APTU Uniform Rules (Appendix F to COTIF 1999)

Uniform Technical Prescriptions (UTP) General provisions – COMMON SAFETY METHOD (CSM) ON RISK EVALUATION AND ASSESSMENT (RA)

Explanatory note:

The texts of this UTP which appear across two columns are identical to corresponding texts of the European Union regulations. Texts which appear in two columns differ; the left-hand column contains the UTP regulations, the right-hand column shows the text in the corresponding EU regulations. The text in the right-hand column is for information only and is not part of the OTIF regulations.

Corresponding text in EU regulations¹

EU ref.

OTIF UTP

0. EQUIVALENCE

Following their adoption by the Committee of Technical Experts, the OTIF regulations included in this document have been declared equivalent to the corresponding EU regulations within the meaning of Article 13 of APTU and Article 3a of ATMF.

1.	SUBJECT MATTERPURPOSE				
1.1	This				
	UTP	Regulation			
	establishes a <u>revised</u> common safety met sessment	thod (CSM) for on risk evaluation and as-			
	of safety risks of subsystems and integra- tion into their environment.	(CSM) as referred to in Article 6(3)(a) of Directive 2004/49/EC.			
<u>1.2</u>	This				
	UTP	Regulation			
	when and where necessary and reasonably practicable. The CSM-shall facilitate				
	cross-border	the access to the market for			
	rail transport services through harmonisation	n of:			
	the risk management processes used to ass and the compliance with safety requirement				
	the exchange of safety-relevant information between different actors within the rail sector in order to manage safety across the different interfaces which may exist within this sector;				
	the evidence resulting from the application of	of a risk management process.			
2.	SCOPE		Article 2		
<u>2.1</u>	<u>This</u>				

¹ Commission Regulation EC 352/2009, published in the EU Official Journal L108 on 29.04.2009.

G:\Technik\CTE\CTE06_2013_06\Documents\1_Documents as input to CTE 6\EN\A94-01G_1_2012_v02_e_UTP GEN-G - CSM-RA_amendment.doc

	OTIF	GENERAL PROVISIONS Risk evaluation and assessment				UTP GEN-G Page 2 of 33	
Status: PROPC	IN FORCE- <u>)SAL</u>	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.04.2013	
OTIF U	TP			Corresponding tex	t in EU regula	tions ¹ EU ref.	
	UTP			Regulation			
	The CSM on r as defined	isk evaluation and ass	sessmei	_	change of the	proposer	
	in section 3(1)	<u>1)</u>		in Article 3(11)			
	when making	any change to the		I			
	railway system of the Contracting States which has an impact on internationa traffic <u>., and which is considered to be</u> significant within the meaning of Article 4 of this UTP.			nal referred to in point (2)(d) of Annex III to be Directive 2004/49/EC, which is consid-			
	regards organ maintenance	hanges may be of a isational changes, onl processes shall be s ditions shall be consid	y those ubjecte	changes which cou	ld impact oper	rational or	
	of-section 4.			Article 4.			
<u>2.2</u>	When, on the	basis of an assessme	<u>nt unde</u>	r the criteria set out	<u>in:</u>		
	points a) to f)	of section 4.2:		Article 4(2) (a) to (<u>f):</u>		
	a) the chang	he change is considered significant, the risk management process set out in					
	section 5			Article 5			
	<u>shall be a</u>	pplied;		•			
		ge is considered not decision shall be suffi		cant, keeping adeq	uate documer	ntation to	
<u>2.3</u>	<u>This</u>						
	<u>UTP</u>			Regulation			
	I shall apply also to Where the significant changes concern-structural subsystems to which						
	COTIF 1999			Directive 2008/57/	EC		
	applies , the C	SM on risk evaluation	and ase	i sessment shall apply	<i>µ</i> :		
	a) if a risk as	sessment is required	by the r	elevant			
	uniform te	chnical prescriptions (UTP) <u>;</u>	technical_spec bility (TSI) <u>;</u>	ification for ir	teropera-	
	in this cas	e the		•			
	UTP			TSI			
	shall, whe	re appropriate, specify	/ which	parts of thisthe CSN	4		
	<u>UTP</u>			Regulation			
	apply;			1			
	b) <u>if the char</u>	nge is significant as se	t out in				

Г

	OTIF	GENERAL PROVISIONS Risk evaluation and assessment				UTP GEN-G Page 3 of 33		
Status: PROPC	IN FORCE- ISAL	Version: 02	Ref.: /	A 94-01G/1.2012	94-01G/1.2012 Original: EN			
OTIF U	TP			Corresponding tex	t in EU regula	tions ¹ EU ref.		
	section 4.2	2,		<u>Article 4(2),</u>				
	the risk ma	anagement process se	et out in	1 <u>1</u>				
	section 5			Article 5				
				service of structural sub-systems to ensure system of the structural subsystems to which				
	UTPs			TSIs				
	apply			1				
	4		by virtue of A 2008/57/EC.	rticle 15(1) of	Directive			
<u>2.4</u>	<u>The</u> However,	application of th <u>is</u> e		1				
	<u>UTP</u>			Regulation				
	CSM-in the ca	se referred to in		•				
	point b) of sec	tion 2.3		paragraph (b) of A	rticle <mark>2(3)</mark>			
		e first subparagraph m n in the relevant	nust <u>sh</u>	all_not lead to requir	ements contra	dictory to		
	UTPs <u>.</u>			TSIs <u>.</u>				
	which are mar	idatory.		•				
		dictions occur, the pro M leads to a required						
	Contracting St	ate		Member State				
	concerned whi	ch may <u>then</u> decide to	o ask fo	for a revision of the				
	UTP			TSI				
	in accordance	with		1				
	Article 8a of A	PTU		Article 6(2) or 2008/57/EC	Article 7 of	Directive		
	or a derogation	n in accordance with		1				
		PTU and the guideline opted in accordance /F Annex B.		Article 9(2) of that	Directive.			
2.53				I				
<u>2.5</u>	(reserved)			The railway system scope of Directive to its Article 2(2) scope of this Regu	2004/49/EC are excluded	according		
	shall not apply	to:						

	OTIF GENERAL PROVISIONS Risk evaluation and assessment					
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-010	6/1.2012	Original: EN	Date: 03.04.2013	
OTIF UTP		Corres	ponding tex	t in EU regulat	tions ¹ EU ref.	

\sim	motroe	trama	and	othor	light	roll or	voto mo
	menos,						

networks that are functionally separate from the rest of the railway system and intended only for the operation of local, urban or suburban passenger services, as well as railway undertakings operating solely on these networks;

privately owned railway infrastructure that exists solely for use by the infrastructure owner for its own freight operations;

heritage vehicles that run on national networks providing that they comply with national safety rules and regulations with a view to ensuring safe circulation of such vehicles;

heritage, museum and tourist railways that operate on their own network, including workshops, vehicles and staff.

2.<u>64</u> Th<u>eis provisions of</u>

UTP_GEN-G, document A 94-01G/1.2012, Regulation 352/2009 version 01, dated 01.05.2012

shall <u>continue to apply in relation to are projects which are at an advanced stage of</u> development

as defined in Article 2 b) of APTU.

within the meaning of Article 2(t) of Directive 2008/57/EC.

Article 3

not apply to systems and changes, which, on <u>at the date of application entry into force</u> of this

U	Т	F)

Regulation.

Regulation

3. DEFINITIONS

	the			~f	thia
ΓUI	uie	pui	pose	UI.	แทร

UTP

the definitions

in ATMF Article 2 and APTU Article 2

in Article 3 of Directive 2004/49/EC

shall apply.

The following definitions shall also apply:

- 1. "risk" means the <u>frequency</u>rate of occurrence of accidents and incidents resulting in harm (caused by a hazard) and the degree of severity of that harm;
- 2. "risk analysis" means systematic use of all available information to identify hazards and to estimate the risk;
- "risk evaluation" means a procedure based on the risk analysis to determine whether <u>anthe</u> acceptable <u>level of</u> risk has been achieved;
- 4. "risk assessment" means the overall process comprising a risk analysis and a risk evaluation;
- 5. "safety" means freedom from unacceptable risk of harm;
- 6. "risk management" means the systematic application of management policies, procedures and practices to the tasks of analysing, evaluating and controlling risks;
- 7. "interfaces" means all points of interaction during a system or subsystem life-cycle, including operation and maintenance where different actors of the rail sector will

