

# Work Programme 2012



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# Introduction



In 2010, the Commission carried out an evaluation of implementation of the Agency founding regulation, the results obtained by the Agency and its working methods as envisaged by the founding regulation. By the middle of 2012 the Commission should submit a proposal regarding the future role of the Agency post 2014.

It is already evident that there is a consensus supporting an enhanced role for the Agency in acting in a number of ways as the "ambassador" for the European rail framework. This involves both disseminating the framework within the European Community and acting as a focal point for information exchange on Technical and safety regulatory issues with non-European administrations.

Within the European domain, simplification is an essential prerequisite for the future success of the European railway sector and that there is an urgent need for the Member States to remove the duplications and inconsistencies between their historical regimes and the framework necessary to efficiently manage a railway system shared between many actors put in place by the Access, Interoperability and Safety Directives.

Within this role, the Agency must play an important role in facilitating the Member States' removal of duplicating requirements, facilitating their removal of inconsistencies of roles and responsibilities and the adoption of a genuinely common approach to the implementation of the European framework by all Member States. Otherwise, without this facilitation, it is likely that different national interpretations of European rules, processes and frameworks would lead to a continuation of the diversity of approach that currently undermines the economic viability of the railway sector in its core markets. Lessons must be learned from the early ETCS and GSM-R implementations in order to ensure that interoperability and technical compatibility is ensured by future projects and that new system diversities are not introduced.

Whilst it has always been clear that for the competitive position of the railway sector to be improved it is necessary for activities covering technical and safety issues to be properly integrated, it is now apparent that these two subject areas cannot be dealt with in isolation. There is a critical need to ensure consistency between these activities and the application of regimes covering such issues as access, environmental protection and dangerous goods. Diversity in these areas or at their interfaces with interoperability and safety also brings a substantial economic burden and the Agency will need to develop its "whole – system" understanding.

As part of our drive to ensure quality and consistency between all our activities we have, during 2010 been developing the "one Agency" approach. In 2012 we take this a step further by adopting an "Activity-Based" approach to the work programme. This means that rather than describing our work as a series of approx 150 tasks each allocated to a specific organisational unit we have adopted best practice of some other Agencies and restructured the Work Programme around 13 Activities each of which contributes to our overall objective. Within each activity there are described a small number of projects. We believe this allows our stakeholders to better understand our work outputs, their context and purpose.

By integrating our organisational processes under the "One Agency" umbrella we believe that we will be better able to develop our key role as "the place where all the actors meet" at the heart of the European Railway System ever more dedicated to putting customers at the heart of its endeavours.

Marcel Verslype,
Executive Director



# European Railway Agency core objective and role

The Agency's core objective and role is strictly defined in Article 1 of Regulation (EC) No 881/2004 as amended by Regulation 1335/2008 ("the Regulation"). It is:

"to contribute, on technical matters, to the implementation of the Community legislation aimed at improving the competitive position of the railway sector by enhancing the level of interoperability of railway systems and at developing a common approach to safety on the European railway system, in order to contribute to creating a European railway area without frontiers and guaranteeing a high level of safety".

This is reflected in our vision and mission statements.

#### Our vision

We contribute to the creation of an integrated European railway area where Railway Undertakings can run trains and organise their transport services freely, safely, effectively, and without interruption, where Manufacturers Railway Undertakings and Infrastructure Managers can benefit from an internal market for equipment and services, ensuring an economically sustainable railway sector. The objective is to allow the rail transport sector to realise its inherent competitive advantages in relation to other transport modes.



#### Our mission

The main task of the Agency is to prepare new and updated legislative acts for adoption by the European Commission ("the Commission"), after a positive opinion from the Railway Interoperability and Safety Committee of Member States established by Article 21 of Directive 96/48/EC and referred to in Article 29 of Directive 2008/57/EC (the RISC Committee), and to give other technical support to the Commission. The activities carried out by the Agency aim at:

- Developing a common approach to safety, safety regulation and accident investigation, in particular by harmonisation of safety assessment methods, safety targets and safety certification conditions.
- Improving the interoperability of the European rail system by developing the conditions for the free and uninterrupted movement of trains through technical and operational harmonisation, including conditions for mutual acceptance of railway vehicles.
- Supporting the progressive creation of an internal market for the provision of railway equipment and services.
- Facilitating the exchange of information within the railway sector by networking with national bodies, providing registers and databases, issuing reports and giving guidance on the implementation of the regulatory framework.

In order to fulfil its objective the Agency works under mandates within Directive 2004/49/EC (the Railway Safety Directive) as amended by Directive 2008/110, Directive 2007/59/EC (the Driver Licensing Directive) Directive 2008/57/EC (the recast Railway Interoperability Directive), and Regulation (EC) No 881/2004 (the Agency Regulation) as amended by Regulation (EC) No 1335-2008, complemented by more detailed mandates and task requests that are delivered to it by the Commission when the legislation provides for it.

# ERA priorities for 2012 and associated risks

The legal framework necessary for the efficient operation of the shared railway system, including the opening of the internal market in equipment and services for the construction, renewal, upgrading and operation of the rail system is now in place at European level but there remains much to be done to achieve the objective of a more competitive railway sector.

In practice, the Railway Undertakings and their suppliers still face numerous problems and obstacles to competitiveness. These problems arise normally from three causes:

- The European framework has not been fully implemented.
- The existing national regime has not been removed but remains as an overlay or in parallel with the European framework. This often leads to confusion over roles and responsibilities and duplication of rules, checks and verifications.
- The European framework has been implemented differently in each Member State rather than using a common approach.
- The responsible actors are not applying the rules.

These problems of transition primarily arise from the need to restructure rules, roles and responsibilities to take account of the migration from a single "closed" system managed by one entity to a regime more like the aviation and road sectors where the system is "shared". Such systems are managed by many actors, each responsible for their part of the system according to rules, roles and responsibilities laid down by EU law, complemented by national law which respects the European framework.

Close to both the European Commission and the Sector Actors and in its role as "the place where all the actors meet", the Agency is well placed to facilitate a common approach to the implementation of the framework and to help coordinate the actors' implementation and problem solving. This can be achieved by dissemination and training, facilitating/co-ordinating the resolution of shared problems, and the production of Technical Opinions.

The TSIs, CSMs, Databases and Registers produced by the Agency are at the heart of the new European framework and the Agency is the face of "Europe" to the Sector Actors involved in Interoperability and Safety. This means that until the framework has been put fully into place in a consistent manner in the Member States, such that the current obstacles to competitiveness have been removed, there is significant reputational risk for the Agency. Helping to facilitate the migration to the new framework and problem solving is therefore a key activity and a top priority for the Agency, and a key element of its risk management strategy. It is essential that this activity is performed by the Agency in close collaboration with all railway actors. To do this, the Agency has created the "Safety platform" which will be the place where all railway actors will be able to exchange information on the efficiency of the already developed Agency measures and on

potential safety issues.

Nevertheless, some of this activity cannot be planned because is by its very nature "on demand". Its timing and subject matter will only be known as and when problems arise (e.g. freight wagon maintenance issues post the Viareggio accident or when the Agency is asked for a Technical Opinion). Of necessity therefore very little specific provision has been made in this work programme for "on demand" work. When such requests arise resources will be redeployed from other activities and, according to the priorities agreed at the time, the deliverables or timescales of these other activities will be adjusted.

All the Agency's activities represent a very substantial workload across a very broad spectrum to be carried out with few resources. These resources need to be in place on time. Should either the necessary budget or staff establishment not be in place in time, then it will not be possible to carry out all the activities to the timescales planned and this work programme may need to be amended.

Other risks to success are mainly derived from the need to establish and secure budget in good time to enable the right specialist recruitment to take place. Furthermore, in a growing rail sector, the Agency is in competition with many other actors for the expertise that it requires and experience shows that it is not always possible to attract the necessary calibre of staff upon first application. This presents a significant risk not just in the operational areas, where expertise of the right calibre is rare, but also in the administrative activities where expertise is extremely mobile.

The risks associated with budget uncertainty will be particularly acute in 2012 because of the expiry of a large number of operational staff contracts on completion of their initial four years.

#### Our mission

It is a significant risk that the overall requirements of the Directives and the Regulation, the sum total of the mandates, the expectations of the stakeholders, the increase in the proportion of "open ended" or "on demand" work carried out by the Agency and future requirements will, in 2012, either exceed the quantity of resources available in total or the resources available in a particular subject area. To manage this risk it will be necessary to:

- Prioritise,
- Make best use of technical expertise available from the sector,
- Balance use of internal staff with the use of experts and consultants.

When demand for work exceeds the resources available the Agency will make proposals for re-prioritisation and rescheduling of projects according to the Agency's overall objectives.

# **Working Method**

To ensure an integrated approach at working level, although each activity is allocated a lead unit for managing the activity, the internal working groups incorporate experts from all relevant units and activities.

#### The Management Team

The Executive Director, together with the Management Team, will:

- Develop and adopt the long term plan of the Agency taking account of the ongoing need to support the harmonisation of decision making, close open points, adapt to scientific and technical progress and take account of market trends. More precise mission statements will be developed for particular area of activity.
- Act as the coordinating body for all the Agency's units and working groups.
- Provide guidance for training for Agency Staff and Working Party members in
  - the principles and processes underpinning the Interoperability and Safety Directives,
  - · non technical or safety issues (e.g. economic analysis),
  - working methods, meeting management, consensus building etc.
- Act as a forum for prioritisation and risk management in respect of the activity of the Agency.
- Act as the focus for exchange of views with external organisations (inputs to and outputs from ERA) in respect of the overall activity of the Agency and those activities that are not specific to a particular working party.
- Act as the internal review body for quality assurance of Agency recommendations and technical opinions.
- Ensure that the Administrative Board and its Sub-Committee are regularly updated in respect of the Agency's activities and progress with the implementation of the Work Programme, Budget and Staff plan.

The Agency will continue to work through the formal Working Parties prescribed by the directives and the Regulation. These will be supported by several informal groups.

Survey groups will deal with generic functions (e.g. economic evaluation).

- Restricted groups will deal with specific horizontal interoperability and safety issues.
- Interface groups will deal with specific interfaces covered by two or more working groups.
- Smaller task forces, emanating from working groups, will be established to carry out specific tasks such as the drafting of documents.

In all its activities the Agency will respect the objective of putting the customer at the heart of European transport policy and utilising the principles of "Better Regulation", in particular the objectives of simplification and reducing administrative burdens. It will work within the rules and procedures relevant to European Agencies.

#### Transparency

Transparency is an essential prerequisite of the working method of the Agency.

Documents adopted by the Agency, in particular Recommendations to the Commission and Technical Opinions, will be made available on the public website according to the rules on access to documents adopted by the Administrative Board.

In accordance with the requirements of Article 3 of the Agency Regulation that the work of the Working Parties shall be transparent, records of Working Party meetings and working documents will be made available to all members of the relevant Working Party, persons nominated by the representative bodies to coordinate their relationship with the Agency, and persons nominated by the representative bodies coordinators as their members' contacts for interoperability and safety matters. Members of the Network of National Safety Authorities will have access to documents of all Working Parties for which they have the right to appoint members.

#### Participation & Decision Making

Working Parties shall be managed on a collaborative basis with the expectation that all members shall contribute to the development of the documentation in proportion to their expertise and relevance of the output to their representative body and its members.

Agreement within Working Parties shall normally be reached by consensus but, in the event of sustained failure to achieve consensus, the Agency shall request the parties in disagreement to document the case for their position and, taking account of the relative merits of the different options shall make a recommendation. The Agency shall document the different positions and the justification for its recommendation in the report that accompanies the final recommendation.

