



Finnish Transport Agency

**FINNISH INTERLOCKING REQUIREMENTS 2010
QUALITATIVE REQUIREMENTS
APPENDIX 1 - HAZARD LIST**

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FIR-HL001	1 Introduction
FIR-HL002	The requirements herein do not match the hazards on a 'one to one' basis, as many hazards may relate to a single safety requirement. They are however at a high level compared to the functional requirements and therefore cannot be realted at the same level.
FIR-HL003	<p>The linking in this module is bi-directional. This module forms the central focus of the Hazards Identification process and the relationship to the functional requirements. The linking is therefore</p> <p>Safety Requirements - Identified Hazards Safety Requirements - Functional Requirements</p> <p>In this way, we can identify missing relationships between the design and safety, and vice versa for the risk process that safety relationships with Hazards has been fully established. In all this the required safety and risk matrices may be simply completed.</p>
FIR-HL004	2 Safety Requirements
FIR-HL005	2.1 ATP System Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL006	- the detected activation status of intermitted ATP system (activate & not activate) is correct to prevent any accident
FIR-HL007	- the detected signal aspect values of continuous ATP system (current signal aspect) is correct to prevent any accident
FIR-HL008	- the status control of intermittent ATP system (supervision) is correct to prevent any accident
FIR-HL009	- the status control of continuous ATP system (supervision) is correct to prevent any accident
FIR-HL010	- the activation driving values to intermittent ATP system (activate & deactivate) are correct to prevent any accident
FIR-HL011	- the signal aspect driving values to continuous ATP system (current signal aspect) are correct to prevent any accident
FIR-HL012	- the activation state change of an intermittent ATP is correct to prevent any accident
FIR-HL013	- the signal aspect transmission by continuous ATP system (current signal aspect) is correct to prevent any accident
FIR-HL014	2.2 IL Route - ATP System Safety Requirements Table
FIR-HL015	The Interlocking system shall ensure that:
FIR-HL016	- the ATP ID (status) is correct to prevent any accident
FIR-HL017	- the activation status of intermittent ATP system (active & not active) is correct to prevent any accident
FIR-HL018	- the signal aspect status of continuous ATP system (current signal aspect) is correct to prevent any accident

FIR-HL019	- the route initialisation & completion (ATP) is correct to prevent any accident
FIR-HL020	- the route aspect phase (ATP) is correct to prevent any accident
FIR-HL021	- the route use & cancellation (ATP) is correct to prevent any accident
FIR-HL022	- the ATP ID (command) is correct to prevent any accident
FIR-HL023	- the activation command to intermittent ATP logic is correct to prevent any accident
FIR-HL024	- the activation command to continuous ATP system is correct to prevent any accident
FIR-HL025	2.3 Derailer Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL026	- the detected state of a derailer (on rail & off rail) is correct to prevent any accident
FIR-HL027	- the state control of a derailer (on rail & off rail) is correct to prevent any accident.
FIR-HL028	- the status control of a derailer (supervision) is correct to prevent any accident.
FIR-HL029	- the state driving values to a derailer (move on rail & move off rail) are correct to prevent any accident.
FIR-HL030	- the state change of a derailer (on rail & off rail) is correct to prevent any accident.
FIR-HL031	2.4 IL Route - Derailer Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL032	- the derailer ID (status) is correct to prevent any accident.
FIR-HL033	- the availability status of a derailer (available & log. locked & released) is correct to prevent any accident.
FIR-HL034	- the activation status of a derailer (on rail & off rail) is correct to prevent any accident.
FIR-HL035	- the locking status of a derailer (locked & released) is correct to prevent any accident.
FIR-HL036	- the route initialisation & completion (derailer) is correct to prevent any accident.
FIR-HL037	- the route locking & proving (derailer) is correct to prevent any accident.
FIR-HL038	- the route use & cancellation for (derailer) is correct to prevent any accident.
FIR-HL039	- the derailer ID (command) is correct to prevent any accident.
FIR-HL040	- the moving command to a derailer logic is correct to prevent any accident.
FIR-HL041	- the locking command to a derailer logic is correct to prevent any accident.
FIR-HL042	- the releasing command to a derailer logic is correct to prevent any accident.
FIR-HL043	2.5 IL - IL Interface Logic Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL044	- the detected route completion values of an IL-IL-IF (completion route incl. signal aspect) is correct to prevent any accident.