то	ΊF	GENERAL PRO Risk evaluation		-				UTP GEN-G Page 5 of 33	
Status: IN FO I PROPOSAL	RCE-	Version: 02	Ref.: A	4 94-01G/1.2012	Ori	ginal: EN	Date: 03.	04.201	
OTIF UTP				Corresponding	ext in l	EU regula	tions ¹	EU re	
8. "a	actors" me	ner in order to manage ans all parties which the application of the	h are, dii		contra	ctual arrar	ngements,		
L	JTP -pursua	ant to section 5.2;		Regulation-	oursua	nt to Articl	e 5(2) ;		
0	f a system	uirements" means the and its operation of the operation o	(includin	g operational rule					
0	ccurrence	asures" means a so of a hazard or mition acceptable level of	gating its						
11. "j	proposer" I	means							
а	trol me structur	ay undertaking or an asures in accorda re managers in the f ent in accordance w	<u>nce with</u> ramewoi	<u>the railway und</u> k of the risk cont	ertakir rol me	i gs or <u>an</u> asures the	the infra-		
	regulat make and in sponsik the rail trol of r oblige sary ris approp each safety r	al, regional or interr ions, insofar as the railway under frastructure manage ole for the safe opera- lway system and the risks associated with them to implement sk control measures, riate in cooperation other, to apply r rules and standards, sh safety manages;	these takings ers re- ation of the con- n it and neces- where n with hational and to	<u>Article 4 of I</u>	Directiv	' <u>e 2004/49</u>	9 <u>/EC;</u>		
<u>b</u>) an entit <u>with</u>	y in Charge of Main	tenance	which implement	<u>s meas</u>	sures in ac	<u>ccordance</u>		
		Article 15 and Anne (ECM Uniform rules)		<u>Article 1</u> 2004/49/EC	<u>4a(3)</u> :	of	Directive		
ę	<u>)c)</u> a the co	entracting entityies of	r <u>a</u> the ma	anufacturers wh <u>ic</u>	: <u>h</u> en th	ey invite <u>s</u>			
		essing entity to as em in accordance wi		a notified bo fication proo Article 18(1 or a designa	edure) of Di	in accord rective 20	ance with 08/57/EC		

c)d)or the an applicant

for a technical admission of <u>struc-</u> tural sub-systemsvehicles; of<u>or</u> an authorisation for <u>the placing in</u> service of <u>structural sub-</u> systemsvehicles;

ticle 17(3) of that Directive;

or an Entity in Charge of Maintenance;

12. "safety assessment report" means the document containing the conclusions of the assessment performed by an assessment body on the system under assessment;

OTIF	GENERAL PRO Risk evaluation	UTP GEN-G Page 6 of 33		
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

- 13. "hazard" means a condition that could lead to an accident;
- 14. "assessment body" means the independent and competent <u>external or internal</u> <u>individualperson</u>, organisation or entity which undertakes investigation to <u>providearrive at</u> a judgement, based on evidence, of the suitability of a system to fulfil its safety requirements;
- 15. "risk acceptance criteria" means the terms of reference by which the acceptability of a specific risk is assessed; these criteria are used to determine that the level of a risk is sufficiently low that it is not necessary to take any immediate action to reduce it further;
- 16. "hazard record" means the document in which identified hazards, their related measures, their origin and the reference to the organisation which has to manage them are recorded and referenced;
- 17. "hazard identification" means the process of finding, listing and characterising hazards;
- 18. "risk acceptance principle" means the rules used in order to arrive at the conclusion whether or not the risk related to one or more specific hazards is acceptable;
- 19. "code of practice" means a written set of rules that, when correctly applied, can be used to control one or more specific hazards;
- 20. "reference system" means a system proven in use to have an acceptable safety level and against which the acceptability of the risks from a system under assessment can be evaluated by comparison;
- 21. "risk estimation" means the process used to produce a measure of the level of risks being analysed, consisting of the following steps: estimation of frequency, consequence analysis and their integration;
- 22. "technical system" means a product or an assembly of products including the design, implementation and support documentation; the development of a technical system starts with its requirements specification and ends with its acceptance; although the design of relevant interfaces with human behaviour is considered, human operators and their actions are not included in a technical system; the maintenance process is described in the maintenance manuals but is not itself part of the technical system;
- 23. "catastrophic consequence" means fatalities and/or multiple severe injuries and/or major damages to the environment resulting from an accident;
- 24. "safety acceptance" means status given to the change by the proposer based on the safety assessment report provided by the assessment body;
- 25. "system" means any part of the railway system

(within the scope of this UTP)

which is subjected to a change whereby the change may be of a technical, operational or organisational nature;

26. "notified national rule" means any national rule notified by

a Contracting State in accordance with APTU Article 12.

Member States under Council Directive 96/48/EC (-1) or, Directive 2001/16/ EC of the European Parliament and of the Council (-2) and Directives 2004/ 49/EC and 2008/57/EC.

"safety management system" (SMS) means the organisation and arrangements estab- $rac{2004/49/}{EC, - Art.}$

	OTIF	GENERAL PROVISIONS Risk evaluation and assessment				UTP GEN-G Page 7 of 33		
Status: PROPO	N FORCE- SAL	Version: 02	Ref.: /	A 94-01G/1.2012	Original: EN	Date: 03.	04.2013	
OTIF UT	⁻ P			Corresponding text in EU regulations ¹ EU ref.				
	lished by an in agement of its	frastructure manager operations;	or a ra	ailway undertaking t	o ensure the s	afe man-	3 (i)	
	SMS may also be in place with keep- ers of rolling stock, Entities in charge of maintenance (ECM) and work- shops delivering maintenance.							
	27. "certificatio	on body" means a <mark>cert</mark>	ificatior	n body				
as defined in Section 3 of Annex A to ATMF (ECM Uniform rules);as defined in Article 3 of (EU) No 445/2011;						egulation		
	28. "conformity	/ assessment body" m	ieans a	conformity assessn	nent body			
					Article 2 of R 008;	egulation		
	29. "accreditat	ion" means		I				
an attestation by a national accredita- tion body ² that a conformity assess- ment body meets the applicable re- quirements.			ssess-	<u>Regulation (EU) No 765/2008;</u>				
	<u>30. "national a</u>	ccreditation body" me	ans_					
	that perfor	ody in a Contracting rms accreditation wit ved from the State;						
		n <u>" means an attesta on body that the ass this</u>						
	<u>UTP</u>			Regulation				
	to carry ou	t the independent ass	essmei	nt activity specified i	<u>n</u>			
	sections 6.	1 and 6.2.		Article 6(1) and	<u>d (2).</u>			
4.	SIGNIFICANT	CHANGES		•			Article 4	
4.1	If there is no n a	otified national rule fo	r defini	ng whether a chang	je is significant	t or not in		
	Contracting Sta	ate,		Member State,				
	the proposer s of the railway s	hall consider the poter system.	ntial im	pact of the change in	n question on t	he safety		
	IfWhen the product of the described in	pposed change has n	o impa	ct on safety, the ris	k managemen	t process		
	section 5			Article 5				
	does not need	<u>not</u> te be applied.						

G:\Technik\CTE\CTE\6_2013_06\Documents\1_Documents as input to CTE 6\EN\A94-01G_1_2012_v02_e_UTP GEN-G - CSM-RA_amendment.doc

	OTIF		GENERAL PROVISIONS Risk evaluation and assessment			5		
Status: PROPC	IN FORCE- DSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013	3		
OTIF U	TP		Corresponding tex	Corresponding text in EU regulations ¹ EU r				
4.2	<u>IfWhen</u> the proposed change has an impact on safety, the proposer shall decide, by expert judgement, <u>on the significance of the change based on the following criteria:</u>							
	 failure consequence: credible worst-case scenario in the event of failure of the system under assessment, taking into account the existence of safety barriers outside the system <u>under assessment;</u> 							
	 b) novelty used in implementing the change: this concerns both what is innovative in the railway sector, and what is new just for the organisation implementing the change; 							
	c) compl	exity of the change;						
			monitor the implemented ene_take appropriately_inter		ghout the			
	e) revers	ibility: the inability to re	evert to the system before t	he change;				
	 f) additionality: assessment of the significance of the change taking into account all recent safety-related <u>changesmodifications</u> to the system under assess- ment and which were not judged <u>to beas</u> significant. 							
<u>4.3</u>	The proposer shall keep adequate documentation to justify hits decision.							
5.	RISK MANAGEMENT PROCESS Art							
5.1	The proposer	shall be responsible fo	or applying this					
	<u>UTP,</u>		Regulation,					
	including the a	assessment of the sign	ificance of the change base	ance of the change based on the criteria in				
	section 4,		Article 4,	Article 4,				
	and for condu apply:	<u>acting the </u> risk manage	ement process <u>set out</u> des	cribed in Anne	ex I <u>. shall</u>			
		ficant change as speci subsystems as referre	fied in section 4, including- d to in section 2.2 b);	the placing in a	service of			
	where a							
	UTP		⊺SI					
	b) where a		,					
	as referre	d to in section 2.2 a) re	efers to this					
	UTP		Regulation					
	in order to	prescribe the risk ma	nagement process describe	ed in Annex I.				
5.2	The risk mana	igement process desci	ribed in Annex I shall be ap	plied by the pr	oposer.			
5. <u>2</u> 3			introduced by <u>its</u> suppliers re <u>also</u> managed <u>in compli</u>		ce provid-			
	<u>UTP</u> .		Regulation.					
	<u>its</u> suppliers a		l ire through contractual arra s, including their subcontra cribed in Annex I.					