# Budget foreseen for 2012

	Unit		DIRECT COSTS	COSTS		INDIRECT COSTS	T COSTS			
ACTIVITY	Staff		CHAP 30		BL3110	Chapter 31 - BL3110	Titles 1 & 2	SUB- TOTAL	istribute overhead	TOTAL
	FTE	ACTIVITIES	STUDIES	TRANSLATIONS. INTERPRETATION						
Safety Management System	6.5	93 310.00	210 000.00	25 000.00	0:00	0:00	737 296.97	1 065 606.97	542 640.45	1 608 247.42
Support to accident investigation bodies	5	102 127.50	0.00	0.00	0:00	0:00	567 151.52	669 279.02	417 415.73	1 086 694.74
Safety certification & regulation (C&R)	16	409 035.00	240 000.00	301 720.00	0:00	0:00	1 814 884.85	2 765 639.85	1 335 730.33	4 101 370.18
Monitoring of railway safety performance - processes and outcome	6.2	118 800.00	0.00	0.00	0.00	0.00	703 267.88	822 067.88	517 595.50	1 339 663.38
Facilitation of vehicle authorisation	10.2	175 000.00	50 000.00	30 000:00	0.00	0.00	1 156 989.09	1 411 989.09	851 528.08	2 263 517.18
ERTMS system authority	12.7	371 000.00	400 000.00	0.00	0.00	0.00	1 440 564.85	2 211 564.85	1 060 235.95	3 271 800.80
Technical specifications	26.05	519 000.00	100 000.00	121 500.00	0.00	0.00	2 954 859.39	3 695 359.39	2 174 735.94	5 870 095.34
Railway staff	2.75	84 000.00	0.00	0.00	0.00	0.00	311 933.33	395 933.33	229 578.65	625 511.98
Shared Databases and registers	σ	55 000.00	0.00	20 000.00	1 145 000.00	0.00	1 020 872.73	2 240 872.73	751 348.31	2 992 221.04
Monitoring Interoperability	2	10 000.00	0.00	8 500.00	0.00	0.00	226 860.61	245 360.61	166 966.29	412 326.90
Promoting a common approach to safety and economic evaluation	7.7	168 037.50	400 000.00	143 280.00	0.00	0.00	873 413.33	1 584 730.83	642 820.22	2 227 551.05
Support to operations	52.7	0.00	0:00	0.00	1 115 000.00	540 000.00	5 977 776.97	7 632 776.97	-7 632 776.97	0.00
Management	8.2	27 690.00	0.00	0.00	0.00	100 000.00	930 128.48	1 057 818.48	-1 057 818.48	0.00
Total	165	2 133 000.00	1 400 000.00	650 000.00	2 260 000.00	640 000.00	18 716 000.00	25 799 000.00	0.00	25 799 000.00

### **Activities**

The Agency's **generic** activities within its overall objective are as follows

- The Agency is involved in the **Production of documentation**. This takes the form of recommendations for secondary European legislation such as Technical Specifications for Interoperability (TSIs) or Common Safety Methods (CSM). For the drawing up of these recommendations the Agency has established a number of Working Parties composed of representatives of the Competent Authorities from the Member States and the European Railway Representative Bodies. The Agency normally produces application guidance to accompany the formal text.
- The Agency is charged with the **Development and Management** of **Databases and Registers** related to railway Interoperability and Safety. These include such things as the register of vehicle types the reference document of national rules used for vehicle authorisation and the databases of safety certificates and authorizations. The Agency also provides support and advice to the Commission in respect of the databases of notified national rules managed by the Commission.
- As an independent and neutral body of expertise the Agency may be called upon to Compile Reports and Provide Opinions upon matters within its competence such as national technical or safety rules and refusals by National Safety Authorities to authorise placing railway sub-systems or vehicles in service or proposals for new measures to manage dangerous goods.
- The Agency has a growing role in Dissemination and Training. The scope of this activity covers both the broad European legal framework of the Interoperability, Driver Licensing and Safety Directives and the specific texts produced by the Agency.
- The above activity also reflects the Agency's role of Providing Assistance to the Commission and Member States in the development, implementation, and monitoring of the framework put in place by the Interoperability, Safety and Driver Licensing directives.
- Finally the Agency has a key role as Facilitator and Coordinator. It is a neutral venue and "the only place where all the railway actors meet". In this context it is the ideal forum for development of the understanding of common problems affecting the competitiveness of the railway sector and the building of consensus solutions and a common understanding of priorities. The safety platform will support the Agency to fulfil this role for safety aspects.

Broadly speaking this puts the Agency as the de-facto "Railway System Authority" for Europe.

These actions are focused around 13 Activities each of which involves a number of projects:

- Developing and promoting a common understanding of Safety Management Systems
- 2. Support to Accident Investigation Bodies
- **3.** Developing and promoting harmonised safety certification & regulation processes
- 4. Monitoring of Railway Safety Performance
- 5. Facilitation of Vehicle Authorisation
- 6. ERTMS System Authority
- 7. Technical Specifications
- 8. Railway Staff
- 9. Shared Databases and Registers
- 10. Monitoring Interoperability
- **11.** Promoting a Common Approach to Safety and Economic Evaluation
- 12. Support to Agency Operations
- 13. Agency Management

These are described in more detail in the Activity Fiches.

#### **Key Activities in 2012**

2012 will be a key year for the making transparent and simplification of the processes and rules used for authorizing railway vehicles and subsystems. Work will be coming to a conclusion on the extension of scope of the Technical Specifications for Interoperability to the entire railway system and the closing of some of the critical open points. This will eliminate the need for simultaneous conformity with TSIs and national rules each of which requires their own verifications. Furthermore for cases where national rules remain applicable (e.g. existing non TSI conform vehicles to be authorized in another country) 2012 will see the completion of the Reference Document "Database Cross Referencing National Rules for vehicle authorisation and their equivalence".

In the Safety field the legislative programme initiated by the directives of 2004 and 2008 will be completed. The CSM for risk assessment as well as CSM for conformity assessment and the ECM certification scheme will be in full application. The CSMs for monitoring and supervision will be finished and waiting for publication. The Agency will then enter in a new phase and concentrate on follow-up, modifications of the texts and dissemination activities, in short make efforts to have the system working.

Furtheron, the Agency assists the Commission in checking the transposition of the Interoperability Directive in the different EU Member States.

The Agency, with the support of the **Safety Platform** established in 2011, will also analyse if additional legislative measures are necessary to have the system working and what are the most critical safety issues. All this will pave the way for the migration plan to a single safety certificate for Railway Undertakings, presented in 2011 and hopefully under gradual implementation. In order to avoid non coordinated reactions after serious accident or repetitive incidents, the Agency will also develop, within the safety platform, a process allowing having common agreed EU positions and action plans.

2012 also sees the completion of baseline 3.0.0 of the **ETCS** specifications.

As well as completing documentation the Agency will be very heavily involved in **dissemination** (briefing and training) of the European framework and the contents of the documents that it has produced and that have come into force over the last few years.

With the full implementation of the European framework we anticipate to be asked to provide a significant number of **Technical Opinions** on such matters as TSI errors, compatibility of national rules with EU legislation, equivalence of national rules and refusals to authorize placing into service.

The Agency also anticipates a significant amount of work facilitating and coordinating the resolution of cross-sector safety and technical problems.

#### 1. Developing and promoting a common understanding of Safety Management Systems (SMS)

The concept of SMS is a key element in the legislative framework to improve the safety performance in an open railway market, as set out by Directive 2004/49/EC (RSD). It is the designated mean for RUs and IMs to ensure the continuous control of all risks related to their activities and it forms the basis for safety certification/authorisation by NSAs. There is however clear evidence that, three to four years after the RSD should have been implemented, different RUs and IMs are still failing to grasp the basic concepts of a good working SMS, showing different levels of understanding and application of its requirements.

A prime activity for the Agency is therefore to continue the development on the understanding of the basic concepts, elements and processes that are part of an adequate SMS within the railway sector, continuously taking into account the evolving knowledge on this topic in science and relevant other safety related sectors, and to promote this common understanding throughout Europe.

#### Desired impact

The Agency aims to contribute to a better understanding by all stakeholders on the functioning of an adequate safety management system and how this can help to give assurance that the risks related to operating the railway are under control.

#### **Project 1.1: Developing SMS overall principles**

The SMS guidelines provide a knowledge building basis to be used by RUs/IMs to design and implement their SMS in conformity with requirements set up by the Safety Directive, based on the best practices adopted in the railway sector and in other high reliability industries, also allowing the integration with other management systems.

Although mainly addressed to RUs/IMs that have to design and implement their SMS in order to obtain a safety certificate/authorisation,it is, in addition, useful to all those that have an interest in developing their knowledge in safety or integrated management systems (e.g.: regulatory / supervisory bodies).

Principal outputs 2012	Legal basis	Timing/Frequency
<ul> <li>Development of SMS guidelines:</li> <li>development of specific guidance</li> <li>Study - Identification of existing academic research on processes that form an SMS</li> </ul>	SD- Art. 6(3)(b)	ongoing Oct 2011 – Mar 2012
Dissemination of SMS guidelines  Organisation of workshops  Development of web based application		2011 – 2013 Dec 2012

#### Project 1.2: Developing CSM on Risk Assessment

The Common Safety Methods on Risk Assessment (CSM on RA) provide a harmonised framework for assessing significant changes. This harmonised framework shall be mainly used in the risk assessment management process of operators' Safety Management System.

The CSM on RA needs to be used for any change as referred to in point (2)(d) of Annex III of Directive 2004/49/EC or for change of structural subsystems to which Directive 2008/57/EC applies which are considered as significant changes (as defined in 352/2009/EC regulation).

The changes could be technical, operational or organizational.

The CSM on RA applies to a lot of actors – RU, IM, ECM, manufacturers, assessment bodies and NSA.

As a consequence of the delivery to the EC of the Agency report referred to in Article 9(4) of 352/2009/EC regulation on CSM on RA by the end of 2011, the key objectives of the CSM on RA project in 2012 are:

- The delivery to the EC of the Agency recommendation on the revision of 352/2009/EC regulation on CSM on RA by the end of April 2012 taking into account the inputs received from the consultation of the social partners and NSA.
- The delivery to the EC of a progress report on the development of risk acceptance criteria to be used in explicit risk estimation for operational issues by the end of 2012.
- The delivery to the EC of a progress report on the development on links between the risk acceptance criteria developed for technical systems and their acceptable availabilities by the end of 2012.
- The delivery to the EC of a report on the feedbacks on the application of the CSM on RA collected by the Agency during 2012.

Principal outputs 2012	Legal basis	Timing/Frequency
Revision of 352/2009/EC  Recommendation  Accompanying report  Impact Assessment  Support to EC  Prepare dissemination	SD Art 6(3)(a) SD Art 6(4) Mandate 04/49-MA05- EN03	Apr 2012/ Dec 2012
Development of Risk Acceptance Criteria (RAC)  RAC for operational issues  RAC and availability criteria	As above	Dec 2012
Feedback from first application – Return of experience	As above	Dec 2012

#### **Project 1.3: Developing CSM on Monitoring**

The CSM on monitoring project aims at harmonising safety monitoring methods for the railway sector.

The common monitoring method for the railway sector is, in first instance, addressed to the railway undertakings, is also intended to address other actors such as the ECM and the manufacturers as part of the interface management process.

As a consequence of the delivery to the EC of the Agency recommendations on the CSM on monitoring by the end of 2011, the key objectives of the CSM on monitoring project in 2012 are:

- The support to the EC for drafting the EC regulations on the CSM on monitoring.
- The elaboration of a program and of materials for the dissemination of the CSM on monitoring.

Principal outputs 2012	Legal basis	Timing/Frequency
Dissemination program and material	SD Art 6(3)(c)	Dec 2012

#### 2. Support to accident investigation bodies

Article 1 (Purpose), citations (23) to (25) and Article 19.1 of the Railway Safety Directive (RSD) require the NIBs to be established, to investigate serious accidents (and accidents that under different circumstances might have led to serious accidents), and to make recommendations where appropriate in order to maintain or improve European railway safety.

The ultimate objective of these investigations is the improvement of railway safety and the prevention of accidents. A correct application of the investigation framework set out in the RSD, whereby all concerned organisations recognise and accept their own and each other's roles and responsibilities in investigating accidents and incidents, can contribute to a sustainable and safe development of the railway system in Europe.

From 2004 the EU countries have started to organise their National Investigating Bodies according to this Directive. Almost all the EU countries have a National Investigating Body (NIB) in place and in practice investigate accidents.

The Agency is responsible, according to the Agency Regulation, for assisting the Commission, including collecting information from the NIBs [article 21b (c)] and for organizing and facilitating cooperation between the investigating bodies defined in article 21 of the RSD (article 6.5 of the Agency Regulation). Article 21.7 of the RSD also requires the Agency to support the NIBs to develop common investigation methods and common principles for the follow-up of recommendations and adaptation to the development of technical and scientific progress.

Thus the Agency provides support to the Commission and to the NIBs by organizing and facilitating NIB cooperation and by gathering and analysing data from the NIBs.

#### **Desired impact**

The Agency aims to support the NIBs' capabilities in, and performance of, their primary role of investigating accidents. The areas where support will be given, and where benefits are expected, are of the guiding principles for the conduct of railway accident investigations by the NIBs, the training of accident investigators, the analysis and feedback on investigation reports, the development and implementation of harmonized practices for accident investigation where applicable, and the promotion of an understanding by the NIBs of the concepts, processes and practices relating to SMSs, TSIs and the ERTMS.

The Agency will also develop a policy for its response to major serious European railway accidents and promote the use of human factors expertise by the NIBs. The impact of these initiatives shall be an improved efficiency and effectiveness of the NIBs in performing their duties, an increasing European harmonization of NIB process and practice.