FIR-HL045	- the route completion state control of an IL-IL-IF (completion of routes incl. signal aspects) is correct to prevent any accident.
FIR-HL046	- the route driving values to adjacent IL (route request) is correct to prevent any accident.
FIR-HL047	- the route processing of an adjacent IL is correct to prevent any accident.
FIR-HL048	2.6 Route IL - IL Interface Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL049	- the adjacent IL ID is correct to prevent any accident.
FIR-HL050	- the route completion status of an adjacent IL (completion route incl. signal aspect) is correct to prevent any accident.
FIR-HL051	- the route initialisation & completion (IL) is correct to prevent any accident.
FIR-HL052	- the route locking & proving (IL) is correct to prevent any accident.
FIR-HL053	- the route aspect phase (IL) is correct to prevent any accident.
FIR-HL054	- the route use & cancellation (IL) is correct to prevent any accident.
FIR-HL055	- the IL interface ID is correct to prevent any accident.
FIR-HL056	- the route completion command to an adjacent IL is correct to prevent any accident.
FIR-HL057	2.7 Level Crossing Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL058	- the detected protection values (secured & not secured) of a level crossing are correct to prevent any accident.
FIR-HL059	- the detected failure values (failed & fail-safe) of al level crossing are correct to prevent any accident.
FIR-HL060	- the protection control of a LX (secured & not secured) is correct to prevent any accident.
FIR-HL061	- the status control of a LX (supervision) is correct to prevent any accident.
FIR-HL062	- the operation driving values to a LX (operate open & operate close) are correct to prevent any accident.
FIR-HL063	- the protection state change of a LX is correct to prevent any accident.
FIR-HL064	2.8 IL Route - Level Crossing Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL065	- the LX ID (status) is correct to prevent any accident.
FIR-HL066	- the availability status of a level crossing is correct to prevent any accident.
FIR-HL067	- the failure status information of a LX (failed & fail-safe) is correct to prevent any accident.
FIR-HL068	- the protection status of a LX (secured & not secured) is correct to prevent any accident.
FIR-HL069	- the locking status of a LX (locked, released) is correct to prevent any accident.
FIR-HL070	- the route initialisation & completion (LX) is correct to prevent any accident.

FIR-HL071	- the route locking & proving (LX) is correct to prevent any accident.
FIR-HL072	- the route use & cancellation (LX) is correct to prevent any accident.
FIR-HL073	- the LX ID (command) is correct to prevent any accident.
FIR-HL074	- the activation command to a LX logic is correct to prevent any accident.
FIR-HL075	- the locking command to a LX logic is correct to prevent any accident.
FIR-HL076	- the releasing command to a LX logic is correct to prevent any accident.
FIR-HL077	2.9 Line Block Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL078	- the detected occupation status of a line block device is correct to prevent any accident.
FIR-HL079	- the occupation state control of a line block (line normal & line in use & line clear) is correct to prevent any accident.
FIR-HL080	- the occupation driving values to a line block (line normal & line in use & line clear) are correct to prevent any accident.
FIR-HL081	- the occupation state change of a line block device is correct to prevent any accident.
FIR-HL082	2.10 IL Route - Liner Block Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL083	- the line block ID (status) is correct to prevent any accident.
FIR-HL084	- the occupation status of a line block (line normal & line in use & line clear) is correct to prevent any accident.
FIR-HL085	- the route initialisation & completion (line block) is correct to prevent any accident.
FIR-HL086	- the route locking & proving (line block) is correct to prevent any accident.
FIR-HL087	- the route use & cancellation (line block) is correct to prevent any accident.
FIR-HL088	- the line block ID (command) is correct to prevent any accident.
FIR-HL089	- the occupancy change command to a line block is correct to prevent any accident.
FIR-HL090	2.11 Lockable Devices Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL091	- the detected locking status (locked & released) of a lockable device is correct to prevent any accident.
FIR-HL092	- the detected availability status (usable & not usable) of a lockable device is correct to prevent any accident.
FIR-HL093	- the locking control of a lockable device (locked & released) is correct to prevent any accident.
FIR-HL094	- the status control of a lockable device (supervision) is correct to prevent any accident.
FIR-HL095	- the locking driving values to a lockable device (lock & release) are correct to prevent any accident.
FIR-HL096	- the locking state change of a lockable device is correct to prevent any accident.