	OTIF		GENERAL PROVISIONS UTP Risk evaluation and assessment Page					
Status: PROPC	IN FORCE- DSAL	Version: 02	Ref.: /	A 94-01G/1.2012 Original: EN Date: 03.04				
OTIF U	TP			Corresponding tex	t in EU regula	tions ¹ EU ref.		
6.	INDEPENDEN	IT ASSESSMENT		•		Article 6		
<u>6.1</u>	bothcorrect th	nt body shall carry ou e_application of the f <u>its</u> the results of this a	risk ma	inagement process				
	(including adequate identification of <u>.</u> hazards and the estimation of the risk arising from them) <u>.</u>							
	This assessment body shall be carried out by a body which shall meet the criteria listed in Annex II.							
	<u>The</u>			Where the assessment body is not al- ready <u>designated</u> identified by <u>existing</u> <u>Union Community</u> or national legis-lation, the proposer shall appoint its own as- sessment body which may be another organisation or an internal department.				
	proposer shall appoint its own assessment body at the earliest appropriate stage of the risk assessment process.							
<u>6.2</u>	To perform the	e independent assessi	ment, th	ne assessment body	shall:			
		has a thorough unde ation provided by the p			t change base	ed on the		
	during the	n assessment of the design and implemen eady certified by a rel	ntation of	of the significant cha	inge, if those p			
		n assessment of the design and implement				processes		
		eted its assessment i y shall deliver the safe				<u>), the as-</u>		
	section 15			Article 15				
	and Annex III.			1				
6. <u>32</u>	Duplication of	work between the folle	owing a	ssessments shall be	e avoided:			
	a) the assess	sment of conformity of						
				the safety mar as required by				
	the system	n of maintenance of er	ntities ir	charge of maintena	ance as require	ed by		
	<u>Annex A</u> rules), and	to ATMF (ECM U	niform	Directive 2004	/49/EC, and;			
		formity assessment of	carried	 out by				
		sing entity in accor GEN-D <u>₋ and;</u>	rdance	a notified body <u>defined</u> require rective 2008/5 <u>nated in accor</u> that Directive,	d by <u>Article 2</u> 7/EC or a bo dance with Art	<u>?(j) of </u> Di- dy desig-		

	OTIF		GENERAL PROVISIONS Risk evaluation and assessment					
Status: PROPC	IN FORCE- ISAL	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.04.2013		
OTIF U	TP			Corresponding tex	t in EU regulat	tions ¹ EU ref.		
	b)<u>c)</u>and any ir accordanc	ndependent safety as e with this	sessme	ent carried out by the	he assessmen	t body in		
	UTP <u>.</u>			Regulation.				
	shall be avoide	əd.						
6. <u>4</u> 3		dice to the safety auth changes concern the			ssment body w	/here <u>that</u>		
	where a vehicle needs an authorisation for placing in service, as referred to in Articles							
		2) of Directive 2008/57						
	-	ernational regulations,		Union legislation,				
	the proposer may choose the Competent authority in the meaning ATMF Article 5			national safety au needs an additi placing in service,				
	as assessmen	t body where that						
	Competent aut	thority_		national safety aut	<u>hority</u>			
	offers this serv	vice and where the sig	nificant	changes concern th	<u>ne following ca</u>	<u>ses:</u>		
	<u>(a) a vehicle r</u>	needs						
	<u>a first adr</u> ferred to ir	nission to operation <u>ATMF:</u>	<u>as re-</u>	a vehicle needs placing in service cles 22(2) and 2008/57/EC;	, as referred t			
	(b) a vehicle r	needs		I				
		nentary admission to contract to contract the contract of the		an additional auth service, as referr and 25(4) of Direct	ed to in Artic	les 23(5)		
	<u>(reserved)</u>			(c) the safety ce dated due to alto extent of the open Article 10(5) of Dir	eration of the ration, as refe	type or rred to in		
	<u>(reserved)</u>			(d) the safety cert due to substantial regulatory framew Article 10(5) of Dir	<u>changes to t</u> /ork, as refer	<u>he safety</u> red to in		
	<u>(reserved)</u>			(e) the safety a updated due to su infrastructure, sign or to the principles maintenance, as 11(2) of Directive to in Articles 23(5)	bstantial chang nalling or energes of their oper referred to 2004/49/EC;as	ges to the <u>ay supply,</u> ation and in Article s referred		

	OTIF	GENERAL PRO Risk evaluation		-		UTP GE Page 1	
Status: PROPO	N FORCE- <u>SAL</u>	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.0	04.2013
OTIF UT	P			Corresponding tex	t in EU regula	tions ¹	EU ref.
				2008/57/EC;			
	<u>(reserved)</u>			(f) where the safe updated due to an extent of the oper Article 10(5) of Dire	alteration of that a second stration, as refe	ne type or rred to in	
				where the safety certificate has to be revised due to substantial changes to the safety regulatory framework, as referred to in Article 10(5) of Directive 2004/49/EC:			
				where the safety of updated due to sult infrastructure, sign or to the principle and maintenance, 11(2) of Directive 2	bstantial chan alling or enere es of <u>their</u> its as referred to	ges to the jy supply, operation	
				where the safety a revised due to sub safety regulatory to in Article 2004/49/EC.	ostantial chang	es to the	
<u>6.5</u> 4	Where <u>a</u> the sig	gnificant change s cond	cern <u>s</u> a	structural subsyster	n that needs		
	ATMF, <u>the p</u>	mission in accordanc proposer may choos rity competent for tec	e_the	an authorisation for referred to in Artic Directive 2008/57/ <u>choose</u> the <u>national</u>	le 15(1) or Art /EC, <u>the prop</u>	icle 20 of oser may	
	may act as the	⊢assessment body <u>, wł</u>	here tha	<u>at</u>			
	national autho admission	rity competent for tec	hnical	national safety authority			
	offers this serv	<u>vice, unless the propos</u>	ser <u>has</u>	already <u>gi</u> ave <u>n</u> that	task to		
	another asses provisions in U	sing entity which mee ITP GEN-D.	ets the	a notified body in 18(2) of that Direct		ith Article	
<u>7.</u>	ACCREDITAT	ION/RECOGNITION	OF THE	ASSESSMENT BO	DDY		Article 7
<u>7.1</u>	The assessme	ent body provided for in	<u>n</u>				
	section 6			Article 6			
	shall be either:	<u>.</u>		1			
	a) accredited	by the national accred	ditation	body referred to in			
	section 13	<u>.1</u>		Article 13(1)			
	using the c	criteria defined in Anne	ex II, or;	_			
	b) recognised	by the recognition bo	ody refe	rred to in			
	section 13	<u>.1</u>		<u>Article 13(1)</u>			
	using the c	criteria defined in Anne	ex II, or;	Ĺ			

	OTIF		GENERAL PROVISIONS UTP G Risk evaluation and assessment Page					
Status: PROPC	IN FORCE-)SAL	Version: 02	Ref.: A	94-01G/1.2012	Original: EN	Date: 03.0	04.2013	
OTIF U	<u>c) the</u> <u>National a</u>	uthority competent for ssion under the requir 9.2.		Corresponding tex national safety quirement of A	v authority und		EU ref.	
<u>8.</u>		E OF ACCREDITATIO	DN/REC	DGNITION			Article 8	
<u>8.1</u>	(Reserved)- ³			When granting the safety auth with Regulation or Regulation national safety accreditation Member State ticle 7, as pro- railway under manager to a body.	norisation in ac on (EU) No 1 (EU) No 1169 authority sha or recognitio in accordance of of the abil taking or infra	cordance 158/2010 /2010-, a all accept n by a with Ar- ity of the astructure		
<u>8.2</u>	When granting	the certificate to an e	ntity in c	harge of maintena	nce in accorda	nce with		
0.2		MF (ECM Uniform rule	· ·	Regulation (EU) N				
		n body shall accept su						
	Contracting St	ate		Member State,				
	as proof of the	ability of the entity in	charge o	e of maintenance to act as assessment body				
<u>9.</u>	TYPES OF RE	COGNITION OF THE	ASSES	SMENT BODY			Article 9	
<u>9.1</u>	_	types of recognition of	the asso	essment body may	be used:			
	a) recognition		1	Mambar Clata				
	<u>Contractin</u>	<u>g state</u> y in charge of mainter	ance a	Member State	_	n individ-		
	ual;			<u>n organisation or a</u>				
	<u>b) (reserved)</u>			recognition by thority of the a or a part of it duct independent the assessment the safety man railway undert ture manager;	bility of an org or an individua ent assessmer ent and super nagement sys	anisation al to con- nt through vision of atem of a		
	c) when the		I					
	national au nical admi	uthority competent for ssion	tech-	national safety	authority			
	is acting as certification body in conformity with							

³ In OTIF Railway undertakings or infrastructure managers may act as proposers, as set out in the definitions, but are not recognised as possible assessment bodies.

