eXtended Mark-up Language |

17. <u>Definitions - redundant</u>

17.1. <u>Introduction</u>

At the start of PIANC-working group 125, based on the various wishes of many stakeholders, the need was expressed to bring together all relevant definitions in one document.
To that end many sources and experts were consulted and soon it appeared that some from definitions there were several variations in circulation. This can easily lead to confusion even when the differences were slight.
By the fact that the definitions were collected and sorted in a systematically way, it was possible to have an overview of definitions for the same notation. Having this overview proposals were worked out to select the most appropriate definition.

Redundant definitions were not deleted, but placed in chapter 17.It is expected that in the years to come, in the field of RIS (definitions) some developments can be expected. There may be the possibility that it turns out that a definition being now redundant fits better at that end.

The sequence of the subjects corresponds to the order of chapter 3 to 13.

17.2. <u>General definitions</u>

<u>Authentication</u> is the process of verifying the identity of a user, terminalor service provider.
(Source: unknown)

<u>Availability</u> is the probability that a system fulfils its objectives.
(Source: unknown)

<u>Availability</u> means the ability of a product to be in a state to perform a required function under given conditions at a given instant of time or over a given time interval assuming that the required external resources are provided.
(Source: International Electronic technical Commission)

<u>Base station</u> is the common name for all radio equipment located at one and the same place used for serving one or several cells.
(Source: unknown)

<u>Broadcasting Service</u> is a service where the same message (voice, text, pictures, video or data) is transmitted simultaneously to all users within the radio coverage of the broadcasting transmitter(s) or to a group of several users via wire or cable.
(Source: unknown)

<u>Bulk cargo</u> is unpacked homogenous cargo poured loose in a certain space of a vesselor container e.g. oil or grain.
(Source: CCNR Standard Electronic Reporting version 1.2 19/10/2006)

<u>Cargo</u> (synonym: Freight) are goods transported or to be transported, all goods carried on a ship covered by a bill of loading.
(Source: P&O Nedlloyd A-Z of shipping terms)

Container (synonym: Freight Container). means an article of transport equipment (lift van or other similar structure):
- of a permanent character and accordingly strong enough to be suitable for repeated use;
- specially designed to facilitate the carriage of goods, by one or more means of transport; without breakage of load;
- fitted with devices permitting its ready stowage and handling, particularly when being translated from one means of transport to another;
- so designed as to be easy to fill and empty;
- having an internal volume of not less than 1 m3, except for containers for the carriage of radioactive material.

(Source: International Organisation for Standardization (ISO)
ADN)

Container (synonym: Freight Container) is an article of transport equipment of
- a) a permanent character and accordingly strong enough to be suitable for repeated use,
- b) specially designed to facilitate the carriage of goods, by one or more modes of transport, without intermediate reloading,
- c) fitted with devices permitting its ready handling, particularly from one mode of transport to another,
- d) so designed as to be easy to fill and empty,
- e) having an internal volume of 1 m3 or more.

The term container includes neither vehicles nor conventional packing.
(Source: ISO standard 668 freight containers 1995E)

Fairway (synonym: Channel or Navigation channel) is that part of a river, harbour, etc. where the main navigable channel for vessels of larger size lies. It is also the usual course followed by vessels entering or leaving harbours, called "ship channel".
(Source: International Maritime Dictionary)

Fairway (synonym: Channel or Navigation channel) is the Navigable part of a waterway.
(Source: MSC74/Add1/Annex 22)

Hazardous cargoes include those goods identified by national law as hazardous.
(Source: Inland VTS Guidelines CCNR version 1.0 31/05/2006)

Inland vessel is a type of means of transport, specially designed for the movement of goods and/or persons on inland waterways.
(Source: UNECE Recommendation 28).

Intermodal Transport is transport of goods from door to door utilizing different modes of transport.
(Source: unknown)

Location is any named geographical place recognized by a competent national authority.
(Source:UNECE).