#### **Project 2.1: Harmonising overall NIB principles**

Working closely with the NIBs, and covering the scope of accident investigation as laid down in the RSD, the Agency will develop a set of guiding principles relating to the fundamentals of accident investigation from European and international best practice. This will form the foundation of the continued work of developing guidance to key parts of RSD relating to the process of investigating and reporting

investigation data in a common manner. It will also form the foundation for the content of the programme of modular courses for the training of accident investigators in Europe. Lastly, the project will cover the analysis of accident investigation reports and the feedback of the outcome to the NIBs concerned, and the promotion among the NIBs of awareness into SMSs, TSIs, and the ERTMS.

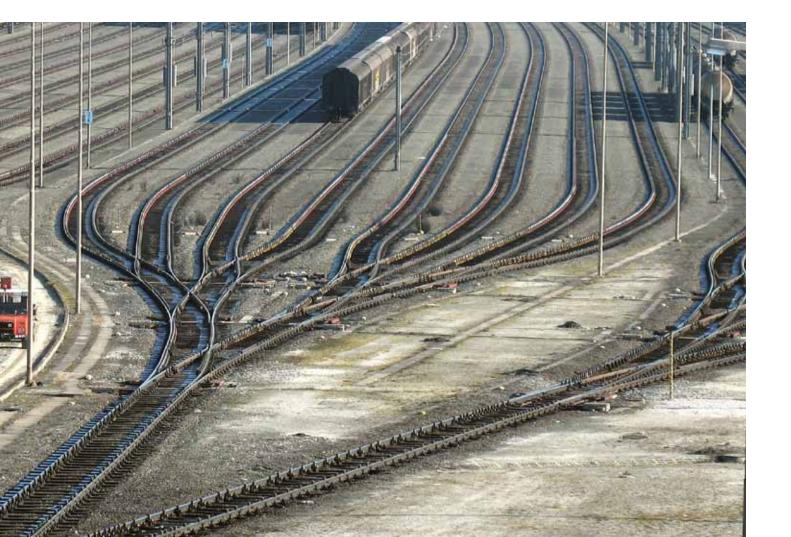
Principal outputs 2012	Legal basis	Timing/Frequency
Guiding principles for the fundamentals of accident investigation	AR – Art 5 SD – Art 21(7)	1st Q 2012
Guidance to the NIBs on aspects of the RSD Articles 22 and 24.	As above	4 <sup>th</sup> Q 2012
Development of a further two course modules for accident investigator training (modules 3 and 4, following on from 1 and 2 done in 2011)	As above	3 <sup>rd</sup> Q 2012
Execution of four training courses within the common European framework	As above	Ongoing
Analysis and feedback on investigation reports	As above	Ongoing
Promoting the awareness of SMSs, TSIs, ERTMS: delivery of a roadmap for NIBs on SMSs and TSIs	As above	4 <sup>th</sup> Q 2012

#### Project 2.2: Promoting cooperation and providing assistance

The Agency will carry on organizing the Network of NIBs to coordinate and promote the participation of the NIBs in the tasks of Project 1 above. This will involve workshops with the NIBs on dedicated topics related to Project 1, the organization of the NIB Network and its meetings, including joint meeting with the NSA network where appropriate, and providing assistance to the NIBs upon request.

In particular, the Agency will further develop a network of human factors experts, and promote their use by the NIBs, as well as complete the work on developing and implementing a policy to regulate the Agency's response to major serious accidents in Europe.

Principal outputs 2012	Legal basis	Timing/Frequency
Organisation of the NIB Network and its meetings	AR – Art 5 SD – Art 21(7)	Ongoing
Workshops with the NIBs on selected topics	As above	Ongoing
Development and implementation of the policy for the Agency's response to major serious accidents	As above	4 <sup>th</sup> Q 2012
Promotion of the use of human factors expertise by the NIBs	As above	Ongoing



#### 3. Developing and promoting harmonised safety certification and regulation processes

Railway safety within Europe is built on the mutual acceptance of certificates and authorisations for RUs/ECM and IMs issued in single member states. This requires a similar approach to certification and regulation, an equivalent level of performance and a high degree of mutual trust amongst NSAs and between other certification bodies. Recent findings, however, show a great variety in approaches and a different level of maturity of NSAs in different Member States, sometimes even hindering the further development of an open European railway market.

A prime activity for the Agency is therefore to continue the development and harmonisation of the core safety certification

and regulation processes that form part of the safety regulatory framework, continuously taking into account the evolving knowledge on this topic in science and relevant other safety related sectors, and to promote this harmonised approach throughout Europe.

#### **Desired impact**

The Agency aims to contribute to an accelerated harmonization of safety certification and regulation processes throughout Europe and an enhanced understanding and respect of the role and responsibility of all stakeholders within the safety regulatory framework.

#### Project 3.1: Developing overall principles for certification and regulation

To enable RUs to operate freely throughout Europe, the activities of NSAs should be harmonised in all Member States. Therefore, the objectives of this project are to:

- harmonise the different levels of performance among the NSAs, facilitating the development of an open European market;
- facilitate harmonisation of the NSAs decision-making criteria and processes, described in article 16 of the Safety Directive;
- exchange and learn from best practices (which have been put in place by the most mature NSAs) and propose solutions to overcome identified problem areas

Principal outputs 2012	Legal basis	Timing/Frequency
Ongoing harmonisation of NSA processes – benchmark study of existing promotion and enforcement activities resulting in guidance on promoting and enforcing the safety regulatory framework	SD – Art. 6(3)(b) AR – Art. 21	Dec 2012
Ongoing harmonisation of NSA processes – study on identification of existing academic research on regulatory bodies and (safety) supervision activities	SD – Art. 6(3)(b) AR – Art. 21	Nov 2011 – Apr 2012
NSA Network activities – supporting the exchange of views and experience amongst NSAs in application of RSD 17.4 and AR Art. 6.5	SD – Art. 17(4) AR – Art. 6(5)	Ongoing
NSA survey – focusing on their setting up, legal powers and competences and on how in practice their activities are developed, based on the Safety Directive	SD – Art. 17(4) AR – Art. 6(5)	Dec 2012
Migration strategy – follow up of project plan	SD – Art. 10(7) AR – Art. 9(2)	Ongoing 2011 – 2016

#### **Project 3.2: Developing CSM on Conformity Assessment**

The Common Safety Methods on Conformity Assessment (CSM CA) provide a harmonised framework for NSAs to assess the SMS of RUs and IMs prior to the award of a safety certificate/authorisation and provides the basic principles for NSA supervision of safety performance after the award of the certificate/authorisation, which will be developed further in the CSM on Supervision.

The CSMs also establishes the hierarchical relationship between Part A and Part B safety certificates and fixes a common NSA approach to awarding Part B certificates. It also provides a transparent approach so that RUs and IMs know how their applications for certification will be assessed and the basic principles for how their performance will be assessed afterwards. This harmonised approach is an important building block towards the functioning of an open European railway system, for the development of a regime based on a single safety certificate and a greater role for supervision activity by the NSAs.

Principal outputs 2012	Legal basis	Timing/Frequency
CSM CA guidelines – dissemination	SD – Art. 6(3)(b)	June 2011 – Jul 2013
Feedback from first application		ongoing

#### **Project 3.3: Developing CSM on Supervision**

In order to promote and improve safety, NSAs need to build a relationship with the RUs and IMs that starts with the assessment of their applications and the issuing of a safety certificate/ authorisation. However, to obtain a complete picture of the risk profile and potential safety performance of the railway system within a Member State and of the different players in this system, NSAs need also to perform supervisory activities, using different sources of monitoring as an input.

By performing these activities, the NSA can provide the MS's Government and the public in general with a source of independent advice on railway safety issues.

The Common Safety Methods on Supervision (CSM SU) provide a harmonised framework to be used by the NSAs for monitoring and supervising the delivery of safe operations by RUs and IMs and the efficiency of their SMS.

Principal outputs 2012	Legal basis	Timing/Frequency
Dissemination of CSM SU		
dissemination material	SD – Art. 6(3)(c)	Dec 2012
dissemination programme		

#### Project 3.4: Developing ECM certification scheme

The ECM certification scheme provides a harmonised framework for the mandatory certification of entities in charge of maintenance for freight wagons and the voluntary certification of workshops and other ECM maintenance functions.

This certification scheme is an important building block towards safe European wide freight transport.

Principal outputs 2012	Legal basis	Timing/Frequency
Dissemination of CSM SU		
dissemination material	SD – Art. 14(a)(5)	2012 – 2013
dissemination programme		
Feedback from implementation		2012 – 2018
Cooperation of certification bodies		Ongoing

#### Project 3.5: Coordination of the Accreditation Framework

The accreditation framework, with the different schemes mandated by the current and future legislation, based on reference standards (EN 45011, ISO 17000 series, etc.) and the specific provisions that make them adaptable for the railway sector, is expected to provide

a reliable basis for the adoption of consistent approach to accreditation all over Europe, in such a way to increase mutual trust among the interested parties.

Principal outputs 2012	Legal basis	Timing/Frequency
Development of accreditation schemes for: ECM, ISA, training centres and ERTMS testing laboratories	SD – Art. 6, 14(a) AR – Art. 6, 16(a)	Ongoing
Identification of further schemes to be developed		
Development of training on accreditation principles for NSAs		

Project 3.6: Ensuring consistency between EU legislation and national legislation of candidate countries and potential candidate countries (enlargement policy countries), as well as with corresponding legal frameworks given by international organisations like OTIF, UNECE, OSJD

goods, security, unified railway legislation, telematics, etc.), on OTIF level; for candidate and potential candidate countries: IPA Project

Monitoring of developments at UNECE level (transport of dangerous level appendix C: RID, Tank and vehicle technology, and on OSJD

Principal outputs 2012	Legal basis	Timing/Frequency
Monitoring of developments at UNECE, OTIF, OSJD level	AR - Art. 30(2)(b)	Ongoing
IPA-Project, ongoing works according to EC planning	AR - Art. 30(2)(b)	Ongoing

#### Project 3.7: Assist EC in monitoring/assessment of the regulatory framework

Evaluation of the transposition/legal implementation of EU recommendations and advices on request; on request: assessment legislation by MS; safety related technical opinions/examination, of publication and availability of National Technical Rules

Principal outputs 2012	Legal basis	Timing/Frequency
Evaluation of Railway Safety Directive (2004/49/EC) Evaluation of Interoperability Directive (2008/57/EC) Evaluation of Certification of Train Drivers Directive (2007/59/EC)	AR Art. 30(2)(b) AR Art. 30(2)(b) AR Art. 30(2)(b)	Ongoing and on request Dec 2012 Dec 2012: general report Dec 2013: final report
Safety related technical examination/opinion	ID Art. 9(a) & AR Art. 8 & 17 (3) AR Art. 10 and Art. 30 Dir 2001/14/EC, Art. 35 Dir 2001/14/EC, Art. 11a Dir 91/440/EEC	On request
Assessment of publication and availability of National Technical Rules	2.3.5 of Framework Mandate	On request

#### Project 3.8: Assist MS/NSA in correct development, implementation and harmonization of EU legislation especially regarding National Safety Rules and information to relevant stakeholders on request

Assessment of content and practical implementation of EU-Legislation in MS regarding NSR; Guidance for justification, establishment and transparency of NSR.

Principal outputs 2012	Legal basis	Timing/Frequency
Evaluation of NSR and renewed NSR	AR- Art. 6	Ongoing and on request
Develop Guidance for MS		Ongoing

#### 4. Monitoring of railway safety performance – processes and outcome

In application of Article 9 of the Agency Regulation, the Agency is charged with monitoring the safety performance at the level of the European Community. In order to develop a complete and consistent safety approach, this monitoring should combine the analysis of safety results through common safety indicators and common safety targets with the monitoring of compliance with and the effectiveness/efficiency of the legislative framework that is set out by the European Union.

The legislative framework that is set out by the RSD is the translation of the EC's intent to regulate railway safety on paper, but this only becomes meaningful ("law in action") when it is backed up by the mobilisation of the correct Member State powers through for example the activities of NSAs and NIBs. If the EU, as lawmaker, wants the necessary assurance that the system is working as intended to fulfil the aim of continuous improvement, safety processes and outcomes should be the focus of monitoring.

A prime activity for the Agency is therefore to initiative and develop a framework for monitoring safety performance not only by looking at safety results but also the at functioning of the core elements and processes that are part of the safety regulatory framework as introduced by the RSD and related EU legislation.

#### **Desired impact**

The provision of reliable and robust data to serve as reference for assessment of achievement of common safety targets. Improvement of the core processes of NSAs and NIBs through audits and assessments with the aim of increasing trust and quality, and improving and harmonising safety and performance.

#### Project 4.1: Monitoring safety performance outcome

The monitoring of safety performance through the common safety indicators and the evaluation of the performance through the common safety targets is a key element in the appreciation of the development of safety on the European railways.

CSI data will be based on the common definitions for all Member States and reported to the Agency by the end of September each year. The automatic data quality control tools, developed during 2011 and used by the NSAs when reporting the CSI data will be further refined.