G:\Technik\CTE\CTE\6_2013_06\Documents\1_Documents as input to CTE 6\EN\A94-01G_1_2012_v02_e_UTP GEN-G - CSM-RA_amendment.doc

	OTIF	GENERAL PRO		-		UTP GE Page 1		
Status: PROPO	N FORCE- SAL	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.0	04.2013	
OTIF UT	P			Corresponding tex	t in EU regula	tions ¹	EU ref.	
	<u>section 1</u> <u>Uniform r</u>	0 of Annex A to ATM ules)	<u>/IF (ECM</u>	<u>Article 10 of</u> 445/2011,	Regulation	<u>(EU) No</u>		
	recognition by	<u>/ the</u>						
	<u>national a</u> nical adm	authority competent	for tech-	national safety	<u>authority</u>			
	ent asses	lity of an organisatio ssment through ass an entity in charge o	essment a	and surveillance of				
	d) recognitio	on by a recognition be	ody desigi	nated by the				
	<u>Contracti</u>	ng State		Member State				
		lity of an entity in cha ual to conduct indep			nisation or a p	art of it or		
<u>9.2</u>	When the							
	Contracting S	<u>itate</u>		Member State				
	recognises th	<u>e</u>						
	national authors and authors a	ority competent for t	technical	national safety aut	<u>hority</u>			
	as an assess	ment body, it is the re	esponsibil	ity of that				
	Contracting S	tate_		Member State				
	to ensure that	<u>t the</u>						
	national authors admission	ority competent for t	technical	national safety aut	<u>hority</u>			
	fulfills the rec tions of the	quirements set out ir	<u>n Annex I</u>	l; In this case, the	assessment b	<u>ody func-</u>		
	national authorian authorian admission	ority competent for t	technical	national safety aut	<u>hority</u>			
	shall be demo	onstrably independer	nt of the o	ther functions of the	<u>)</u>			
	national authors admission.	ority competent for t	technical	national safety aut	<u>hority.</u>			
<u>10.</u>	VALIDITY OF	RECOGNITION		I			Article 10	
<u>10.1</u>	In the cases r	eferred in						
	points a) and section 9.2	d d) of section 9.1	<u>. and in</u>	Article 9(1)(a) and	(d) and Article	9(2),		
	the period of	validity of recognitior	n shall not	exceed 5 years from	m the date it is	granted.		
<u>10.2</u>	In the case re	ferred in						
	point b) of se	ction 9.1:		Article 9(1)(b):				

	OTIF	GENERAL PROVISIONSUTP GERisk evaluation and assessmentPage 14					
Status: PROPO	IN FORCE- ISAL	Version: 02	Ref.: /	A 94-01G/1.2012	Original: EN	Date: 03.0	04.2013
OTIF UT	OTIF UTP a) (Reserved)- ⁴				Corresponding text in EU regulations ¹ EU re the statement of recognition for a railway undertaking or an infrastructure manager shall be displayed on the relevant safety certificate in field 5 'Additional Informa- tion' of the harmonised format of safety certificates provided in Annex I to Regula- tion 653/2007/EC and in an appropriate		
<u>b) (Reserved)</u>			part of the safety authorisations; the period of validity of recognition shall be limited to the validity of the safety certificate or authorisation under which it is granted. In this case, the request of recognition shall be made at the next application for renewal or update of the safety certificate or authorisation.				
<u>10.3</u>	In the cases re	eferred in					
	point c) of section 9.1: Article 9(1)(c): a) the statement of recognition for an entity in charge of maintenance sl played on the relevant certificate in field 5 'Additional Information' of nised format of certificates for entities in charge of maintenance provide V of Annex A to ATMF (ECM Uniform rules); , or in Annex VI where r Regulation (EU) No 445/20 b) the period of validity of recognition shall be limited to the validity of the issued by the certification body under which it is granted. In this case, for recognition shall be made at the next application for renewal or upor certificate.					<u>e harmo- in Annex</u> <u>levant, of</u> <u>l:</u> <u>certificate</u> <u>e request</u>	
<u>11.</u>	SURVEILLAN	CE BY RECOGNITIO	N BOD	<u>Y</u>			Article 11
<u>11.1</u>	tor the confor which they ha certificate, and		<u>dies to</u> ditation	By analogy to the 5(3) and 5(4) or 765/2008 for accre	f <u>Regulation</u> editation,	(EC) No	
	assessment b	n body shall conduct body it recognised co dity of the recognition	ntinues				
<u>11.2</u>	tion body sha	nent body no longer s Il limit the scope of a n, depending on the de	pplicati	on of the recognitio			
<u>12.</u>	RELAXED CR	RITERIA WHERE A	SIGNIF	ICANT CHANGE	<u>S NOT TO B</u>	<u>e mutu-</u>	Article 12
	the proposer	<u>k assessment for a si</u> <u>shall appoint an ass</u> and impartiality requ	essmer	nt body meeting at	least the con	npetency,	

⁴ In OTIF Railway undertakings or infrastructure managers may act as proposers, as set out in the definitions, but are not recognised as possible assessment bodies.

G:\Technik\CTE\CTE\6_2013_06\Documents\1_Documents as input to CTE 6\EN\A94-01G_1_2012_v02_e_UTP GEN-G - CSM-RA_amendment.doc

	OTIF		GENERAL PROVISIONS UTP GE Risk evaluation and assessment Page 1					
Status: PROPC	IN FORCE- DSAL	Version: 02	Ref.:	A 94-01G/1.2012	Original: EN	Date: 03.	04.2013	
OTIF U	TP			Corresponding tex	t in EU regula	tions ¹	EU ref.	
	paragraph 1 in	<u>n Annex II may be rela</u>	ixed in a	agreement with				
	national autho admission	prity competent for tee	<u>chnical</u>	the national safety	authority			
	in a non-discri	minatory way.		1				
<u>13.</u>	PROVISION C	OF INFORMATION TO	<u>D THE</u>				Article 13	
	SECRETARY	GENERAL		AGENCY				
<u>13.1</u>		able, by no later than by years after the date of			<u>d when OTIF t</u>	ext will be		
	Contracting St		<u>Ji enu y</u>	Member States				
	shall inform th			Member Otates				
	Secretary Gen			Agency				
	which is their national accreditation body a				dy or recogniti	on bodies		
	for the purpos	<u>es of this</u>						
	<u>UTP,</u>			Regulation,				
		he assessment bodies	s they re	-	<u>nity with</u>			
	point a) of sec			<u>Article 9(1)(a).</u>				
		o notify any change to	o that sit	1	onth of the cha	inge.		
	Secretary Gen			The Agency				
		s information publicly						
<u>13.2</u>		an <u>[specific date to l</u> adate of entry into for						
	Secretary Gen	<u>neral</u>		Agency				
	those assessn	ment bodies accredite nent bodies are accre o notify any change to	edited a	s provided for in poi	nts 2 and 3 of	Annex II.		
	Secretary Gen	neral		The Agency				
	shall make this	s information publicly	availab	<u>e.</u>				
<u>13.3</u>		an <u>[specific date to l</u> date of entry into for				<u>ted + two</u>		
	Secretary Gen	<u>neral</u>		Agency				
	those assessn	ment bodies recognis nent bodies are recog o notify any change to	nised a	s provided for in po	ints 2 and 3 of	Annex II.		
	Secretary Gen			The Agency				
	-	s information publicly	availab					

	OTIF	GENERAL PROV Risk evaluation				UTP GEN-G Page 16 of 33	
Status: PROPC	IN FORCE- SAL	Version: 02	Ref.: /	A 94-01G/1.2012	Original: EN	Date: 03.0	04.2013
OTIF UT	ΓP			Corresponding tex	t in EU regulat	ions ¹	EU ref.
<u>14.</u>	SUPPORT FR	OM THE		I			Article 14
	SECRETARY	GENERAL		AGENCY			
	TO ACCREDI	TATION OR RECOGN		OF THE ASSESSM	ENT BODY		
<u>14.1</u>	themselves to	ditation bodies shall s peer evaluation orga Il level, with the assis ry General.	anised	tions between the recognition bodies			
	Contracting States shall ensure that thein national accreditation bodies regularly undergo peer evaluation.						
<u>14.2</u>	<u>(reserved)</u>			The Agency in collaboration with the European cooperation for Accreditation (EA), shall organise, training on this Regulation for the national accreditation bodies and for the recognition bodies at least at each new revision of this Regulation.			
7 <u>15</u> .	SAFETY ASS	ESSMENT REPORT		1			Article 7 <u>15</u>
7 <u>15</u> .1	⁷¹⁵ The assessment body shall provide the proposer with a safety assessment report <u>in</u> accordance with the requirements set out in Annex III. The proposer shall be responsible for determining if and how to take into account the conclusions of the safety assessment report for the safety acceptance of the assessed change. The proposer shall justify and document the part of the safety assessment report for which the proposer eventually disagrees.						
7 <u>15</u> .2	In the case ref	erred to in					
	point b) of sec paragraph 5 of	tion 2.3, in accordanc f this section,	e with	point b) of Article 2 paragraph 5 of this		ance with	
	point a) of sec	tion 5.1, the declaration	on refer	red to in safety asse	essment report		
	section 16			Article 16			
	shall be taken	acceptedinto account	by the				
	national autho admission	rity competent for tec	hnical	national safety aut	hority		
	in its decision			•			
	for the admiss	ion to operation of		to_authorise the pla	acing in service	e of	
	structural sub-	systems and vehicles.					
<u>15.3</u>	The national technical admi	authority competer ssion	<u>nt for</u>	Without prejudice 2008/57/EC, the n			
	may not request additional checks or risk analyses unless it is able to demonstrate the existence of a substantial safety risk.						
<u>15</u> 7. <u>4</u> 3	In the case ref	erred to in					