Obstruction means an object such as a wreck, net etc which blocks a fairway route etc.
(Source: MSC74/Add1/Annex 22)

Vessel (synonym: Ship) in inland navigation this term includes also small crafts, ferry boats and floating equipment.
(Source: Standard for Electronic Reporting CCNR version 1.2 2006)

Vessel traffic monitoring is providing information orally as well as electronically as well as giving directions in interaction with and response to vessels in a traffic flow to optimize the smooth (efficient) and safe transport.
(Source: Standard for electronic ship reporting EU/164/2010)

Voyage is the journey of a vessel, on a specified distance (to be) travelled in a given time. At the time of the journey the vessel is participating in the inland waterway traffic.
(Source: ERI MD group)

Way point is a point where the traffic flow changes its direction or an exit /entry point.
(Source: unknown)

17.3. **Players**

Agent is a person or organisation authorised to act for or on behalf of another person or organisation, such as the forwarding agent, the custom agent and the carrier agent.
(Source: P&O Nedlloyd A-Z of shipping terms)

Carrier is the party undertaking transport of goods from one point to another.
(Source: Marnis)

Conning skipper (synonym: Navigating skippernavigates the vessel on voyage plan instructions of the shipmaster.
(Source: COMPRIS SWP 2.1 (Reference Model))

Consignor **(**synonym: Cargo Shipper, Shipper and Sender) is the merchant by whom, in whose name or on whose behalf a contract of carriage of goods has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the consignee in relation to the contract of carriage.
(Source: Standard for electronic ship reporting EU/164/2010)

Customs is the department of the Civil Service that deals with the levying of duties and taxes on imported goods from foreign countries and the control over the export and import of goods, e.g. allowed quota prohibited goods.
(Source: Standard Tracking and Tracing EU/415/2007)

Customs is the department of the Civil Service that deals with the levying of duties and taxes on imported goods from foreign countries and the control over the export and import of goods, e.g. allowed quota or prohibited goods.
(Source: P&O Nedlloyd A-Z of shipping terms)

Freight broker (synonym: Forwarder and Freight forwarder) is responsible on behalf of the transport supplier for the physical transport of the goods to be executed. The freight broker offers transport capacity to shipper s on behalf of the transport supplier and is this way mediator between supply forwarder and Master in charge.
(Source: IRIS-Europe II)

Lock operator is the person who monitors and controls the fluent and safe progress of traffic around and through a lock and who is responsible for the locking process in itself.
(Source: Standard Tracking and Tracing EU/415/2007)

Operator means the owner or manager of the ship.
(Source: Standard for electronic ship reporting EU/164/2010)

Rescue and Emergency Services Providers are the persons responsible for the search and rescueand emergency services (deals with a calamity and takes care of the people, animals, cargo and vessel involved)
(Source: IRIS-Europe II)

RIS users are the users of the services can be described in a number of different groups: skippers, RIS operators, lock/bridge operators, waterway authorities, terminal operators, operators in calamity centres, fleet managers, cargo shippers, consignors, consignees, freight brokers, and supply forwarders.
(Source: RIS-Guidelines 2007/414/EC)

RIS users are the users of the services described in a number of different groups: boat masters, RIS operators, lock/bridge operators, waterway authorities, terminal operators, operators in calamity centres of emergency services, fleet managers, cargo shippers, freight brokers.
(Source: unknown)

Shipmaster (synonym: Master, Master in charge, Captain, Skipper and Boat master) is the person responsible for the overall safety of the vessel, cargo, passengers and crew and thereby for the voyage plan of the vessel and the condition of the vessel, the cargo, respectively passengers and the quality and quantity of the crew.
(Source: Standard Tracking and Tracing EU/415/2007)

Ship-owner is the (legal) person officially registered as such in the certificate of registry where the particulars of the ship are contained.
(Source: IRIS-Europe II)

Supply Forwarder is responsible on behalf of the shipper for the organisation of the physical transport of the goods that should be exchanged. The supply forwarder offers cargo to transporters on behalf of the shipper.
(Source: IRIS-Europe II)

Terminal Operator (synonym: Stevedore) controls a set of one or more terminals and puts these terminals at the disposal of terminal operators to tranship cargo from one conveyance to another.
(Source: IRIS-Europe II)