During 2012, a new system, ERAIL, for accident investigation reporting will be launched and upgraded. The system will be used by the national investigation bodies when notifying the agency of opened investigations. The system will bring a new range of possibilities of monitoring safety and disseminating lessons learnt from accident investigation.

Principal outputs 2012	Legal basis	Timing/Frequency
Assessment of second set of CSTs	Commission Decision 2010/409/EU	Yearly
Launch of ERAIL system Upgrade of ERAIL	AR – Art 9 (2)	Jan 2012 Sept 2012
Upgrade of CSI data quality tools	AR – Art 9 (2)	May 2012

#### Project 4.2: The NSA cross-audit programme

To be able to harmonise and optimise the safety regulatory framework at EU level, all stakeholders need to have an overview of its effectiveness. Only an objective oversight function, that assesses activities of NSAs (and NIBs) in all Member States, in a structured and transparent way, will be able to provide all stakeholders with this necessary overview. This systematic control element at EU-level is missing in the existing safety regulatory framework.

The cross-audit framework, in which the Agency supports the transformation of the NSA peer review activities into a more structured and effective approach, where mixed teams of NSA and Agency staff perform in a 5 year cycle cross-audits of NSA processes put in place in all Member States can address this issue. In addition, the initiative will accelerate the harmonisation of NSA processes as foreseen by RSD Art.17.4 and therefore also contributes to the Agency's activity for developing and promoting harmonised processes for certification and regulation.

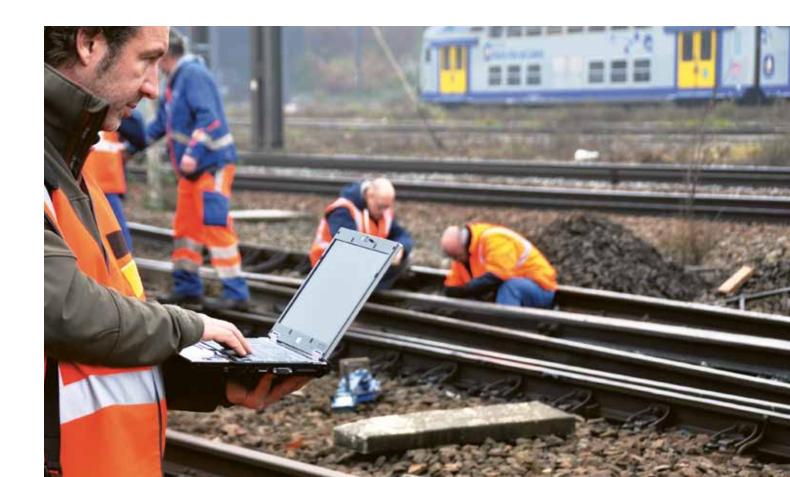
Principal outputs 2012	Legal basis	Timing/Frequency
Support for the Audit Committee	SD – Art. 17(4) AR – Art. 6(5), 21(b)	Ongoing
Conduct of 4 pilot cross-audits	AR – Art 9 (2)	December 2012

#### Project 4.3: Survey and assessment of NIB activities

The Railway Safety Directive requires the NIBs to be established, investigate serious accidents, and to make recommendations where appropriate in order to maintain or improve railway safety. In order for the Agency to be able to support the NIBs in this task and to fulfil the requirements, it is imperative to understand the way the NIBs work, how investigations are carried out and what the needs are.

NIB surveys aim at collecting information and provides a framework for a communication around their activities and organisation. The objective of the assessment of NIBs is to help them achieve their objective above by giving them support in identifying changes that will improve their efficiency and effectiveness.

Principal outputs 2012	Legal basis	Timing/Frequency
Conduct of 4 NIB assessments	AR - Art 9 and 33	Quarterly



#### 5. Facilitation of Vehicle Authorisation

Vehicle authorisation is currently recognised as a complex, expensive and time consuming process. Associated uncertainty and delay in some projects have led to expressions of concern at the highest levels in the railway sector.

The Agency's report on the existing vehicle authorisation processes identified that in many countries traditional "homologation" processes and associated national rules are applied in parallel with the processes and rules prescribed by the Interoperability and Safety Directives. This creates uncertainty and duplication of checks for the applicant and confusion about roles and responsibilities. Furthermore the report also highlighted that the interpretation and application of the Interoperability and Safety Directives is different between Member States thus creating risk of duplicate checks, high costs and uncertainty. In addition, whilst in some Member States much progress had been made with mutual recognition of the equivalence of national rules for vehicle authorisation (cross acceptance) there remains a substantial amount of work to be done to put in place the vehicle authorisation regime prescribed by the recast Interoperability Directive of 2008. It is also apparent that the requirements for Technical Compatibility between vehicles and networks and route compatibility between trains and routes are often not very transparent. This is especially the case for ETCS and GSM-R (ERTMS).

The Agency has a key role in facilitating the simplification of vehicle authorisation firstly by publishing the applicable rules and the national legal frameworks in the "Reference Document" envisaged by the recast Interoperability Directive, secondly by facilitating and disseminating a common understanding of the European process for authorisation (now published by the Commission as Recommendation 2011/217/EC), and thirdly by facilitating the Member States and Safety Authorities in the classification of equivalence of national rules and the adoption of equivalent and/or TSI compatible national rules between Member States.

Lessons from the early ETCS and GSMR implementations also need to be learned and disseminated in order that the requirements for ETCS and GSMR are made transparent and technical incompatibilities between existing ETCS and GSMR installations are not repeated in future projects. It is essential that on-board GSMR and ETCS that conform to the CCS TSIs may operate on TSI conforming routes without extra verifications, tests and checks.

#### **Desired Outcomes**

- The implementation in every Member State of the common, mutually recognized vehicle authorisation process prescribed by the recast Interoperability Directive and the Commission Recommendation 2011/217/EC.
- The publication in the Reference Document (including its application guide) of the national legal frameworks describing the application of this process in each Member State.
- A single, transparent and exhaustive list of parameters to be checked for vehicle authorisation and route compatibility.
- Transparent and non-discriminatory national rules for each of these parameters.
- Full classification and mutual recognition of the equivalences between the respective national rules and between these rules and the TSIs covering these parameters.
- Elimination of unnecessary, duplicative or redundant checks and processes (including on-track tests wherever possible)
- Provide guidance to ensure consistent application of EU regulation covering vehicle authorisation
- Resulting from the above there should be a progressive and measureable simplification of the vehicle authorisation process and a corresponding reduction in its duration, costs and uncertainty.

#### Project 5.1: Facilitating the Simplification of Vehicle Authorisation processes

Prior to the adoption of the recast Interoperability Directive a mixture of two authorisation processes were applied in most Member States. Whilst part of the processes were based on the Interoperability Directive and TSIs (where they existed) this tended to apply only for the Trans European Network (TEN) with old national authorisation processes using national rules (often derived from the old national railway company "homologation" procedure) mixed into the processes to cover off TEN parts of the network. This has created a complex, uncertain, time-consuming, and expensive set of authorisation processes each with different rules, procedures, roles and responsibilities. With the implementation of the recast Interoperability Directive, a single harmonised European authorisation process, including the concepts of Type Authorisation and mutual recognition of national rules (cross - acceptance) is put in place to cover all the European Railway System. This should lead to a substantial simplification of the authorisation processes.

The Agency has a number of roles in the facilitation of the simplification of authorisation processes. In 2010 it developed with the Commission a common understanding of the process (Recommendation 20011/217/EC) and took over an ongoing role for publication and its dissemination. In addition it has the task of publishing the national implementations of the authorisation processes (the National Legal Frameworks) in the Reference Document. Geographical Interest Groups will be used to disseminate the common understanding and explore differences in the National Legal Frameworks.

The Agency also gives supports to the commission providing technical opinions on rules and authorisations on request.

Principal outputs 2012	Legal basis	Timing/Frequency
Disseminating the common understanding of the authorisation process	AR - Art 21b	Ongoing
Publishing the National Legal Frameworks for vehicle authorisation in the Reference Document	EC Decision 2009/965	Ongoing
Assisting the Commission in the management of the High Level task force on Vehicle authorisation (to be defined)	AR - Art 21b	To be agreed
Providing a Technical opinion in the case of a decision by a competent national safety authority refusing the placing in service of a railway vehicle	AR Art 10.2 (b)	As requested
Report on authorisation of types of vehicle and authorisation for placing in service on the basis of conformity to type	Art 26, RISC MoM 60 and 61	Q1 2012



## Project 5.2: Facilitating the Publication and Evaluation of National Technical Rules including Rules used for Vehicle Authorisation

Pending the extension of scope of the TSIs to OFF-TEN, the closure of all open points in the TSIs and the full conformity of all vehicles and networks with those TSIs, there remains a need for National Rules to be used for subsystem and vehicle authorisation and ongoing maintenance of the essential requirements. The Agency has a role in the publication and evaluation of those rules. Firstly, by specifying the parameters to be covered by rules for vehicle authorisation, secondly, by facilitating the mutual recognition of equivalence of the rules covering these parameters and thirdly, by facilitating the national adoption of common rules (TSIs, ENs etc.).

Based on a recommendation from the Agency the list of parameters to be checked for vehicle authorisation was first issued as a Commission decision in 2009 (Decision 2009/965/EC). This is to be reviewed by the Agency on an annual basis to ensure that it and the TSIs are consistent with each other and to break down the parameters in a way that best facilitates mutual recognition.

As part of its responsibilities for the management and maintenance of the Reference Document, cross-referencing all the national rules applied by the Member States for placing vehicles in service, (see also the "Activity Databases and Registers") the Agency facilitates the classification of the equivalence of National Vehicle Rules between Member States. It does this by supporting and facilitating Geographical Interest Groups of Member States. These are organised around geographical zones (e.g. the Nordic Region) or Corridors (e.g. Corridor A Rotterdam-Genoa) according to local business needs.

The Agency provides assistance to the Commission both in the evaluation of new Technical Rules notified to the Commission and, on request from the Commission, Technical Opinions on national rules.

Principal outputs 2012	Legal basis	Timing/Frequency
Publishing and maintaining the list of parameters to be checked for vehicle authorisation	AR - Art 27	Updates as required in synchronisation with changes to TSI and register parameters
Facilitating the evaluation by NSAs of the equivalence of national rules used for vehicle authorisation	SD – Art 17 (4) Doc DV36	Ongoing
On request of the Commission evaluation of National Technical Rules submitted for notification	Art 21b of AR and Letter from EC dated	Ongoing
Providing Technical Opinions on the Equivalence of National Technical Rules	AR Art 10. 2 (a)	On request
Facilitating, through studies, workshops, research proposals and recommendations a common approach to the evolution of national technical rules in specific subjects where the current level of diversity inhibits mutual recognition. (e.g. EMC)	AR - Art 27	Ongoing

#### 6. ERTMS System Authority

The European Railway Traffic Management System, ERTMS, is a major industrial project at the forefront of the EU agenda for an interoperable railway system and the progressive establishment of an open market in the sector.

The system is based on two technological and operational pillars: ETCS, the harmonized European Train Control System, and GSM-R, the radio communication system for voice and data application based on the worldwide GSM standards.

The ERTMS specifications are referenced in the Annex A of the TSI CCS; in addition to the revision and extension of scope of the TSI charged to the Agency by the Regulation and the Commission Mandates, the art.21(a) introduced with the modified Regulation in 2008 requests the Agency to carry out a number of specific tasks in coordination with the Commission ensuring a coherent development of the ERTMS

and contributing to the compliance of ERTMS equipment as with the specifications in force. The Operational Rules specific for ETCS and GSM-R are defined in the Annex A of the TSI OPE.

#### **Desired impact**

The Agency aims to contribute to the coherent European strategy to foster the deployment of ERTMS, closely cooperating with the Commission and the Sector to ensure up-to-date technical and operational specifications, supporting the European initiatives to identify, design and ensure compliant implementations. The Agency fulfils the role of System Authority for the specifications of the system, GSM-R, ETCS and the related operational rules. The Agency provides technical support to the ERTMS Coordinator in its work and initiatives.

#### Project 6.1: Change Control Management and database of Change Requests

The management of a shared system at European level requires transparent, accountable principles implemented in an effective process to ensure the collection, analysis and resolution of thousand of reports and requests affecting the harmonized standards.

This process is defined by the Agency's Change Control Management procedure, and entails the support and cooperation from the Sector and the NSA, together with the establishment and management of a database for reporting Change Requests (CR) and to control allocation of shared work items.

Principal outputs 2012	Legal basis	Timing/Frequency
Periodic reports on the status of the CR in the database.	AR, art 21(a)	Monthly
Approval via CCM of ETCS and GSM-R specification documents		4 <sup>th</sup> Q 2012

#### Project 6.2: Support to the EC as per art. 21(a)

Develop the system version management strategy separately for ETCS and GSM-R; assess the migration mechanisms for the early implementers of ETCS in consequence of Decision 2008 on the adoption of 2.3.0d for ETCS.'