	OTIF	GENERAL PRO Risk evaluation				UTP GEN-G Page 17 of 33	
Status: PROPO	N FORCE- SAL	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.04.2013	
OTIF UT				Corresponding tex	t in EU regula	tions ¹ EU ref.	
	point a) of sec paragraph 5 of	tion 2.3, in accordanc this section,	e with	point (a) of Artic with paragraph 5 c		cordance	
	the declaration	referred to in		I			
	section 16			Article 16			
	shall be accep	ted by the		I			
point b) of sec- tion 5.1, the indo- pon- dent assess ment shall be part of the task of the		ntity which performa f conformity with the		notified body,			
	unless otherwi	se prescribed in the					
	structural UTP	.		TSI.			
	If the independ	lent assessment is no	t part o	t of the task of			
		g entity which perforn f conformity with the		the notified body			
		essment report shall b	e taken	<mark>∣</mark> ⊢into account by the			
	assessing enti	t y		notified body			
	of drawing up	elivering the conformity the <u>unless it justifies a</u> the appropriateness o	and doc	uments its doubts of			
	UTP declaration	on of verification.		EC declaration of	verification.		
<u>15</u> 7. <u>5</u> 4		or part of a syste process specified in th		1		g the risk	
	UTP,			Regulation,			
		afety assessment rep ody in charge of perfor					
	used under th	cognition shall be con ne same functional, o nted system, and tha	operatio	onal and environme	ental conditior	ns as the	

	OTIF	GENERAL PROVISIONSUTP GEIRisk evaluation and assessmentPage 18					
Status: PROPO	N FORCE- SAL	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.0	04.2013
OTIF UT	P			Corresponding tex	t in EU regula	tions ¹	EU ref.
<u>16.</u>	DECLARATIO	N BY THE PROPOSE	<u>ER</u>	I			Article 16
<u>16.1</u>	Based on the r	esults of the application	on of th	is			
	<u>UTP</u>			Regulation			
	shall produce a			ovided by the assessment body, the proposer all identified hazards and associated risks are			
8 <u>17</u> .	RISK CONTRO	OL MANAGEMENT_#	NTERN	IAL AND EXTERNA			Article 17
<u>17.1</u>	Any proposer which has had a CSM on risk evaluation and assessment carried out shall continue to monitor the applica- tion and audit the effects of the applica- tion, in particular the hazard identification, risk estimation and risk evaluation on which the conclusions were based. 1. The railway undertakings a structure managers shall include the application of this Regulation on risk evaluation and assessme recurrent auditing scheme efor t management system as referr Article 9 of Directive 2004/49/EC.				audits of one CSM nt in their the safety red to in	Article-8	
<u>17.2</u>	The entities in	charge of maintenanc	e shall	include audits of the	e application of	this	
	<u>UTP</u>			Regulation			
	in their recurre	nt auditing scheme for	r the sy	stem of maintenanc	e as referred t	<u>o in</u>	
	Annex A to AT	MF (ECM Uniform rule	<u>əs)</u> .	Article 14a(3) of D	irective 2004/4	<u>9/EC.</u>	
<u>17.3</u>				<u>As part2. Within</u> tasks defined in A tive 2004/49/EC, authority shall mo th <u>ise CSM on ri- sessmentRegulation</u> takings, infrastrucc entities in charge not fall within the (EU) No 445/2011 National Vehicle R	Article 16(2)(e) the national pointor the applest on by by railwa ture managers of maintenance scope of R but are identi	of Direc- al safety ication of and as- ay under- s and the se that do degulation	
<u>17.4</u>	As part of the t	asks defined in		I			
	section 7.1 of Uniform rules),	Annex A to ATMF	<u>(ECM</u>	Article 7(1) of 445/2011,	Regulation	(<u>EU) No</u>	
		n body of an entity in Ilance of the application			of freight wag	<u>ons shall</u>	
	<u>UTP</u>			Regulation			
	by the entity in	charge of maintenand	<u>ce.</u>	-			
9 <u>18</u> .	FEEDBACK A	ND TECHNICAL PRO	OGRES	S			Article 9 <u>18</u>
	monitoring and ter <u>17</u> 8 shall, deviation from sumptions on	rvations made <u>by i</u> d audits according to in the case of a sign one or more of the which the CSM conclu- reported to the com	chap- ificant e pre- usions	1. Each infrastruct railway undertakin safety report refer Directive 2004/49/ experience with t <u>RegulationCSM</u>	ng shall, in it red to in Artic EC, report bric he applicatior	s annual le 9(4) of efly on its of th <u>is</u> e	

		GENERAL PROVISIONS Risk evaluation and assessment			
Status: IN FORCE PROPOSAL	Version: 02	Ref.: /	A 94-01G/1.2012	Original: EN	Date: 03.04.2013
OTIF UTP			Corresponding tex	t in EU regula	tions ¹ EU ref
authority of the Contracting State which has issued the technical admission.			assessment.		
The report shall also include a synthesis on significance of the changes.			f the decisions take	n related to th	e level of
one or m CSM on has/have nual basi serious c _report_ ⁵ Experts General) back.	2A Contracting State which has issued one or more technical admissions where CSM on risk evaluation and assessment has/have been applied shall, on an an- nual basis – or immediately in the case of serious consequences being observed— _report— ⁵ to the Committee of Technical Experts (through the OTIF Secretary General) on their experiences and feed- back.			safety authority report refer tive 2004/49/E of the propo hise <u>Regulatio</u> and assessme , its own exper <u>Railway</u> Age lect feedback CSM on risk of	red to in EC, report osers with on <u>CSM on</u> ent, and, rience. oncy shall con the ovaluation
tions or the Contr the Contr cable, m	se of problems with the refficiency of the CS racting State shall, when the recommendation	 and assessment and, where applicable, shall make recommendations to the Commission with a view to improving it. 			

3. The annual maintenance report of entities in charge of maintenance of freight wagons referred to in point I(7)(4)(k) in Annex III to

Annex A to ATMF (ECM Uniform rules),

view to improving them/it.

Regulation (EU) No 445/2011,

shall include information about the experience of entities in charge of maintenance in applying this

UTP. The Competent Authorities of the Contracting States in which the entity has its place of business,

shall gather this information in coordination with the respective certification bodies-

and make it available to the Secretary . General upon request.

4. The other entities in charge of maintenance that do not fall within the scope of

Annex A to ATMF (ECM Uniform rules), may also be requested by the Competent authority of the country where they have their place of business to report on their activities. This information should also be made available to the Secretary General upon request.

Regulation (EU) No 445/2011, shall also share their experience with the Agency on the application of this Regulation. The Agency shall coordinate the sharing of experience with these entities in charge of maintenance and with the NSAs.

5. The Agency shall collect all information on the experience of application of this Regulation and shall, when necessary, make recommendations to the Commis-

⁵ The report to the Committee of Technical Experts may be made by the EU for those Contracting States which are also Member States of the EU.

Ĩ			GENERAL PROVISIONSUTP GRisk evaluation and assessmentPage 2					
	Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.0	Date: 03.04.2013	
	OTIF UTP			Corresponding tex <u>sion with a view to</u> <u>tion.</u> <u>46. Before [speci</u> <u>when CSM text v</u> <u>Official Journal + 1</u> <u>of entry into force</u> Agency shall sub by 31 December report <u>containing</u> (a) an analysis of application of th <u>i</u> risk evaluation and cases where the by proposers on a the relevant date for in Article <u>2</u> +0; (b) an analysis of proposers conce <u>onrelated to</u> the <u>the-changes</u> ; (c) an analysis of	t in EU regulat improving this ific date to be will be publish two years after two years after the Europear mit to the Co -2011 at the chich shall inclu the experience assessment, CSM has bee a voluntary bas of application f the experience erning the level of signif	tions ¹ <u>s Regula-</u> <u>e inserted</u> <u>ed in EC</u> <u>r the date</u> a Railway mmission latest, a ude : <u>e with the</u> <u>CSM on</u> including n applied sis before provided ce of the decisions icance of	EU ref.	
				of practice have b scribed in pointsee	een used as <u>s</u> etion 2.3.8 of A	<u>set out</u> de- nnex I;		
				(d) an analysis of <u>accreditation and</u> <u>ment bodies;</u>	recognition o	f assess-		
				(e) an analysis of t of this Regulation tion and assessme	e CSM on ris	ctiveness k evalua-		
				The <u>national</u> sa <u>supportassist</u> the <u>such information</u> s application of the and assessment.	Agency in y identifying	collecting cases of		
Ì	19. REDEAL						Article 19	
	REPEAL							

The previous version 01 of this UTP, dated 01.05.2012 is repealed with effect	Regulation (EC) No 352/2009 is repealed with effect from <i>[specific date to be in-</i>
from [two years after entry into force].	serted when CSM text will be published in EC Official Journal + two years after the date of entry into force].
References to the repealed UTP shall be construed as references to this UTP.	References to the repealed Regulation shall be construed as references to this Regulation.