VTS Authority is the Authority responsible for the management, operations and cooperation of the VTS, the interaction with participating vessels and the safe and effective provision of the service
(Sources: IMO A.857 (20)
*   Inland VTS Guidelines CCR version 1.0 31/05/2006)*

VTS Operator is a person, appropriately qualified by the Competent Authority, performing one or more tasks contributing to the services of the VTS.
(Source: Inland VTS Guidelines CCNR version 1.0 31/05/2006)

VTS Operator is the person who monitors and controls the fluent and safe progress of traffic within the area around the VTS centre
(Source: Standard Tracking and Tracing EU/415/2007)

VTS Operator is an appropriately qualified person carrying out VTS operations on behalf of a VTS authority.
(Source: IALA VTS Manual 2008)

17.4. Information Technology

Architecture is a framework for depicting how different stakeholders need to relate to one another in order to provide ITS user services. It is a technologically-neutral framework depicting what information will be shared between stakeholders now and in the future.
(Source: US National ITS Architecture)

Code means
   a) a data transformation or data representation in different forms according to pre-established rules,
   b) the representation by a certain symbol or combination of symbols of specific data within a system.
(Source: Marnis)

Code is a systematic representation of specific signals or values by another set of signals or values, which has to conform to a definite set of rules.
(Source: International Electro Technical Commission)

Code is a character string used as an abbreviated means of recording or identifying information
(Source: Standard Electronic Reporting CCR version 1.2 2006)

Compatibility is the property of hardware and software components which permits to exchange such components among each other or to combine them into a system without needs for adaptation
(Source: Principia Cybernetica Web)

Data element is a unit of data which, in a certain context, is considered indivisible and for which the identification, description and value representation has been specified.
(Source: Standard for electronic ship reporting EU/164/2010)

Data element is an unit of data that in a certain context is considered indivisible .
(Source: ISO 2382/4).

Electronic Data Interchange (EDI) is the automated exchange of any predefined and structured data for business among information systems of two or more organizations.
(Source: UN/CEFACT Glossary of terms)

Information Architecture is used to show the structure of information within Architecture. It focuses on the nature of the data, how it is manipulated and stored, and their relationships, e.g. using a data model.
(Source: KAREN)

Intelligent Transportation Systems. (ITS) The term ITS refers to a wide range of advanced electronics, communications and control, and computer technologies applied to transportation. Designed to improve safety and productivity, reducing congestion and encouraging transit use.
(Source: US National ITS Architecture)

Integrity is maintenance of accuracy or validity of data.
(Source: unknown)

Interoperability means that services, organization, data contents and data exchange formats are harmonized in such a way that users have access to the services and information on a pan-European level to enable the use of the same equipment on-board of vessels all over Europe.
(Source: Draft RIS Directive of the European Union (14/11/03))

Interoperability means that services, data contents, data exchange formats and frequencies are harmonised in such a way that RIS users have access to the same services and information on a European level.
(Source: RIS-directive 2005/44/EC)

Interoperability is the ability of multiple entities in different networks or systems to operate together without the need for additional conversion or mapping of states and protocols.
(Source: unknown)

Interoperability refers to the ability of a transport network to operate trains and infrastructures to provide, accept and use services so exchanged without any substantial change in functionality or performance. This ability rests on all the regulatory, technical and operational conditions which must be met in order to satisfy all the defined requirements applicable to the given grade of automation taking into account grade of line, irrespective of which supplier provides which components or systems.
(Source: International Electrotechnical Commission)

Physical Architecture provides agencies with a physical representation (though not a detailed design) of the important Intelligent transportation systems. (ITS) interfaces and major system components. It provides a high-level structure around the processes and data flows defined in the Logical Architecture.
(Source: US National ITS Architecture)

Reference data are data which by general agreement may be used for prediction and/or comparison with observed data.
(Source: ITU)

Reference data is the totality of internationally standardized reference codes and tables, which are used in the application of one or more RIS key technologies (e.g. codification of dangerous goods, vessel and convoy type).
(Source: unknown)