Support the EC in the development of the EU deployment plan for ERTMS and coordinating the installations along Corridors. Activities contributing to the Steering Committee set up by the European Coordinator for ERTMS. Support to other Units

Principal outputs 2012	Legal basis	Timing/Frequency
Report on Baseline 3 Version Management for GSM-R	AR, art 21(a)	4 <sup>th</sup> Q 2012 2 <sup>nd</sup> Q 2012

#### Project 6.3: Verification and authorisation survey

In cooperation with NoBos and NSA evaluate the processes for the verification and authorisation of ERTMS. Recommend appropriate measures to the EC in case of risk of incompatibilities between network and vehicle installations

The Agency chairs an ad hoc working group of notified bodies with a view to checking that the EC procedures of verification carried out by notified bodies in the context of specific ERTMS projects.

Evaluate and follow up the certifications

Principal outputs 2012	Legal basis	Timing/Frequency
Report to the EC recommendations to EC if needed	AR, art 21(a)	December

#### Project 6.4: ETCS Baseline 3

Develop and validate the complete set of technical specifications for the ETCS Baseline 3, in cooperation with the sector organizations, contracting testing to external laboratories, leveraging on coordinated and partially TEN funded support from the ERTMS Users Group.

Principal outputs 2012	Legal basis	Timing/Frequency
Release of the updated specifications for Baseline 3 including test cases	AR, art 21(a)	2 <sup>nd</sup> Q
Revision of the ETCS Operational Rules		2 <sup>nd</sup> Q

#### Project 6.5: GSM-R next baseline

Classify the requirements in the current EIRENE specifications, review them with the sector and the UIC, following the implementation of the GSM-R MoU signed in October 2010, use structured tool based on Excel macros, to compile the final format of the new specifications.

Organise the discussion on the time plan for the reframing to new technology while preserving the functional interoperability requirements.

Principal outputs 2012	Legal basis	Timing/Frequency
Proposal for restructured EIRENE requirements	AR, art 21(a)	4 <sup>th</sup> Q 2012
Update of GSM-R Operational Rules	AR, art 21(a)	2 <sup>nd</sup> Q 2012
Test cases draft	AR, art 21(a)	3 <sup>rd</sup> Q 2012

#### 7. Technical Specifications

According to the Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community, 'Technical specification for interoperability' (TSI) means a specification adopted in accordance with this Directive by which each subsystem or part of subsystem is covered in order to meet the essential requirements and ensure the interoperability of the rail system. The Agency has been mandated to revise the TSIs with an aim at closing open points, merging (where appropriate) the HS and CR TSIs, and extending their scope to the entire European Community rail network. Closing open points will also include specifying the relevant parameters for the 1520 mm rail system, as far as possible.

As emphasised by the "new approach" to standardisation, the functional specifications of the TSIs are complemented by technical solutions described in harmonised standards which provide a

presumption of conformity with the TSIs. It is therefore of utmost importance for the Agency to ensure a close coordination with the Standardization bodies (CEN, CENELEC, ETSI) and the Notified Bodies (NoBos) who verify the compliance to the TSI requirements of sub-systems and the conformity (to the requirements of TSIs) of Interoperability Constituents.

#### **Desired impact**

It is expected that the revised TSIs will contribute to the simplification of the legal framework in the field of railway technology, related to design, construction, placing in service, renewal and upgrading. The revised TSIs should be easier for application and should contribute further to the development of the Community's rail system, opening the rail market and enhancing competitiveness of rail transport compared with the other means of transport.

#### **Project 7.1: TSIs Revision and development**

By the Mandate dated 29th April 2010, the Commission assigned to the Agency the task of revising the TSIs in force. The aim is to close open points and extend their scope and extend their scope to the entire European railway network. Several preliminary studies have been (merger of HS and CR; split of 'transverse' TSIs) or are in course of being carried out (limits of scope; interchangeable spare parts) which may impact upon the revision process and deliverables. This Work Programme has been based upon the most realistic assumptions.

Furthermore, the Noise (NOI) TSI is due to be revised in 2013 to reassess the maximum allowable emission levels and include requirements for infrastructure if deemed appropriate based on the return on experience.

The revision of TSIs is carried out with the support of Working Parties which will meet on a regular (typically once every 6 to 8 weeks).

Specific subjects to close open points that are key to interoperability are addressed by specific working groups (e.g. running dynamics; Electro-Magnetic Compatibility (EMC)) equally chaired by ERA Project Officers. For closing open points related to the 1520 mm rail system, the special sub-groups will be created, attached to the Working Parties in charge of the three TSIs: INF, ENE and RST-LOC&PAS.

Every time a TSI is revised an application guide is issued to help stakeholders in the implementation of the TSI. This guide indicates links to harmonized standards, established methods to assess the compliance to requirements etc.

The list of TSIs to be revised in 2012 in the frame of the Mandate notified by decision C(2010)2576 dated 29 April 2010 covering the following aspects or sub-systems:

#### • High Speed and Conventional Control-Command and Signalling (HS and CR CCS TSI)

After merging the CR and HS TSI CCS, the revision of the TSI will focus on the extension of scope into the entire rail network. (to be checked by ERTMS Unit)

#### • HS Rolling Stock (HS RST TSI) and Locomotives and Passenger Rolling Stock (CR LOC and PAS TSI)

HS RTS TSI and CR LOC&PAS TSI will be merged into a single TSI covering the HS and CR trainsets, locomotives and passenger carriages (freight wagons will remain covered by a separate TSI). The open points will be closed as far as possible, with special attention given to requirements for 1520 mm rail system.

#### · Infrastructure (HS and CR INF TSIs)

A single INF TSI will be created, merging together HS and CR TSI with a view of the extension of scope to the entire rail network. The open points will be closed as far as possible, with special attention given to requirements for 1520 mm rail system.

#### • Energy (HS and CR ENE TSIs)

A single ENE TSI will be created, merging together HS and CR TSI with a view of the extension of scope to the entire rail network. The open points will be closed as far as possible, with special attention given to requirements for 1520 mm rail system.

#### **Project 7.1: TSIs Revision and development**

#### • Operation and Traffic Management (OPE TSI)

The revision will include, among others, harmonisation of operational rules (Appendix B) as set out in the mandate, revision of Appendices C and D.

#### • Safety in Railway Tunnels (SRT TSI)

The revision will include, among others, aligning the CR LOC&PAS and HS RST requirements related to fire and tunnel safety (in conjunction with merging the HS and CR RST TSIs), scope extension, and addressing operation of TSI compliant RST in the existing tunnels.

#### • Access for Persons with Reduced Mobility (PRM TSI)

The revision will include, among others, closure of open points, removal of incompatibilities and consistency, correction of errors and clarifications when needed, extension of scope according to the complementary study on the subject, revision of the implementation strategy for an improved migration towards full compliance.

#### Rolling stock Noise (NOITSI)

The revision will include, among others, merging HS and CR TSIs, including HS RST TSI requirements, scope extension to off-TEN, covering the 1520 mm network, and lowering pass-by noise limits,

#### • Telematic Applications for Freight services (TAF TSI)

Step 2 of the revision, to be commenced in 2012, based on information to be received, will include review of chapters 1 and 4 with the aim to support the on-going deployment of TAF TSI. Change Control Management system will also be set up and aligned with the CCM already existing for TAF.

#### • Telematic Applications for Passenger services (TAP TSI)

Operation of the Change Control Management system will continue to operate, with two sets of changes submitted in June, and in December 2012.

TSI	Legal basis	Principal outputs 2012	Timing/Frequency
CCS	A . 42 (AD FM FM	Preliminary TSIs and reports	Apr. 2012
CCS	Art. 12 of AR, FM, EM	Final draft TSIs and final reports	Oct. 2012
RST (LOC&PAS)	Art. 12 of AR, FM, EM	Preliminary draft	Apr. 2012
NOT (LOCAPAS)	ALL 12 OF AR, FWI, EIVI	Final draft	Oct. 2012
INF	Art. 12 of AR, FM, EM	Preliminary draft	Apr. 2012
IINF	AIL. 12 OI AR, FM, EM	Final draft	Oct. 2012
ENE	Art 10 of AD EM EM	Preliminary draft	Apr. 2012
LINE	Art. 12 of AR, FM, EM	Final draft	Oct. 2012
OPE	Art. 12 of AR, FM, EM	Intermediate report	Aug. 2012
SRT	Art. 12 of AR, FM, EM	Preliminary draft	Apr. 2012
SINI	Art. 12 of AK, FM, EM	Final draft	Oct. 2012
PRM	Art. 12 of AR, FM, EM	Preliminary draft	Apr. 2012
FNIVI		Final draft	Oct. 2012
NOI	Art. 12 of AR, FM, art 7.2 of the TSI NOI	Preliminary draft	June 2012
TAF	Art. 12 of AR, FM, EM	ToR for revision (report to DG MOVE)	June 2012

#### **Project 7.2: Coordination with Notified Bodies (NoBos)**

In order to support the development of the TSIs and ensure their efficient implementation, the Agency is coordinating its TSIs related activities with the Notified Bodies (NoBos).

In particular, the Agency assists the Commission by acting as technical secretariat of NB-Rail (Network of Notified Bodies). The Agency is also represented in the various sub-groups of NB-Rail.

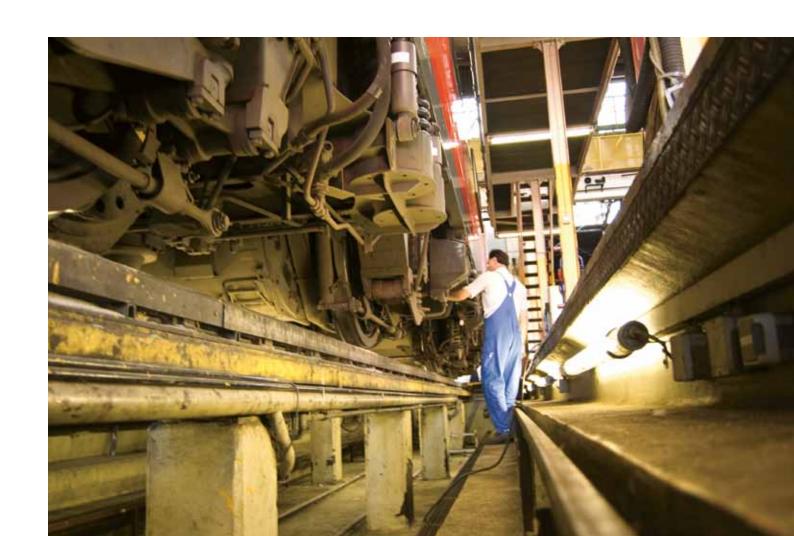
Principal outputs 2012	Legal basis	Timing/Frequency
Carrying the secretary activity Participation in the various meetings	AR Art. 12(d), 13	Ongoing activity

#### Project 7.3: Coordination with European Standardization Organisations

In order to support the development of the TSIs and ensure their efficient implementation, the Agency is coordinating its TSIs related activities with the European standardisation organisations (ESOs).

The Agency is member of JPCR (Joint Programming Committee for Rail) that coordinates the development of the ENs related to rail and is represented in the two Technical Committees for rail (TC256 and TC9X).

Principal outputs 2012	Legal basis	Timing/Frequency
Issuing the requests for standards Participation in the meetings	Art. 4.2 of AR	As required Ongoing



#### 8. Railway Staff

According to European railway legislation, the Agency shall address recommendations to the Commission relating to the working conditions of all staff executing safety-critical tasks and concerning the determination of common criteria for the vocational competences and the assessment of the staff involved in the operation and maintenance of the railway system. This includes also tasks aiming to support the practical implementation of the train driver licence scheme and the exchange of experiences between Member States in this respect.

Safety management systems provide for staff training programmes and systems which ensure that staff competence is maintained and that duties are performed in the appropriate manner. In addition, a process of continuous training shall be set up in order to ensure that staff competences are maintained, in accordance with the Safety Directive.

Staff competences and health and safety conditions have been developed in the context of the interoperability directives, as part of the OPE TSI. There is a need to ensure that common principles are used to develop the specifications for chapters 4.6 and 4.7 of

each TSI. Distinction between aspects that are covered by the SMS and those that need to be dealt with in TSIs has to be taken into account properly.

The employment of train drivers certified in accordance with train drivers' Directive should not exonerate RUs and IMs from their obligations to set up a system of monitoring and internal control of the competences and conduct of their train drivers pursuant to the Safety Directive and should form part of that system. The harmonised complementary certificates should not relieve either RUs or IMs of their responsibility for safety and, in particular, the training of their staff.

#### **Desired impact**

Within the scope of mandates defined in the relevant EU legislation the Agency contributes to the development of common European criteria for railway staff involved in the operation and maintenance of the rail system. Such criteria concern training tasks, certification or licensing systems or conditions linked to health and safety at work.