	OTIF	GENERAL PROV Risk evaluation				UTP GE Page 2	
Status: PROPO		Version: 02	Ref.: A	A 94-01G/1.2012	Original: EN	Date: 03.0	04.2013
	P	Version: 02	Ref.: A	A 94-01G/1.2012 Corresponding tex ENTRY INTO FOR 1This Regulation on the 20th day fo the Official Jour Union. EN 29.4.20 the European Unic 2 <u>ItThis Regular</u> [specific date to be text will be publish nal – two years after force].1July 2012. However, it shall a (a) to all significar affecting vehicles 2(c) of Directive 20 (b) to all significar structural subsyster Article 15(1) of D	t in EU regulat RCE n shall enter i llowing its pub mal of the 009 Official J on L 108/9 tion shall ap pe inserted will ned in EC Offi er the date of pply from 19 J cant technical- as defined 008/57/EC; ont changes co oms, where re	tions ¹ into force lication in <i>European</i> ournal of ournal of ply from <u>hen CSM</u> <u>cial Jour- entry into</u> uly 2010: <u>-changes</u> in Article pncerning quired by	04.2013 <i>EU ref.</i> Article 2010
				by a TSI. This Regulation s entirety and dire Member States.			

Corresponding text in EU regulations¹ EU ref.

ANNEX I 6

1. GENERAL PRINCIPLES APPLICABLE TO THE RISK MANAGEMENT PROCESS

1.1 General principles and obligations

1.1.1 The risk management process covered by this

UTP

Regulation

shall start from a definition of the system under assessment and comprise the following activities:

- a) the risk assessment process, which shall identify the hazards, the risks, the associated safety measures and the resulting safety requirements to be fulfilled by the system under assessment;
- b) demonstration of the compliance of the system with the identified safety requirements; and
- c) management of all identified hazards and the associated safety measures.

This risk management process is iterative and is depicted in the diagram of the Appendix. The process ends when the compliance of the system with all the safety requirements necessary to accept the risks linked to the identified hazards is demonstrated.

1.1.2 Theis iterative risk management process.+

shall include appropriate quality assurance activities and be carried out by competent staff. It;

_shall be independently assessed by one or more assessment bodies.

1.1.3 The proposer in charge of the risk management process required by this

UTP

Regulation

shall maintain a hazard record in accordanceing with point to section 4. 7613

1.1.4 The actors who already have in place methods or tools for risk assessment may continue to apply them <u>if such methods or toolas far as they</u> are compatible with the provisions of this

UTP

Regulation

the risk assessment methods or tools are described in a safety management system which has been accepted by a national safety authority in accordance with Article 10(2)(a) or Article 11(1)(a) of Directive 2004/49/EC; or

b) the risk assessment methods or tools are required by a

UTP

a) (Reserved)⁸

TSI

or comply with publicly available recognised standards specified in notified national

and subject to the following conditions:

G:\Technik\CTE\CTE\6_2013_06\Documents\1_Documents as input to CTE 6\EN\A94-01G_1_2012_v02_e_UTP GEN-G - CSM-RA_amendment.doc

^b When the word "<u>point" or "</u>section" is used in this Annex I, it means a section of this Annex.

When the word "point" or "section" is used in this Annex I, it means a section of this Annex.

³ COTIF does not prescribe the use of safety management systems (SMS)

OTIF	GENERAL PRO	VISIONS and assessment		UTP GEN-G Page 23 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

rules.

1.1.5 Without prejudice to civil liability in accordance with the legal requirements of the

Contracting States,

Member States,

the risk assessment process shall fall within the responsibility of the proposer. In particular the proposer shall decide, with agreement of the actors concerned, who will be in charge of fulfilling the safety requirements resulting from the risk assessment. The safety requirements assigned by the proposer to those actors shall not go beyond the scope of their responsibility and domain of control. This decision shall depend on the type of safety measures selected to control the risks to an acceptable level. The demonstration of compliance with the safety requirements shall be conducted <u>in accordanceing</u> to <u>pointsection</u> 3.

- 1.1.6 The first step of the risk management process shall be to identify in a document, to be drawn up by the proposer, the different actors' tasks, as well as their risk management activities. The proposer shall coordinate close collaboration between the different actors involved, according to their respective tasks, in order to manage the hazards and their associated safety measures.
- 1.1.7 Evaluation of the correct application of the risk management process falls within the responsibility of the assessment body. described in this

UTP

Regulation

1.2 Interfaces management

1.2.1 For each interface relevant to the system under assessment and without prejudice to specifications of interfaces defined in relevant

UTPs,

TSIs,

the rail-sector actors concerned shall cooperate in order to identify and manage jointly the hazards and related safety measures that need to be handled at these interfaces. The management of shared risks at the interfaces shall be coordinated by the proposer.

- 1.2.2 <u>IfWhen</u>, in order to fulfil a safety requirement, an actor identifies the need for a safety measure that it cannot implement itself, it shall, after agreement with another actor, transfer the management of the related hazard to the latter <u>in accordance withusing</u> the process <u>set outdescribed</u> in <u>pointsection</u> 4.
- 1.2.3 For the system under assessment, any actor who discovers that a safety measure is non-compliant or inadequate is responsible for notifying it to the proposer, who shall in turn inform the actor implementing the safety measure.
- 1.2.4 The actor implementing the safety measure shall then inform all the actors affected by the problem either within the system under assessment or, as far as known by the actor, within other existing systems using the same safety measure.
- 1.2.5 When agreement cannot be <u>reached</u>found between two or more actors it is the responsibility of the proposer to find an adequate solution.
- 1.2.6 When a requirement in a notified national rule can-not be fulfilled by an actor, the proposer shall seek advice from the relevant competent authority.
- 1.2.7 Independently from the definition of the system under assessment, the proposer is responsible for ensuring that the risk management covers the system itself and <u>its</u>the integration into the railway system as a whole.

2. DESCRIPTION OF THE RISK ASSESSMENT PROCESS

Corresponding text in EU regulations¹ EU ref.

2.1 General description

- 2.1.1 The risk assessment process is the overall iterative process that comprises:
 - a) the system definition;
 - b) the risk analysis including the hazard identification;
 - c) the risk evaluation.

The risk assessment process shall interact with the hazard management in accordanceing withto pointsection 4.1.

- 2.1.2 The system definition sh<u>allould</u> address at least the following issues:
 - a) system objective (, e.g. intended purpose);
 - b) system functions and elements, where relevant (including e.g. human, technical and operational elements);
 - c) system boundary including other interacting systems;
 - d) physical (i.e. interacting systems) and functional (i.e. functional input and output) interfaces;
 - e) system environment (<u>for example</u>e.g. energy and thermal flow, shocks, vibrations, electromagnetic interference, operational use);
 - f) existing safety measures and, after <u>the necessary relevant</u> iterations, definition of the safety requirements identified by the risk assessment process;
 - g) assumptions that which shall determine the limits for the risk assessment.
- 2.1.3 A hazard identification shall be carried out on the defined system, <u>in accordanceing</u> <u>withto pointsection</u> 2.2.
- 2.1.4 The risk acceptability of the system under assessment shall be evaluated by using one or more of the following risk acceptance principles:
 - a) the application of codes of practice (pointsection 2.3);
 - b) a comparison with similar systems (pointsection 2.4);
 - c) an explicit risk estimation (pointsection 2.5).

In accordance with the general principle referred to in <u>pointsection</u> 1.1.5, the assessment body shall refrain from imposing the risk acceptance principle to be used by the proposer.

- 2.1.5 The proposer shall demonstrate in the risk evaluation that the selected risk acceptance principle is adequately applied. The proposer shall also check that the selected risk acceptance principles are used consistently.
- 2.1.6 The application of these risk acceptance principles shall identify possible safety measures that which make the risk(s) of the system under assessment acceptable. Among these safety measures, those ones selected to control the risk(s) shall become the safety requirements to be fulfilled by the system. Compliance with these safety requirements shall be demonstrated in accordance with point section 3.
- 2.1.7 The iterative risk assessment process can be considered as completed when it is demonstrated that all safety requirements are fulfilled and no additional reasonably for eseeable hazards have to be considered.

2.2 Hazard identification

2.2.1 The proposer shall systematically identify, using wide-ranging expertise from a compe-

OTIF	GENERAL PRO Risk evaluation	VISIONS and assessment		UTP GEN-G Page 25 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

tent team, all reasonably foreseeable hazards for the whole system under assessment, its functions where appropriate and its interfaces.