Reference data are data describing a physical or virtual object and its properties.
(Source: Wikipedia)

Reference data means any kind of date that are used solely to categorize other data found in a database, or solely for relating data in a data base to information beyond the boundaries of the enterprise.
(Source: unknown)

Reference data means a relationship within a certain use e.g. on documents as an indication towards other information to be consulted, often a direction where other additional data can be found.
(Source: Webster and Oxford)

17.5. RIS

17.5.1. General RIS definitions

Interoperability means that services, organization, data contents and data exchange formats are harmonized in such a way that users have access to the services and information on a pan-European level to enable the use of the same equipment on-board of vessels, all over Europe.
(Source: Draft RIS Directive of the European Union (14/11/03))

Interoperability means that services, data contents, data exchange formats and frequencies are harmonised in such a way that RIS users have access to the same services and information on a European level.
(Source: RIS-directive 2005/44/EC)

Interoperability is the ability of multiple entities in different networks or systems to operate together without the need for additional conversion or mapping of states and protocols.
(Source: unknown)

Interoperability refers to the ability of a transport network to operate trains and infrastructures to provide, accept and use services so exchanged without any substantial change in functionality or performance. This ability rests on all the regulatory, technical and operational conditions which must be met in order to satisfy all the defined requirements applicable to the given grade of automation taking into account grade of line, irrespective of which supplier provides which components or systems.
(Source: International Electro Technical Commission)

RIS application is the regional or dedicated use of RIS systems under specific requirements: local, functional, and process-oriented. A single application can use one or more systems to provide a service.
(Source: Draft RIS directive of the European Union (30/09/03))

RIS centre is the place, where the services are managed by operator s. A RIS may exist without a RIS centre (e.g. an Internet service, a buoys service). When ship/shore interaction in both ways (e.g. by VHF service) is intended, one or more RIS centres are needed. If a VTS centre or a lock exists in a RIS area, they may also be used as RIS centres. It is recommended to concentrate all services in a RIS area into one single RIS centre
(Source: RIS-Guidelines 2007/414/EC)

RIS centre is the place where the services are managed by operators; if necessary it is established by the Competent Authority.
(Source: Draft RIS directive of the European Union (14/11/03))

River Information Services (RIS) is defined as an (ICT) concept for information services to support Vessel Traffic Management in inland waters. The information may be distributed to allied services to improve their management. Allied services may also include other transport modes.
(Source: unknown)

River Information Services (RIS) means harmonised information services to support traffic and transport management in inland navigation, including, wherever technically feasible interfaces to other transport modes. RIS aim at contributing to a safe and efficient transport process and at utilising the inland waterways to their fullest extent. RIS are already in operation in manifold ways.
(Source: RIS-Guidelines 2007/414/EC)

River Information Services (RIS) is an European concept for harmonised information services to support traffic management and transport management in inland navigation; including the interfaces to other transport modes.
(Source: Standard Tracking and Tracing EU/415/2007)

River Information Services (RIS) are the harmonized information services to support traffic and transport management in inland navigation, including interfaces to other transport modes. RIS are not dealing with internal commercial activities between one or more of the involved companies, but RIS are open for interfacing with commercial activities.
(Source: unknown)

River Information Systems are one or more harmonized information technology systems (IT systems) for the purpose of RIS. In this context, an IT system is the totality of human resources, hardware, software, communication means and regulations in order to fulfil the task of processing information.
(Source: unknown)

RIS users are the users of the services described in a number of different groups: boat masters, RIS operators, lock/bridge operators, waterway authorities, terminal operators, operators in calamity centres of emergency services, fleet managers, cargo shippers freight brokers.
(Source: unknown)

RIS users means all different user groups including boat masters, RIS operators, lock and/or bridge operators, waterway authorities, port and terminal operators, operators in calamity centres of emergency services, fleet managers, cargo shippers and freight brokers
(Source: RIS-directive 2005/44/EC)