#### **Project 8.1: Train Drivers**

'Train driver' means a person capable and authorised to drive trains, including locomotives, shunting locomotives, work trains, maintenance railway vehicles or trains for the carriage of passengers or goods by rail in an autonomous, responsible and safe manner.

The aim of the tasks gathered in this project is to further supplement the train drivers licence model established by the Train Driver Licensing Directive. In particular they refer to the development of assessment schemes to be used for accreditation of training centres and examiners of train drivers, and two reports – One on the feasibility of the use of smart cards and another on evaluation of the progress with implementation.

Principal outputs 2012	Legal basis	Timing/Frequency
Draft assessment scheme for the accreditation of training centres and examiners	AR – art 17.2 TD – art.20 & 23	Sep 2011 – Jun 2014
Report on evaluation of the development of the certification of train drivers in accordance with the TD	TD - art 33	Oct 2013
Report on feasibility of the use of smart cards based on external study results expected end 2011.	TD – art.34	Nov 2012

#### Project 8.2: Other on board Staff

'Other crew members performing safety-critical tasks' means staff on board the train who are not train drivers but who help to ensure the safety of the train and of the passengers and goods being transported.

The Agency submitted the report on this professional group to the Commission in September 2010. As foreseen in Art 28 of the Driver Licensing Directive the EC will present a report on this matter to Parliament and Council. We assume the EC will follow at least partly the agency recommendations and mandate the Agency with respective follow up activities.

Principal outputs 2012	Legal basis	Timing/Frequency
To be determined by future EC request/mandate	(linked to) TD – art.28	Dec 2011 - Dec 2012 (assumption)

#### Project 8.3: Professional competences and health and safety

The aim of the project "Professional competences and health and safety " is to check and evaluate appropriateness of the current

specifications of Chapters 4.6 and 4.7 applying a horizontal approach in parallel to the general TSI revision work.

Principal outputs 2012	Legal basis	Timing/Frequency
Intermediate Report on a common approach for TSIs on the specifications on "Professional competences" and "Health and safety conditions" (chapters 4.6 and 4.7 of TSIs) of the staff involved in operation and maintenance	ID Art 5.3 g	Dec 2011 – Dec 2013



#### 9. Shared Databases and registers

In order to ensure the greatest possible transparency and equal access for all parties to relevant information, the public documents envisaged for the interoperability process and for matters related to safety should be accessible to the users and to the public.

The Agency is required to provide an efficient means of exchanging this information by developing and maintaining several databases and registers. To develop and maintain transparency of information the Agency will continue to:

- develop the legislation and specifications on registers,
- put in to place and maintain the databases and registers,
- agree with the relevant parties on the data transmission
- validate the data

#### **Desired** impact

Transparency of information.

#### Project 9.1: ERADIS (ERA Database of Interoperability and Safety)

The database is used for collection and publishing documents concerning safety and interoperability. According to the Agency Regulation the Agency has to make publicly available following documents:

- the EC declarations issued in accordance with the Interoperability Directive,
- the Authorisations for placing in service of infrastructure and fixed installations,
- the Licenses issued in accordance with the Drivers Licensing Directive,
- the certificates issued in accordance with Article 10 of the Safety Directive,

- the investigation reports sent to ERA in accordance with Article 24 of the Safety Directive;
- the national safety rules notified to the Commission in accordance with Article 8 of the Safety Directive

In addition this data base includes the reports on service quality performances of the railway undertakings in application of article 28 of regulation EC/1371/2007 on rail passengers' rights and regulation.

In accordance with the certification scheme on the Entity in Charge of Maintenance (ECM), the database will also be used to provide information on certification bodies and issued ECM certificates.

Principal outputs 2012	Legal basis	Timing/Frequency
Extension of ERADIS for ECM certificates	Art. 18, 19 of AR	Dec 2012
Maintenance including update of the content	Art. 18, 19 of AR	Ongoing

#### Project 9.2: Reference Document database of equivalence of national vehicle rules and processes

The Reference Document lists all the national rules applied for the authorisation to place vehicles into service. In force from August 2011, it has a form of series of pdf documents. During 2011 and 2012 the data will be moved to a database managed by the Agency that will allow easy cross referencing of Member States' rules for vehicle authorisation and their equivalence.

This database is to be linked with the Commission's database of National Technical and Safety Rules (NOTIF-IT) in order that Member States may benefit from single data entry of data qualifies for inclusion in both databases.

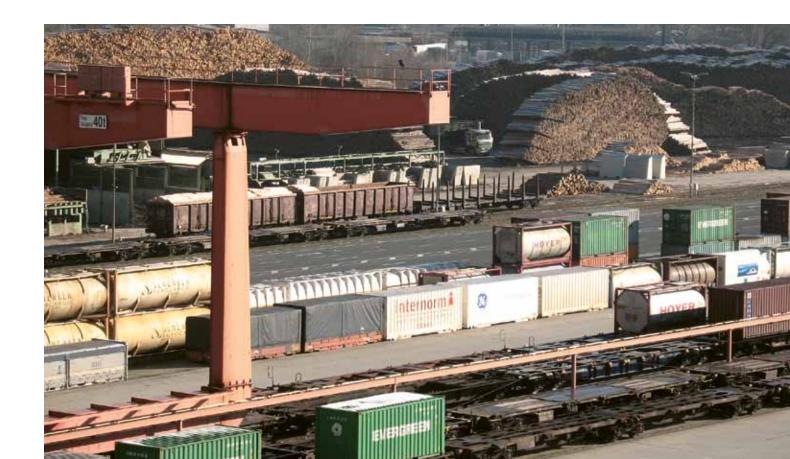
Principal outputs 2012	Legal basis	Timing/Frequency
Implementing additional functionality to present the different National legal framework in the Reference Document Database.	Art. 19 of AR	Early 2012
Updating and maintenance of Reference Document Database functionalities	As above	Ongoing
Training and dissemination on the requirements for rules to be contained within the Reference Document	As above	Ongoing
Dissemination and Training on the use of the Reference Document Database including regular update of the user's manual.	As above	Ongoing
Annual Report on the progress made with the publication and management of the reference document.	Decision on the RD	Mid 2012

#### **Project 9.3: Database of National Technical Rules**

In 2010 the Commission's database for the notification of National Rules entered into service. The Agency assists the Commission in

the specification and development of the NOTIF-IT database and provides training to its users.

Principal outputs 2012	Legal basis	Timing/Frequency
Monitoring of NOTIF-IT database performance	Art. 19 of AR	Ongoing
Training of NOTIF-IT users	As above	Ongoing



#### **Project 9.4: Registers for Interoperability**

The European Centralised Virtual Vehicle Register (ECVVR) consists of the National Vehicle Registers (NVR), where the vehicles are actually registered and all the associated data are stored, and the Virtual Vehicle Register (VVR), which is a search engine connecting all the NVRs.

The WP 'RINF Development' will develop and propose methods for implementing the Register of Infrastructure containing data about fixed installations at a European level in accordance with the common RINF specification expected to enter into force in the first half of 2012.

The European Register for Authorised Types of Vehicles (ERATV) is the community-wide type based register that replaces the national vehicle based Registers of Rolling Stock which were defined in the "old" Interoperability Directives. The register includes the types of vehicle authorised in the different Member States. The specification of ERATV is expected to be adopted in Q3-Q4 2011. Once the specification has been adopted the Agency will start the development of the system.

As a complement the Register of Infrastructure the ERATV facilitates the assessment of technical compatibility for the capability of a vehicle to run on a specific line, both conforming to the relevant TSIs. It helps MSs authorising the placing in service of structural sub-systems and is also the source of information for strategic development of the railway sector.

The VKM (Vehicle Keeper Marking) is a code to be inscribed on each vehicle and representing the name of the vehicle keeper. The VKM register is published on the Agency's and OTIF's websites.

The Agency will carry out an analysis of the combination of the all the registers required by the Interoperability and Safety Directives, in particular addressing their interfaces and the expected combined result of these registers. The conclusions of the report will include the necessary actions.

Principal outputs 2012	Legal basis	Timing/Frequency
Development of ERATV	ID - Art. 34 AR - Art. 18, 19	ERATV in operation by 31.12.2012
Development of RINF – reports in accordance with art. 3 and 4 of EC decision	ID - Art. 35, AR - Art. 18 EC decision 2011/633/EU – Art. 3, 4	Dec. 2012
Maintenance and operation of ECVVR + ERATV	ID - Art. 33, 34 AR - Art. 18, 19	As required
Report on registers		Q4 2012



#### Project 9.5: Safety performance and accident data

The National Investigation Bodies submit notifications and final reports of the investigations opened according to Article 24 of the Safety Directive. The information is processed and validated by the Agency and made publicly available through the ERADIS database. This validation process includes verification of accuracy and correctness of information, administration of translations of reports and communication with the investigation bodies. The work is continuously ongoing.

The National Safety Authorities collect and aggregate accident statistics and common safety indicator data from the infrastructure managers and railway undertakings and submit national data to the Agency in accordance with Article 5 and 18 of the Railway Safety Directive. The data is submitted annually and the Agency performs checks of data quality and validates the submitted information before the data is made publicly available through the ERADIS database.

Principal outputs 2012	Legal basis	Timing/Frequency
Accident investigation reports made available in ERADIS	AR – Art 19(2)	Ongoing
Common Safety Indicator data made available in ERADIS	AR – Art 19(5)	Oct 2012

#### **Project 9.6: Descriptive data**

Both the development of recommendations and their impact assessment require a sufficient knowledge of the European railway network, fleets and stakeholders. This is especially necessary in the context of the extension of the scope of TSIs, and of the definition of migration strategies, for instance.

For that purpose, the Agency has progressively implemented a geographic information system from 2011. The DREAM project integrates three modules (database, economic evaluation and interfacing with extranet).

After a slow ramp-up due to limited resources, DREAM will see its full implementation in 2012. The database client application being available from 2011, year 2012 will see the economic evaluation module (for processing of economic data) and the integration of DREAM into extranet, so as to allow stakeholders to interact with this tool, e.g. for the provision or consultation of data, or for running impact assessment models.

Principal outputs 2012	Legal basis	Timing/Frequency
DREAM : development of the economic evaluation module	SEC(2007)926	3 <sup>rd</sup> quarter 2012
DREAM: Sharepoint (extranet) integration	SEC(2007)926	4 <sup>th</sup> quarter 2012

#### **Project 9.7: Communication protocol**

Activities according to the European Framework must be reported in various ways. Documents and input to databases and registers have to be delivered according to Art. 19 (1) of ERA Regulation. On ERA as well as on the Member States side various contact persons are involved into this communication process. Therefore Art.19 (2)

gives the Agency the task to put in place the practical arrangements for a proper communication among MS and EC. Contact persons are listed for each task for all Member States in the communication protocol. The communication protocol must be kept up-to-date.

Principal outputs 2012	Legal basis	Timing/Frequency
Keeping the Communication Protocol up-to-date	AR –Art 19(2)	Ongoing

#### 10. Monitoring Interoperability

The Agency produces report on progress with interoperability every two years which provides the basis for the analysis of the trends of implementation of interoperability across the European Union. The legal basis for this report is provided by Article 14(2) of the Agency Regulation.

Without prejudice to the responsibility of Member States, the Agency may also, at the request of the Commission, monitor the quality or coordinate the work of bodies such as RUs, IMs and NoBos.

#### **Desired** impact

For the time being, the availability of interoperability related data in the Agency is rather limited because databases and registers are still being defined or populated. Therefore, the Agency collects data from other sources, the primary source being the questionnaires distributed to the national safety authorities and sector organisations. Any reports and opinions requested by the Commission have an impact on the workload of the Agency. This impact is difficult to evaluate as the Agency is not aware about the number of requests that may come from the Commission.

#### Project 10.1: Biennial report on interoperability

Reporting every two years allows the Agency to analyse the trends of implementation of interoperability across the European Union. The Agency analyses a set of interoperability indicators and outlines the achievements and problems in the implementation of railway interoperability.

To help understand the evolution of railway interoperability, the report:

- · defines the aims of interoperability,
- summarises the legal and institutional framework established to enhance technical and operational compatibility between rail networks,
- explains the indicators used to evaluate the railway interoperability progress
- look into effects of Technical Specifications for Interoperability (TSIs) on railway market.

Principal outputs 2012	Legal basis	Timing/Frequency
Questionnaire to NSAs	AR - Art.14.2	May 2012

#### Project 10.2: Coordination between railway actors

The Agency shall recommend, at the request of the Commission, procedures for implementing interoperability of the railway systems by facilitating coordination between railway undertakings

and between infrastructure managers, in particular to organise systems migration.

Principal outputs 2012	Legal basis	Timing/Frequency
Recommendations for procedures	AR - Art. 21	Ongoing activity, on request

#### Project 10.3: Evaluation of railway projects and of requests for TSI derogations

At the request of the Commission, the Agency may receive projects (in general co-financed by the EU) to analyse. In particular, the Agency checks if projects are in line with the interoperability principles and the TSIs.