All identified hazards shall be registered in the hazard record in accordanceing withto pointsection 4.

- 2.2.2 To focus the risk assessment efforts upon the most important risks, the hazards shall be classified according to the estimated risk arising from them. Based on expert judgement, hazards associated with a broadly acceptable risk need not be analysed further but shall be registered in the hazard record. Their classification shall be justified in order to allow independent assessment by an assessment body.
- 2.2.3 As a criterion, risks resulting from hazards may be classified as broadly acceptable when the risk is so small that it is not reasonable to implement any additional safety measure. The expert judgement shall take into account that the contribution of all the broadly acceptable risks does not exceed a defined proportion of the overall risk.
- 2.2.4 During the hazard identification, safety measures may be identified. They shall be registered in the hazard record in accordanceing withto pointsection 4.
- 2.2.5 The hazard identification only needs to be carried out at a level of detail necessary to identify where safety measures are expected to control the risks in accordance with one of the risk acceptance principles <u>referred tomentioned</u> in point 2.1.4. Iteration may thus be necessary between the risk analysis and the risk evaluation phases until a sufficient level of detail is reached for the identification of hazards.
- 2.2.6 Whenever a code of practices or a reference system is used to control the risk, the hazard identification maycan be limited to:
 - a) the verification of the relevance of the code of practices or of the reference system;
 - b) the identification of the deviations from the code of practices or from the reference system.
- 2.3 Use of codes of practice and risk evaluation
- 2.3.1 The proposer, with the support of other involved actors and based on the requirements listed in point 2.3.2, shall analyse whether one, or several or all hazards are appropriately covered by the application of relevant codes of practice.
- 2.3.2 The codes of practice shall satisfy at least the following requirements:
 - a) <u>The must be widely recognised</u> acknowledged in the railway domain. If this is not the case, the codes of practice will have to be justified and be acceptable to the assessment body;
 - b) <u>They must be relevant for the control of the considered hazards in the system under assessment. Successful application of a code of practice for similar cases to manage changes and control effectively the identified hazards of a system in the sense of this ¹/₇</u>

- U	ITF	כ	
		_	

Regulation

is sufficient for it to be considered as relevant;

c) Upon request, they must be available to assessment bodies for them to either assess or, where relevant, mutually recognise, in accordance with

section 15.5 of this UTP,

Article 15(5),

-the suitability of both the application of the risk management process and of its results be publicly available for all actors who want to use them.

	OTIF	GENERAL PRO				UTP GEN-G Page 26 of 33
Status PROP	: IN FORCE- OSAL	Version: 02	Ref.: /	A 94-01G/1.2012	Original: EN	Date: 03.04.2013
OTIF L				Corresponding tex	t in EU regula	tions ¹ EU ref.
2.3.3	Where complian	ice with				
	UTPs			TSIs		
	is required					
				by Directive 2008/	57/EC	
	and the relevant					
	UTP			TSI		
	does not impose	e the risk managemen	t proce	ss established by thi	S	
	UTP, the UTPs			Regulation, the TS	ls	
	may be conside <u>b</u> e) of point 2.3.2	ered as codes of prac 2 is fulfilled.	tice for	controlling hazards	s, provided red	quirement
2.3.4	National rules no	otified in accordance v	with			
	Article 12 of AP	ГU		Article 8 of Dire Article 17(3) of Dir	ective 2004/49 ective 2008/57	9/EC and 7/EC
	may be conside fulfilled.	ered as codes of prac	ctice pr	ovided the requirem	nents of point	2.3.2 are
2.3.5		nazards are controllec a the risks associated s that:				
	a) these risks n	eed not be analysed f	urther;			
		ne codes of practice s s for the relevant haza		e registered in the h	nazard record	as safety
2.3.6		native approach is no onstrate that the alter ifety.				
2.3.7		particular hazard cann litional safety measur tance principles.				
2.3.8	When all hazard be limited to:	ls are controlled by co	des of	practice, the risk ma	inagement pro	cess may
	a) the hazard io	dentification in accorda	ance wi	th <u>point</u> section 2.2.6	S;	
		ion of the use of the <u>point</u> section 2.3.5;	codes	of practice in the h	nazard record	in accor-
	c) the documer with section	ntation of the applicati 5;	on of th	ne risk management	process in ac	cordance
	d) an independ	ent assessment in acc	cordanc	ce with Article 6.		
	section 6.			Article 6.		
2.4	Use of reference	e system and risk ev	valuatio	on		
2.4.1		vith the support of oth we hazards are <u>appro</u> ence system.				

Corresponding text in EU regulations¹ EU ref.

- 2.4.2 A reference system shall satisfy at least the following requirements:
 - a) it has already been proven in-use to have an acceptable safety level and would <u>therefore</u> still qualify for approval in the Member State where the change is to be introduced;
 - b) it has similar functions and interfaces as the system under assessment;
 - c) it is used under similar operational conditions as the system under assessment;
 - d) it is used under similar environmental conditions as the system under assessment.
- 2.4.3 If a reference system fulfils the requirements listed in section 2.4.2, then for the system under assessment:
 - a) the risks associated with the hazards covered by the reference system shall be considered as acceptable;
 - b) the safety requirements for the hazards covered by the reference system may be derived from the safety analyses or from an evaluation of safety records of the reference system;
 - c) these safety requirements shall be registered in the hazard record as safety requirements for the relevant hazards.
- 2.4.4 If the system under assessment deviates from the reference system, the risk evaluation shall demonstrate that the system under assessment reaches at least the same safety level as the reference system, applying another reference system or one of the two other risk acceptance principles. The risks associated with the hazards covered by the reference system shall, in that case, be considered as acceptable.
- 2.4.5 If <u>at least</u> the same safety level as the reference system cannot be demonstrated, additional safety measures shall be identified for the deviations, applying one of the two other risk acceptance principles.

2.5 Explicit risk assessment and evaluation

- 2.5.1 <u>IfWhen</u> the hazards are not covered by one of the two risk acceptance principles <u>laid</u> <u>downdescribed</u> in <u>points</u> 2.3 and 2.4, the demonstration of <u>the</u>-risk acceptability shall be performed by explicit risk estimation and evaluation. Risks resulting from these hazards shall be estimated either quantitatively or qualitatively, taking existing safety measures into account.
- 2.5.2 The acceptability of the estimated risks shall be evaluated using risk acceptance criteria either derived from or based on legal requirements <u>contained</u>stated in

COTIF regulations

UnionCommunity regulations

or in notified national rules. Depending on the risk acceptance criteria, the acceptability of the risk may be evaluated either individually for each associated hazard or globally for the combination of all hazards <u>as a whole</u> considered in the explicit risk estimation.

If the estimated risk is not acceptable, additional safety measures shall be identified and implemented in order to reduce the risk to an acceptable level.

- 2.5.3 <u>IfWhen</u> the risk associated with one <u>hazard</u> or a combination of several hazards is considered as acceptable, the identified safety measures shall be registered in the hazard record.
- 2.5.4 <u>IfWhere</u> hazards arise from failures of technical systems not covered by codes of practice or the use of a reference system, the following risk acceptance criterion shall apply for the design of the technical system:

For technical systems where a functional failure has a credible direct potential for a

OTIF	GENERAL PRO Risk evaluation	VISIONS and assessment		UTP GEN-G Page 28 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

2.5.5 A

Corresponding text in EU regulations¹ EU ref.

catastrophic consequence, the associated risk does not have to be reduced further if the rate of that failure is less than or equal to 10⁻⁹ per operating hour.

Without prejudice to the procedure specified in Article 8 of Directive 2004/49/EC, a

more demanding criterion then the one laid down in point 2.5.4 may be requested, through a notified national <u>safety</u> rule, in order to maintain a national safety level.

InHowever, in_the case of additional

technical admissions of vehicles, Article 6 of	authorisations for placing in service of
ATMF shall apply.	vehicles, the procedures of Articles 23 and
	25 of Directive 2008/57/EC shall apply.

2.5.6 If a technical system is developed by applying the 10⁻⁹ criterion <u>laid downdefined</u> in point 2.5.4 the principle of mutual recognition is applicable in accordance with Article 7(4) of this

section 15.5 of this UTP.

Article 15(5) of this Regulation.

Nevertheless, if the proposer can demonstrate that the national safety level in the

Contracting State	Member State
-------------------	--------------

of application can be maintained with a rate of failure higher than 10^{-9} per operating hour, this criterion <u>can may</u> be used by the proposer in that

Contracting State. Member State.

- 2.5.7 The explicit risk estimation and evaluation shall satisfy at least the following requirements:
 - a) the methods used for explicit risk estimation shall reflect correctly the system under assessment and its parameters (including all operational modes);
 - b) the results shall be sufficiently accurate to serve as robust decision support., i.e. Minor changes in input assumptions or prerequisites shall not result in significantly different requirements.