17.5.2.   RIS functions

Fairway Information Services

Fairway Information (FI) means geographical, hydrological, and administrative information regarding the waterway (fairway). Fairway Information is one-way information: shore to ship or shore to office.
(Source: RIS-directive 2005/44/EC)

Fairway Information (FI) Geographical, hydrological, and administrative information regarding the waterway (fairway). Fairway Information is one-way information: shore to or shore to office.
(Source: unknown)

Fairway Information   Services (FIS) a FIS is a system that provides information regarding the fairway and the meteorological and hydrological characteristics. This information may be divided in slow varying time dependent information and fast time varying information. An example of the first is information about lock operating times and bridges, available shore facilities etc., whilst the second category contains vertical tidal data and flash information to shipping (such as sinking of a vessel in the fairway)
(Source: INDRIS)

Strategic Traffic Information

Strategic Traffic Information (STI) is the information affecting the medium and long-term decisions of RIS users. A strategic traffic image contributes to the planning decision capabilities regarding a safe and efficient voyage. A strategic traffic image is produced in a RIS centre and delivered to the users on demand. A strategic traffic image contains all relevant vesselsin the RIS area with their characteristics, cargoes and positions, stored in a database and presented in a table or on an electronic map. Strategic traffic information may be provided by a RIS/VTS centre or by an office.
(Source: RIS-Guidelines 2007/414/EC)

Strategic Traffic Information (STI) is the information affecting the medium and long-term decisions of RIS users. A strategic traffic image contributes to the planning decision capabilities regarding a safe and efficient voyage. A strategic traffic image is produced in a RIS centre and delivered to the users on demand. A strategic traffic image contains all relevant vessels, in the RIS area with their characteristics, cargoes and positions, reported by VHF voice reporting or electronic ship reporting, stored in a database and presented in a table or on an electronic map. Strategic Traffic Information may be provided by a RIS/VTS centre or by an office.
(Source: Standard Tracking and Tracing EU/415/2007)

Tactical Traffic Information

Tactical Traffic Information (TTI) is the information affecting the skipper's or the VTS Operator's immediate decisions with respect to navigation in the actual traffic situation and the close geographic surroundings. A tactical traffic image contains position information and specific vessel , information of all targets detected by a radar and presented on an electronic navigational chart, and -if available - enhanced by external traffic information, such as the information delivered by an Inland AIS. TTI may be provided on board a vessel or on shore, e.g. in a VTS centre.
(Sources: RIS-Guidelines 2007/414/EC
        Standard Tracking and Tracing EU/415/2007)

Tactical Traffic Information (TTI) is the information affecting immediate navigation decisions in the actual traffic situation and the close geographic surroundings.
(Source: Draft RIS directive of the European Union (14/11/03))

Calamity Abatement Support

Rescue and Emergency Services Providers are the persons responsible for the search and rescueand emergency services. (deals with a calamity and takes care of the people, animals, cargo and vessels involved)
(Source: IRIS-Europe II)

Calamity means a disaster causing deep distress that may have considerable consequences for persons and material involved and may have large effects on the respective environment.
(Source: unknown)

Calamity is a natural disaster that brings terrible loss, lasting distress or severe affliction. A calamity could cause complete loss of the passengers the crew, the cargo or even the ship
(Source: unknown)

Calamity abatement support, is the RIS centres ability of transmitting necessary information to the rescue teams
(Source: unknown)

Collision is an event when tow vessels under way strike together, or when a ship, impacts with a hydro technical construction or different installations on the key.
(Source: unknown)

Collision is an event when tow vessels under way strike together.
(Source: dictionary of English Nautical Language)

Incident is an intended event resulting either in fatality, injury, ship, loss or damage, property loss or damage, or environmental damage.
(Source: unknown)

Incident means a subordinate or accessory detached event attracting general attention; it is considered sometimes that happens as a result of or in connection with something more important
(Source: unknown)

Incident is an unexpected minor importance situation which happened during naval activity. It is not classified as an accident, but it is important for risk evaluation.
(Source: unknown)