Principal outputs 2012	Legal basis	Timing/Frequency
Project assessment report(s)	AR - Art. 15	On request

At the request of the Commission, the Agency shall assists the Commission in evaluation of the request for derogation from the provisions of the TSIs, submitted by the Member State.

Principal outputs 2012	Legal basis	Timing/Frequency
Opinions	FM – p. 2.3.2.	On request

#### Project 10.4: Notified Bodies – Notifications and efficiency

The Agency may, at the request of the Commission, monitor the quality of the work of the notified bodies and consider if they met the criteria referred to in Annex VIII of the Interoperability Directive.

Principal outputs 2012	Legal basis	Timing/Frequency
Opinion	AR - Art. 13	On request



#### 11. Promoting a common approach to safety and economic evaluation

The European Railway Agency is keen on consistent handling of the secondary legislation it drafts. The most obvious challenge lies with the development and assessment of safety-related recommendations. The work of the Agency mainly serves three directives (railway interoperability, railway safety and driver licensing). These are complementary – the interoperability Directive reminds that safety is an essential requirement, and therefore a pre-requisite for rail market opening; the safety Directive aims at avoiding the creation of further barriers. Both directives, and the ensuing legislation, were or will be subject to impact assessments. Also, as railways are the safest transport mode, it should be noted that any loss of competitiveness of rail would result in decreasing overall transport safety in Europe. The Agency aims at serving both goals, namely the EU-wide maintenance and improvement of transport safety, and the improved competitiveness of the railways, within its field of competence. Over seven years of operation, the Agency could gather experience in arbitrating and deciding about safety-related recommendations. The Agency is more and more convinced that safety and economics are not contradictory concerns, and need to be considered simultaneously and consistently when making decisions. The already tested impact assessment methods and tools need to be further developed, their application must be scrutinized, and their acceptance should be widened.

To promote a common approach to safety and to be even more close to the needs of the railway sector, the Agency has set up, in 2011, the safety platform.

In recognition of the vital role of humans in achieving the safe transport of goods and people on the European Railways, the Agency will be developing a common approach to integrate human factors into its working methods. This work will be supported by a network of human factors experts and will lead to a comprehensive overview of the current status of human factors input in the operation of the railways, as well as in research and development work. Simultaneously, a framework of human tasks and interactions within the railway system will be developed so that areas for priority input of human factors can be identified and facilitated. A directory of railway human factors expertise will be set up. In the longer term, a comprehensive, web-based source of human factors information, current research and good practice will be established to support the European railway industry.

Developing appropriate recommendations has been a collaborative work for all Agency units. A common approach has already been developed "on the job" and over the years. This has encouraged the Agency to formalise its approach, based on empirical and systematic studies.

#### **Desired** impact

- Transparent, robust decision-making in a sensitive field
- Focus on most effective ways to preserving, and most promising paths to improving railway safety



#### **Project 11.1: Economic Evaluation**

Economic evaluation (the term "impact assessment" being broadly equivalent) is a fundamental tool in European lawmaking. Its rationale is exposed, for instance, in this quote from an information note of the President of the Commission(1):

Impact assessments are a key tool for the European institutions in designing better policies and laws. Impact assessments serve many purposes: they improve the quality of our proposals, they facilitate better informed decision making and they enable us to communicate our decisions more effectively. By looking in detail at economic, social and environment impacts, the process helps us more easily to reach the goals of Better Regulation, and its underlying Lisbon and Sustainable Development strategies.

From the very beginning of its operations the Agency implemented impact assessment. Impact assessment is applied in various degrees to all activities of the Agency that lead to recommendations or technical opinions. A fundamental choice was to carry out impact assessment with the participation of all concerned Agency staff and stakeholders, but also with dedicated resources and independent management. The impact assessments are kept proportionate to the likely impact of recommendations or technical opinions.

Particular stress has been put, from 2011, on **ex post evaluations**. In 2012, the Agency will examine the "**Traffic Operations and Management**" as well as the "**Safety in Railway Tunnels**" TSIs.

Some essential aspects of the Operation and Traffic Management TSI will be analysed, in view of a future revision that should be concluded in 2014. Among these, we may already mention:

- Annex T concerning braking performance (Decision 2010/640/EC); this annex clarifies the responsibilities and interfaces between railway undertakings and infrastructure managers at a high level. It is intended to observe the practical application of this appendix, and whether or not the current, high-level specification addressed create a sufficient framework for achieving optimum performance and safety of the railway system as well as its impact on the existence and repeal of national technical rules on braking performance requirements.
- Rulebook and routebook requirements; these are in force since 2006 and are expected to ease to cross-border driving, in conjunction with the train drivers licensing directive 2007/59.
- Integration of relevant TSI requirements in the safety management systems of railway undertakings and infrastructure managers.

Results of this ex post study would feed into a possible release of the revised TSI by 2014. The analysis will be conducted in the light of the proportionality principle, also considering the administrative costs.

Concerning the SRT TSI, the ex post study will focus on the difficulties arising from its application.

Principal outputs 2012	Legal basis	Timing/Frequency
Ex ante assessment of Agency recommendations	SEC(2007)926	With each recommendation
Ex post assessment of selected Agency recommendations: OPE and SRTTSIs (see text)	As above	1 or 2 per year
General methodology for economic evaluation	As above	Update to be presented to RISC

#### **Project 11.2: The Safety Platform**

The legislative program initiated by the Directives 2004/49/EC and 2008/11/EC will be nearly completed by mid of 2012. The Safety Unit will then enter in a new phase consisting to ensure that all the measures developed from these 2 directives are correctly and efficiently put in place. For this, the Agency put in place the Safety Platform by the end of 2011.

The main purposes of this platform are to:

- Monitor the real outcome of EC's and Agency's core activities and deliverables including potential missing EU measures.
   For this, the platform is supported by the "Data Analysis Focus Group" which will gather and analyse the available information and, where appropriate and in close collaboration with the safety platform, decide on specific developments. For detailed developments, some task forces could be established.
- Reflect on important safety issues taking into account their potential impact on interoperability. At this stage for 2012, two safety issues related to freight wagons and level crossing have been identified.
- Decide on common agreed EU positions and action plans after serious accident or repetitive incidents

Principal outputs 2012	Legal basis	Timing/Frequency
To be decided depending on participants inputs	AR – Art. 6(2), 21(b)	Dec 2012

#### Project 11.3: The freight focus group

The task force on freight wagon maintenance, which was an emergency response to the Viareggio accident in 2009, generated a hitherto unseen impetus within the railway sector and a platform for discussion and growing mutual understanding. All concerned parties -the sector, the national safety authorities as well as the Agency- would like to maintain and expand this platform beyond the issue of broken axles.

A high percentage of the more than 600 annual freight train derailments in Europe, for example, are caused by infrastructure related deficiencies.

In addition, there is logic in combining this with other Agency initiatives such as ongoing studies on freight train derailment, the development of TSIs, the harmonisation of other technical regulations, the follow-up of the new regime for certification of entities in charge of maintenance (ECMs), ongoing and planned research etc.

Therefore there is need for a permanent high level steering instrument that offers the opportunity to reflect on important issues related to the rail freight business in a more structured and balanced way.

Principal outputs 2012	Legal basis	Timing/Frequency
To be decided	AR – Art. 6(2), 21(b)	Dec 2012

#### Project 11.4: The level crossing focus group

All safety performance reports show that the reported number of fatalities and serious injuries at level crossing corresponds to a high proportion of the total number of reported fatalities and serious injuries.

Therefore there is need for a permanent high level steering instrument that offers the opportunity to reflect on this important safety issue in a more structured and balanced way.

Principal outputs 2012	Legal basis	Timing/Frequency
To be decided	AR – Art. 6(2), 21(b)	Dec 2012

#### Project 11.5: Harmonised EU positions and action plans after serious accident and repetitive incidents

After a serious accident or repetitive incidents, it is essential for the sector that the necessary measures taken within the different MS are harmonised, proportionate and revised quickly and regularly in function of the available information.

For this, in 2012, the Agency under the auspices of the safety platform and supported by a dedicated focus group, will develop a procedure allowing to have the appropriate reactions at EU level after serious accidents or repetitive incidents.

Principal outputs 2012	Legal basis	Timing/Frequency
To be decided	AR – Art. 6(2), 21(b)	Dec 2012

#### **Project 11.6: Common Safety Framework**

The development and improvement of railway Safety is the purpose of Article 4 of the Safety Directive which states "Member States shall ensure that railway safety is generally maintained and, where reasonably practicable, continuously improved, taking into consideration the development of Community legislation and technical and scientific progress and giving priority to the prevention of serious accidents".

It is also part of the Agency tasks to address to the European Commission or other relevant parties, on request, Agency positions containing safety-related aspects. Therefore it is very important these safety-related positions are consistent between them and take properly into consideration all relevant legal and technical principles governing the safety developments of EU railways. In addition high level principles of EU legislation developments need to be considered. These include proportionality, subsidiarity, risk and performance, and technical harmonization and development.

In order to be sustainable, the safety-related Agency positions must also take into account technical and scientific progress.

In consequence the purpose of the Common Safety Framework (CSF) is to enable the Agency to deliver consistent, robust and sustainable positions, on all requests (Recommendation, Opinion, Advice) which might contain safety-related aspects.

It is also anticipated that in addition to serve the Agency process of drafting safety-related positions, the Common Safety Framework might help Member States, in their decisions on any particular safety-related changes, as a methodological background.

Principal outputs 2012	Legal basis	Timing/Frequency
Common Safety Framework: guidelines	AR - Art. 6	End 2012



### 12. Support to Agency operations

The transverse activities supporting operations are carried out by the staff of the Executive Director's Office and of the Administration Unit. The Executive Director's Office supports operations in the areas of communication, internal control, audit and legal affairs while the Administration Unit supports operations in the areas of human resources, procurement, finance, accounting, ICT and facilities.

Based on the regulatory framework (in particular the Founding Regulation, Staff Regulations, Financial Regulation and Internal Control Standards), both entities make constant efforts to develop and provide efficient and effective internal policies, procedures and services.

Within the administrative support services, in 2012 extra emphasis will be given to the issues health and safety, IT security and business continuity.

#### **Desired impact**

The transversal activities are designed to ensure the provision of support services for its staff and for the implementation of the operational activities of the Agency leading to outputs of high quality.

#### **Project 12.1: Communication**

The core mission of Communication office is to assist the Agency in designing and implementing the internal and external communication processes.

The Communication Office also provides the tools needed by the Agency to present their activities to the outside world and to strengthen the Agency's image.

Principal outputs 2012	Timing/Frequency
Up-date and revision of Agency Communication Strategy	Ongoing
Reports and brochures to be published - the Agency video will be updated	Ongoing
Preparation of conferences with multi-media material will be continued; important event: INNOTRANS, Berlin	Ongoing
Media monitoring services	Ongoing
Custom developments to enhance usability of the website	Ongoing
Answering external requests	Ongoing
Maintaining contacts with the press	Ongoing



#### Project 12.2: Internal control and audit

The audit and internal control pool attached to Executive Director's Office provides assurance and advice services to the Agency as regards the effectiveness of internal control, risk management and governance with the ultimate objective of delivering value to stakeholders.

Audit reviews, independent assessment on the implementation of the 16 Internal Control Standards adopted by Agency in 2008, and support in establishing an effective risk management framework within the Agency, are the principal tasks granted to audit and internal control staff. The full accomplishment of the quality management project that the Agency is being implementing as from 2010 according to the quality road map, will likely require a coherent evolution and effective integration of audit and internal control functions with the quality management system of the Agency. This should lead audit and internal control processes to focus more and more on providing re-assurance to the Authorising Officer on the good functioning of the quality management system of the Agency.

Principal outputs 2012	Timing/Frequency
Audit report, follow-ups and ex-post checks	1 report, 1 follow-up, 1 ex-post
Advice to AO and AODs on the development of components of internal control system of the Agency including an independent annual assessment on the ICS implementation. Quality assurance activity of IT project as envisaged by the RUP methodology adopted by the Agency for implementing IT projects	On going/ second semester
Coordination and continuous improvement of risk management process within the Agency	Ongoing

#### **Project 12.3: Legal affairs**

The Legal Entity with three full-time lawyers is part of the Executive Director's office and provides independent legal advice to the Executive Director and the Agency in its functions foreseen under the Founding Regulation and other relevant acts and mandates. In addition, it represents the Agency in litigation, where necessary with consultation/assistance of external legal counsels.

The entity assists operational and administration units to improve the legal quality of acts, recommendations and other documents issued and reviews and coordinates horizontally the Agency's tasks from a legal viewpoint. The legal and administrative support to the Agency's Administrative Board and Budgetary Sub-committee is provided also by the Legal Entity.