3. DEMONSTRATION OF COMPLIANCE WITH SAFETY REQUIREMENTS

- 3.1 Prior to the safety acceptance of the change, fulfilment of the safety requirements resulting from the risk assessment phase shall be demonstrated under the supervision of the proposer.
- 3.2 This demonstration shall be carried out by each of the actors responsible for fulfilling the safety requirements, as decided in accordance with point 1.1.5.
- 3.3 The approach chosen for demonstrating compliance with the safety requirements as well as the demonstration itself shall be independently assessed by an assessment body.
- 3.4 Any inadequacy of safety measures expected to fulfil the safety requirements or any hazards discovered during the demonstration of compliance with the safety requirements shall lead to reassessment and evaluation of the associated risks by the proposer <u>in accordanceing with to pointsection</u> 2. The new hazards shall be registered in the hazard record <u>in accordanceing withte pointsection</u> 4.

OTIF	GENERAL PRO Risk evaluation	/ISIONS and assessment		UTP GEN-G Page 29 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

4. HAZARD MANAGEMENT

4.1 Hazard management process

4.1.1 Hazard record(s) shall be created or updated (where they already exist) by the proposer during the design and the implementation <u>until and till the</u> acceptance of the change or the delivery of the safety assessment report. <u>AThe</u> hazard record shall track the progress in monitoring risks associated with the identified hazards.

Once

÷

OTIF UTP

In accordance with point 2(g) of Annex III to Directive 2004/49/EC, once

<u>Once</u> the system has been accepted and is <u>in</u> operationed, the hazard record shall be further maintained by the infrastructure manager or the railway undertaking in charge <u>ofwith</u> the operation of the system under assessment.

as an integrated part of its safety management system.

4.1.2 The hazard record shall include all hazards, together with all related safety measures and system assumptions identified during the risk assessment process. In particular, It shall contain a clear reference to the origin of the hazards and to the selected risk acceptance principles and shall-clearly identify the actor(s) in charge of controlling each hazard.

4.2 Exchange of information

All hazards and related safety requirements <u>thatwhich</u> cannot be controlled by one actor alone shall be communicated to another relevant actor in order to find jointly an adequate solution. The hazards registered in the hazard record of the actor who transfers them shall only be <u>regarded as</u> <u>'</u>controlled' when the evaluation of the risks associated with these hazards is made by the other actor and the solution is agreed by all concerned.

5. EVIDENCE FROM THE APPLICATION OF THE RISK MANAGEMENT PROCESS

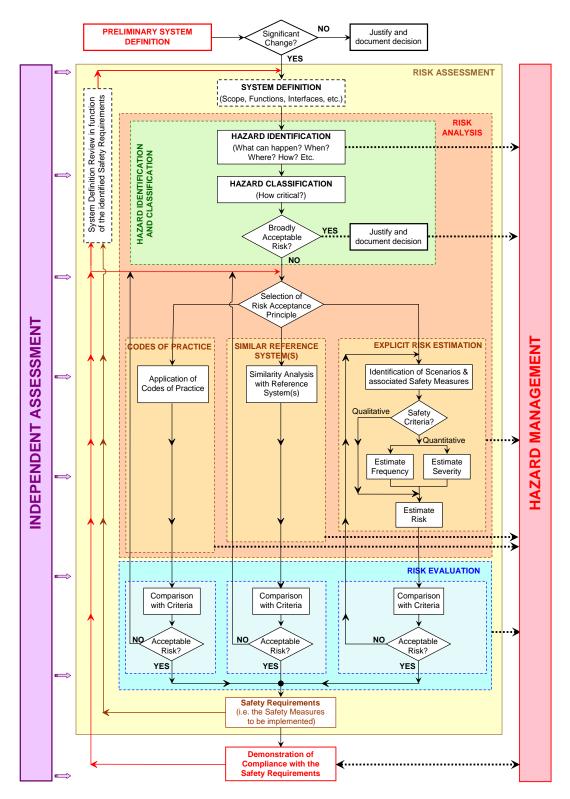
- 5.1 The risk management process used to assess the safety levels and compliance with safety requirements shall be documented by the proposer in such a way that all the necessary evidence showing <u>the suitability of both</u> the <u>correct</u> application of the risk management process <u>and of its results areis</u> accessible to an assessment body. The assessment body shall establish its conclusion in a safety assessment report.
- 5.2 The document<u>ation</u> produced by the proposer under point 5.1. shall at least include:
 - a) <u>a</u>description of the organisation and the experts appointed to carry out the risk assessment process;
 - b) results of the different phases of the risk assessment and a list of all the necessary safety requirements to be fulfilled in order to control the risk to an acceptable level;
 - c) evidence of compliance with all the necessary safety requirements;
 - d) <u>all assumptions relevant for system integration, operation or maintenance, which</u> were made during system definition, design and risk assessment.
- 5.3 The assessment body shall establish its conclusion in a safety assessment report as defined in Annex III.

	OTIF	GENERAL PROV Risk evaluation	/ISIONS and assessment		UTP GEN-G Page 30 of 33
••••	atus: IN FORCE- <u>ROPOSAL</u>	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

Appendix

Risk management process and independent assessment



OTIF	GENERAL PROV Risk evaluation	VISIONS and assessment		UTP GEN-G Page 31 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

ANNEX II

3.

CRITERIA FOR ACCREDITATION OR RECOGNITION OF WHICH MUST BE FULFILLED BY THE ASSESSMENT BODY IES

- 1. The assessment body may not become involved either directly or as authorised representatives in the design, manufacture, construction, marketing, operation or maintenance of the system under assessment. This does not exclude the possibility of an exchange of technical information between that body and all the involved actors. The assessment body shall fulfil all requirements of the ISO/IEC 17020:2012 standard and of its subsequent amendments. The assessment body shall exercise professional judgement in performing the inspection work defined in that standard. The assessment body shall fulfil both the general criteria concerning competence and independence in that standard and the following specific competence criteria: a) competence in risk management : knowledge and experience of the standard safety analysis techniques and of the relevant standards; b) all relevant competences for assessing the parts of the railway system affected by the change; c) competence in the correct application of safety and quality management systemsmay not become involved either directly or in auditing management systems. 2. The assessment body must carry out the assessment with the greatest possible profes-
- The assessment body must carry out the assessment with the greatest possible professional integrity and the greatest possible technical competence and must be free of any pressure and incentive, in particular of a financial type, which could affect their judgement or the results of their assessments, in particular from persons or groups of persons affected by the assessments. By analogy to

the notification of notified bodies, cognised for the different areas of com for which an essential safety requiren /ing the operation and maintenance of pans required to perform adequately
cognised for the different areas of com for which an essential safety requiren ving the operation and maintenance of
for which an essential safety requiren ving the operation and maintenance of
ans required to perform adequately
he assessments; it shall also have acc
essments.<u>The</u> assessment body shal erall consistency of the risk managen
assessment into the railway system a sessment body in checking the followi
cessary to ensure a coordinated appro form understanding and application of
thods and resources deployed by vari

- <u>d)f) the technical aspects necessary for assessing the relevance and completeness of</u> risk assessments and the level of safety for the system as a whole.
- 4. The assessment body may be accredited or recognised for one, several or all of the area of competences listed in points 2 and 3. The staff responsible for the assessments must possess:

				UTP GEN-G Page 32 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

proper technical and vocational training,

a satisfactory knowledge of the requirements relating to the assessments that they carry out and sufficient practice in those assessments,

the ability to draw up the safety assessment reports which constitute the formal conclusions of the assessments conducted.

5. The independence of the staff responsible for the independent assessments must be guaranteed. No official must be remunerated either on the basis of the number of assessments performed or of the results of those assessments.

6.	The assessment body	Where the assessment body is external to
		the proposer's organisation it

must have its civil liability ensured unless that liability is covered by the State under national law or unless the assessments are carried out directly by that

.

	Contracting State.	Member State.
7.	The assessment body's	Where the assessment body is external to the proposer's organisation its

staff are bound by professional secrecy with regard to everything they learn in the performance of their duties (with the exception of the competent administrative authorities in the State where they perform those activities) in pursuance of this

UTP.

Regulation.

OTIF				UTP GEN-G Page 33 of 33
Status: IN FORCE- PROPOSAL	Version: 02	Ref.: A 94-01G/1.2012	Original: EN	Date: 03.04.2013

Corresponding text in EU regulations¹ EU ref.

ANNEX III

SAFETY ASSESSMENT REPORT OF THE ASSESSMENT BODY

- 1. The safety assessment report of the assessment body shall contain at least the following information:
 - a) identification of the assessment body;
 - b) the independent assessment plan;
 - c) the definition of the scope of the independent assessment as well as its limitations;

d) the results of the independent assessment including in particular:

1) detailed information on the independent assessment activities for checking the compliance with the provisions of this

<u>UTP;</u>

2) any identified cases of non-compliances with the provisions of this

<u>UTP</u>

Regulation

Regulation;

and the assessment body's recommendations;

e) the conclusions of the independent assessment.