Logistics

Agent is a person or organisation authorised to act for or on behalf of another person or organisation, such as the forwarding agent, the custom agent and the carrier agent .
(Source: P&O Nedlloyd A-Z of shipping terms)

Consignor **(**synonym: Cargo shipper, Shipperand Sender) is the merchant by whom, in whose name or on whose behalf a contract of carriage of goods has been concluded with a carrier or any party by whom, in whose name or on whose behalf the goods are actually delivered to the consignee in relation to the contract of carriage.
(Source: Standard for electronic ship reporting EU/164/2010)

Customs is the department of the Civil Service that deals with the levying of duties and taxes on imported goods from foreign countries and the control over the export and import of goods, e.g. allowed quota prohibited goods.
(Source: Standard Tracking and Tracing EU/415/2007)

Freight broker (synonym: Forwarder and Freight forwarder) is responsible on behalf of the transport supplier for the physical transport of the goods to be executed. The freight broker offers transport capacity to shippers on behalf of the transport supplier and is this way mediator between supply forwarder and master in charge.
(Source: IRIS-Europe II)

Logistics is the planning, execution and control of the movement and placement of goods and the supporting activities related to such movement and placement within a system organized to achieve specific objectives.
(Source: COMPRIS WP5/logistics
*   P&O Nedlloyd A-Z of shipping terms)*

Means of transport is a particular type of vehicle, vessel or other device used for transportation.
(Source: Marnis)

Mode of Transport, means the method of transport (such as air, road, sea, rail, inland river) used for the carriage of goods, persons or any other subjects.
(Source: Marnis)

Place of delivery is the location where a consignment is delivered to the consignee (end of the carrier's liability).
(Source: unknown)

Place of receipt (Synonym: Place of acceptance) is the location where a consignment is received by the carrier from the shipper (commencement of the carrier's liability).
(Source: unknown)

Terminal is a location at either end of a transportation line including servicing and handling facilities. Also container, respectively oil terminal.
(Source: Nedlloyd Glossary)

Terminal operator (synonym: Stevedore) controls a set of one or more terminals and puts these terminals at the disposal of terminal operators to tranship cargo from one conveyance to another.
(Source: IRIS-Europe II)

Law enforcement

None

Statistics

None

Waterway charges and harbour dues

None

17.6. Inland VTS

17.6.1. General Inland VTS definitions

Instruction is a message given to a vessel with the purpose to achieve a result in the traffic flow.
(Source: unknown)

VTS-area is the delineated, formally declared, area for which the VTS has sensor coverage in order to construct a traffic image. A coverage area may be subdivided into sub-areas or sectors.
(Source: unknown)

VTS Authority is the Authority responsible for the management, operations and cooperation of the VTS, the interaction with participating vessels and the safe and effective provision of the service
(Sources: IMO A.857 (20)
Inland VTS Guidelines CCNR version 1.0 31/05/2006)

VTS Operator is a person, appropriately qualified by the Competent Authority, performing one or more tasks contributing to the services of the VTS.
(Source: Inland VTS Guidelines CCNR version 1.0 31/05/2006

VTS Operator is the person who monitors and controls the fluent and safe progress of traffic within the area around the VTS centre.
(Source: Standard Tracking and Tracing EU/415/2007)

VTS Operator is an appropriately qualified person performing one or more tasks contributing to the services of the VTS.
(Sources: IMO.A.857 (20)

17.6.2. Inland VTS Services

Navigational assistance service is a service to assist on-board navigational decision making and to monitor its effects. Navigational assistance is especially of importance in reduced visibility, or difficult meteorological circumstances or in case of defects or deficiencies affecting the radar, steering or propulsion. Navigational assistance is given in due form of position information at the request of the traffic participant or in special circumstances when deemed necessary by the VTS operator, using technologies such as GNSS/Galileo.
(Source: RIS-Guidelines 2007/414/EC)

Navigational assistance service is a service of a VTS to assist to the on-board navigational decision making and to monitor the effects, especially during difficult circumstances, with messages updated in appropriate intervals.
(Source: IALA VTS Manual 2000.)