#### **Personal Data Protection**

The Data Protection Officer, responsible for the implementation and compliance with personal data protection rules at the Agency, is functionally independent but administratively under the Executive Director.

Principal outputs 2012	Timing/Frequency
Legal Advice and Legal Opinions	Ongoing
Legal and administrative support to the Administrative Board (including Budgetary Sub-Committee)	Ongoing
Implementation of Regulation 45/2001 in order to ensure compliance with personal data rules	Ongoing

#### **Project 12.4: Human Resources**

The main activities of the HR sector are the on-going tasks linked to the provision a full range of human resources management services, in particular recruitment, individual entitlements, training and career development in compliance with the legal basis.

In 2012, the HR Sector will continue and intensify the efforts to streamline and document procedures in order to both make efficiency gains and to facilitate the preparation of necessary data protection notifications. These aims will be, in part, achieved by implementing further applications of e-HR, the IT tool originally developed by EASA and now being used by several EU agencies.

Principal outputs 2012	Timing/Frequency
Basic HR services (objective: 95% of the establishment plan filled at the end of the year)	Ongoing
Preparation of data protection notifications	Ongoing
Introduction of new e-HR modules	Ongoing
HR contribution to Health & Safety and Business Continuity planning	Ongoing
Staff survey and subsequent action plan	3 <sup>rd</sup> quarter
Review of recruitment process and possible introduction of psychometric testing	2 <sup>nd</sup> quarter

#### Project 12.5: Finance, accounting and procurement

The Finance and Procurement Sector is responsible for all ongoing tasks in relation to the preparation of the budget, the financial initiation of all commitments and payments, reporting on the budget implementation, the bookkeeping and relations with the Court of Auditors. In addition, the Sector co-ordinates the procurement planning and provides support in relation to the preparation and implementation of all procurement procedures.

In terms of projects, particular attention will be given to the procurement, to the development of an IT based tool for the management of experts' reimbursements and to a study of the possibilities of gradually introducing a paperless financial administration.

Principal outputs 2012	Timing/Frequency
Basic finance, accounting and procurement services	Ongoing
Preparation of budget, ABB and procurement planning	Within the planning deadlines
Reporting on budget execution (objective for budget execution: commitments >98%, payments >70%)	Monthly
Timely processing of financial dossiers (objective: 95% of payments within foreseen deadlines)	Ongoing
Requirements for an experts reimbursements tool prepared	2 <sup>nd</sup> quarter

#### **Project 12.6: Information Technology**

The IT organization provides the underlying hardware, software, network infrastructure and enterprise services for the Agency. The related activities are mainly carried out by in-house staff and contractors working on-site.

technology enabling Agency staff to perform even more activities without being in the office will be analysed and a way forward will be devised.

In addition, the possibility of introducing new communication

Building on the planned recruitment of an IT Security Officer in 2011, the development and implementation of an IT security strategy and a business continuity plan will continue in 2012.

The on-going activities in relation to documentation of procedures and definition of service levels and performance indicators will also be enhanced in 2012.

Principal outputs 2012	Timing/Frequency
Basic IT services (objective: 99.5% availability of core systems and services)	Ongoing
Documentation of procedures and definition of service levels	Within the planning deadlines
Finalisation of IT security strategy	2 <sup>nd</sup> quarter
Comprehensive business continuity plan in place	4 <sup>th</sup> quarter

#### **Project 12.7: Facilities**

The facilities team provides for the maintenance of the sites in Valenciennes and Lille and their security.

In 2012, Facilities will start the process of formulating the Agency's requirements to a possible new building in Valenciennes. Together with the HR and ICT teams significant steps will be taken in improving the health and safety and the business continuity planning.

Principal outputs 2012	Timing/Frequency
Basic facilities services	Ongoing
Formulation of requirements to a possible new building	4 <sup>th</sup> quarter

## 13. Agency Management

In recent years the Agency has striven for a common and integrated approach – the "one Agency" approach between its operational units - for example in the development of the common understanding of the authorisation process. The "one Agency" approach takes a further step forward with the Activity Based format of this 2012 Work Programme. However to compliment a common approach to operational matters a consistent and common approach is required to managerial and administrative activities such as business planning,

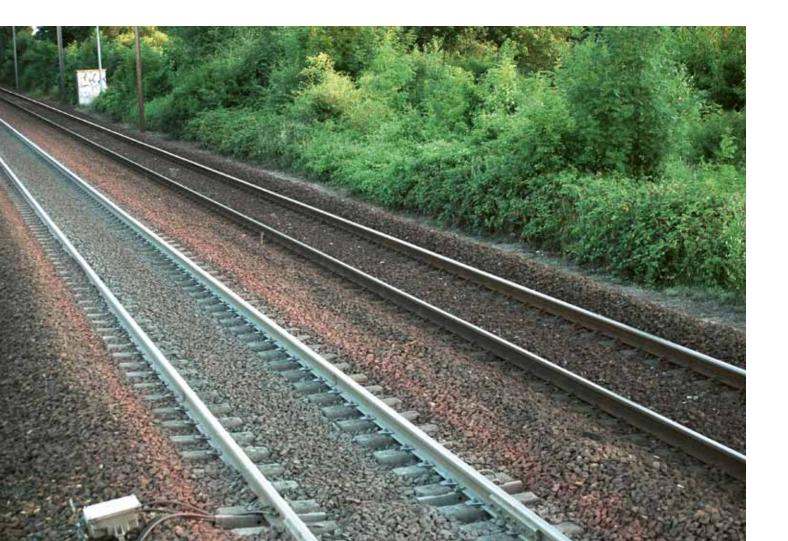
the drafting of recommendations, the organisation of meetings and the management of stakeholder interfaces. Bearing in mind that all the operational units carry out the same business processes it is appropriate that the Agency's management procedures be simplified and integrated in an Agency Quality Manual utilising the principles of Total Quality Management. Under the auspices of the Quality Project 2012 should see the near-completion of this more structured and simplified approach to management.

#### Project 13.1: Strategy and business planning

A key management challenge is to integrate the budgeting, staff planning and work planning processes in order to optimise the use of available resources taking account of the various priorities and constraints whilst at the same time producing the appropriate

documentation in a timely manner as required by the authorities. With the Agency moving towards a more strategic, multi-annual, activity based approach this becomes a more complex but essential activity.

Principal outputs 2012	Timing/Frequency
Coordinating the Agency's 2013 Budget, Multi-Annual Staff Policy Plan and Work Programme	January 2012
Producing the Agency's Annual and multi-annual Work Programme	Draft February 2012 Final version September 2012
Coordinating and producing the Annual Activity Report	March 2012



#### **Project 13.2: Stakeholder Management**

The Agency relies to a great extent upon the input from its stakeholders to produce its outputs: in particular the Sector Associations and the Safety Authorities. In the meantime the Agency also plays an important role as "the place where all the actors meet" in the facilitation and coordination of the stakeholders activities in respect of Technical and Safety matters. Furthermore the Agency's reputation and future relies heavily upon stakeholder perception. It is essential therefore for the Agency to interface efficiently with its stakeholders.

The **Network of Representative Bodies** is the forum where the Agency meets the leaders and coordinators of the recognised railway sector associations. Its objective is to give the associations an overview of future Agency work, progress with existing work (including progress through the RISC Committee), to act as a forum for discussion of "horizontal" issues and to act as a forum for the resolution of any conflicts.

In parallel the Agency manages the **Network of National Safety Authorities** by organising regular NSA network meetings. These meetings allow the NSA to conduct active exchanges of views and experiences for the purpose of harmonising their decision-making criteria and increasing trust between them.

A significant number of European research projects, whilst not directly managed by the Agency, are targeted at activities covered by the Agency. These include for example the closure of TSI "open points", quantitative analysis of safety costs and benefits or the facilitation of vehicle authorisation. The Agency through its Research Steering Group in consultation with relevant Working Party coordinators ensures coordinated input to and interfaces with DG Research and other bodies coordinating European railway research

Principal outputs 2012	Timing/Frequency
Regular meetings of the Network of Representative Bodies	Quarterly meetings
Regular meetings of the NSA Network	Quarterly meetings
Subject specific meetings with stakeholders	As required
Regular liaison meetings with DG Research (DG MOVE to be kept informed)	Quarterly
Regular meetings of the Agency Research Steering Group	bi-monthly
Participation in activities of bodies coordinating railway research at European or regional level (e.g. ERRAC, EURNEX etc.)	As required
Participation in Advisory Boards or Technical Management meetings of research projects relevant to the Agency's activities	As required
Creation of research projects Data Base	Ongoing

#### **Project 13.3: Quality Management**

In the course of 2009 the Executive Director started a reflection on the need to establish a quality management system within the Agency aimed at both consolidating the reached level of activities and above all, at creating the favourable conditions for a smooth and effective growth of the European Railway Agency. For this aim, a quality officer was recruited during 2009 and a quality staff pool has been operating at the Agency since the end of 2009. In the course of 2010 a Quality Steering Committee was set up with the main mandate to establish a quality "road map" for the Agency.

The quality approach adopted by the Agency is inspired to the Total Quality Management principles and aims at implementing a fully process-based management system. In this context, the Project 3. "Quality Management" should be seen as a real ad hoc project whose full accomplishment will eventually mean for the Agency the adhesion to an organisation-wide culture more oriented to value's creation for stakeholders coupled with a continuous effort towards improvement and increased levels of transparency and economy.

The Agency launched in 2011 the Common Assessment Framework (CAF) initiative with the support of the European Institute of Public Administration. Based on the results of the management and of the staff self-assessments of the Agency current maturity int he different processes of the CAF model, the Agency will, in 2012, define and prioritise improvement actions. These actions will then be implemented with the aim to continuously improve the Agency performances.

Principal outputs 2012	Timing/Frequency
Coordination in establishing a process -based management system within the Agency including management of relevant framework contract.	Ongoing
Implementation of the CAF action plan	Ongoing
Perform evaluation of process-based management system and provide assurance to AO as regards its performance	2 <sup>nd</sup> semester 2012



# Annex I – Procurements foreseen for 2012

UNIT	OBJECT	ESTIMATED AMOUNT DIRECT CONTRACT
SAF	Prospective study into harmonized train accident precursors analysis and management	110.000€
	Facilitating the use of new approaches in accident investigation	30.000 €
	Identification of existing academic research on regulatory bodies and (safety) supervision activities	100.000€
	Identification of SMS audit techniques	100.000 €
	Support study for the integration of human factors	60.000€
	Development of NIB training modules	100.000€
IOP	Study on the standard for the exchange of fare information in the context of connection with other modes of transport (NeTEx Part 3)	65.000 €
ERTMS	ETCS and GSM-R activities covering survey, compilation of user requirements and drafting of technical proposals	400.000€
	Framework Contract for specification reviews (3 lots: ETCS, GSM-R, Human factors)	
ECOEV	OPE TSI (Operation and traffic management - Technical Specifications for Interoperability) ex post analysis, with emphasis on Annex T (braking performance)	250.000 €
	SRT TSI (Safety in Railway Tunnels -Technical Specifications for Interoperability) ex post analysis	100.000€
XA	Studies to enhance and improve Cross Acceptance	50.000€

# Annex II – Risk Register

No	Risk Category	Description	Actions (TBC)
1	Political decisions and priorities outside ERA	Mandate is not in alignment with the needs and priorities of the EU railway policy.	
2	External partners	Conflicting expectations of the stakeholders due to poor management of stakeholder relations by the Agency or conflict between the stakeholders interests and objectives.	
3	External partners	Delay (or possible rejection) in approval of ERA's results in the RISC due to the non-involvement of the decision making stakeholders (from the ministries)	
4	Operational processes	Inappropriate data management that could impact the security, availability and integrity of data, as well as the alignment with business and legal equirements.  Dependence upon a small number of individuals' knowledge and experience to comply with the requirements of the mandates.	
5	IT and other support systems -recovery	Critical business processes are at risk of not being restored in case of a disaster due to the unavailability of proper infrastructure and environments to recovery the core ICT systems and services	
6	IT and other support systems – alignment with business needs	Lack of alignment of the IT function and the IT decision making with the business objectives due to insufficient management involvement in the key IT strategic decisions.	
10	Security of staff, buildings and equipment	Danger to the health and safety of the staff and ERA's reputation due to the lack of safety management system procedures and processes (including fire protection)	
11	Legality and regularity	ERA's ability to respond to changes is limited by the strict EC regulations	
12	Other risks related to compliance with applicable rules and regulations	Core mission of ERA to improve competitiveness of the railways may be impaired by other priorities (such as oldest or mandated tasks first)	
13	Communication methods and channels	Ineffective communications to the stakeholders due to the lack of communication policy, including procedures for crisis management and channelling of external communication	
14	Communication methods and channels	Operational performance affected by insufficient communication within or between ERA's units due to the lack of internal communication tools that may lead to potential diverting opinions in different working groups	