Traffic organisation service (VTS) is a service to prevent the development of dangerous vessel traffic situations by managing of traffic movements and to provide for the safe and efficient movement of vessels traffic within the VTS area.
(Sources: Inland VTS Guidelines CCNR version 1.0 31/05/2006
RIS-Guidelines 2007/414/EC
Standard for electronic ship reporting EU/164/2010
Standard Tracking and Tracing EU/415/2007)

Traffic organisation service is planning and manning of traffic movements avoiding congestion and dangerous shipping traffic situations within the VTS coverage area.
(Source: unknown)

VTS Services means and information service, but also others, such as a navigational assistance service, or a traffic organisation service, or both.
(Source: Standard for electronic ship reporting EU/164/2010)

VTS Services are services provided by a VTS centre, partly facilities (placed at the disposal of the mariner, optional), partly measures (adherence is mandatory): information service, navigational assistance service, traffic organization service, cooperation with allied services and with emergency services.
(Source: unknown)

17.7. <u>Tracking and Tracing</u>

Automatic Identification System (AIS) is a broadcast transponder system, operating in the VHF maritime mobile band.
(Source: IALA VTS Manual 2008)

Automatic Identification System (AIS) is a maritime radio data _exchange system between equipped ships and between ships and shore stations.
(Source: unknown)

Inland AIS is AIS for inland navigation.
(Source: IALA)

17.8. <u>Inland ECDIS</u>

Inland Electronic Navigational Chart (Inland ENC) means the database, standardised as to content, structure and format, issued for use with Inland ECDIS. The Inland ENC complies with the IHO standards S-57 and S-52, enhanced by the additions and clarifications of this standard for Inland ECDIS. The Inland ENC contains all essential chart information and may also contain supplementary information that may be considered as helpful for navigation.
(Source: CCNR Inland ECDIS Standard; Edition 2.0/23/11/2006)

17.9. <u>Notice to Skippers</u>

None

17.10.   <u>Electronic Reporting</u>

Electronic Data Interchange (EDI) is the automated exchange of any predefined and structured data for business among information systems of two or more organizations.
(Source: UN/CEFACT Glossary of terms)

Single Window is a system that allows parties involved in trade and transport to lodge information with a single body to fulfil all regulatory requirements.
(Source: unknown)

Single Window means a facility that allows parties involved in trade and transport to lodge standardized information with a single entry point to fulfil all regulatory requirements. If information is electronic then individual data elements should only be submitted once.
(Source: Standard for electronic ship reporting EU/164/2010)

Single Window is defined as a (intelligent) facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once.
(Source: UNECE)

17.11.   E-Navigation

None

17.12.   Vessel Traffic Management

Vessel Traffic management (VTM) Vessel Traffic Management is the co-ordination and exchange of data about global maritime activities. It may incorporate VTS and include information from other maritime agencies.
(Source: IALA VTS Manual 2008)

Vessel Traffic Management (VTM) is providing information orally as well as electronically as well as giving directions in interaction with and response to vessels in a traffic flow to optimise the smooth (efficient) and safe transport.
(Source: Standard Tracking and Tracing EU/415/2007)

Vessel Traffic Management (VTM) means the set of efforts (measures, provisions, services and related functions) which, within a given area and under specified circumstances, intend to minimise risk for safety and the environment, whilst maximising the efficiency of waterborne and connecting modes of transport.
(Source: unknown)

17.13.   Position systems

Global Positioning System (GPS) is a global navigation satellite system (GNSS) developed by the United States Department of Defence and managed by the United States Air Force It is the only fully functional GNSS in the world, can be used freely by anyone, anywhere, and is often used by civilians for navigation purposes. It uses a constellation of between 24 and 32 medium Earth orbit satellites that transmit precise radio wave signals, which allow GPS receivers to determine their current location, the time, and their velocity. Its official name is NAVSTAR GPS.
(Source: Wikipedia)

Global Positioning System (GPS). The Global positioning Standard positioning Service is a space based three dimensional positioning velocity and time system which is operated by the USAF. GPS met full operational capability in 1995.
(Source: unknown)

18. Index

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