FIR-HL097	2.12 IL Route - Lockable Devices Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL098	- the lockable device ID (status) is correct to prevent any accident.
FIR-HL099	- the availability status of a lockable device (available & not available) is correct to prevent any accident.
FIR-HL100	- the locking status of a lockable device (locked & released & useable & not useable) is correct to prevent any accident.
FIR-HL101	- the route initialisation & completion (lockable device) is correct to prevent any accident.
FIR-HL102	- the route locking & proving (lockable device) is correct to prevent any accident.
FIR-HL103	- the route use & cancellation (lockable device) is correct to prevent any accident.
FIR-HL104	- the lockable device ID (command) is correct to prevent any accident.
FIR-HL105	- the locking command to a lockable device logic is correct to prevent any accident.
FIR-HL106	- the releasing command to a lockable device logic is correct to prevent any accident.
FIR-HL107	2.13 Point Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL108	- the detected direction values of a point (left & right) are correct to prevent any accident.
FIR-HL109	- the detected failure values (trailed & not trailed) of a point are correct to prevent any accident.
FIR-HL110	- the direction control of a point (left & right) is correct to prevent any accident.
FIR-HL111	- the status control of a point (supervision) is correct to prevent any accident.
FIR-HL112	- the direction driving values to a point (move left & move right) are correct to prevent any accident.
FIR-HL113	- the direction change of a point (left & right) is correct to prevent any accident.
FIR-HL114	2.14 Route IL - Point Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL115	- the point ID (status) is correct to prevent any accident.
FIR-HL116	- the availability status of a point (available & logically locked or released) is correct to prevent any accident.
FIR-HL117	- the direction status of a point (left & right) is correct to prevent any accident.
FIR-HL118	- the locking status of a point (locked & released) is correct to prevent any accident.
FIR-HL119	- the route initialisation & completion (point) is correct to prevent any accident.
FIR-HL120	- the route locking & proving (point) is correct to prevent any accident.
FIR-HL121	- the route use & cancellation (point) is correct to prevent any accident.
FIR-HL122	- the point ID (command) is correct to prevent any accident.
FIR-HL123	- the moving command to a point logic is correct to prevent any accident.

FIR-HL124	- the locking command to a point logic is correct to prevent any accident.
FIR-HL125	- the releasing command to a point logic is correct to prevent any accident.
FIR-HL126	2.15 Signal Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL127	- the detected lighting values of a signal (lamp on & lamp off) are correct to prevent any accident.
FIR-HL128	- the detected failure values (lamp failure) of a signal are correct to prevent any accident.
FIR-HL129	- the status control of a signal (supervision) is correct to prevent any accident.
FIR-HL130	- the lamp control of a signal (aspect to lamp) is correct to prevent any accident.
FIR-HL131	- the lighting driving values to a signal lamp (lamp on & lamp off) are correct to prevent any accident.
FIR-HL132	- the lighting state change of a signal is correct to prevent any accident.
FIR-HL133	2.16 IL Route - Signal Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL134	- the signal ID (status) is correct to prevent any accident.
FIR-HL135	- the availability status of a signal (available & not available) is correct to prevent any accident.
FIR-HL136	- the locking status of a signal (locked & released) is correct to prevent any accident.
FIR-HL137	- the aspect status of a signal (shown aspect) is correct to prevent any accident.
FIR-HL138	- the route initialisation & completion (signal) is correct to prevent any accident.
FIR-HL139	- the route locking & proving (signal) is correct to prevent any accident.
FIR-HL140	- the route aspect phase (signal) is correct to prevent any accident.
FIR-HL141	- the route use & cancellation (signal) is correct prevent any accident.
FIR-HL142	- the signal ID (command) is correct to prevent any accident.
FIR-HL143	- the locking command to a signal logic is correct to prevent any accident.
FIR-HL144	- the aspect command to a signal is correct to prevent any accident.
FIR-HL145	- the releasing command to a signal logic is correct to prevent any accident.
FIR-HL146	2.17 Signal Monitoring Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL147	- the point ID (status) is correct to prevent any accident.
FIR-HL148	- the failure status of a point (trailed) is correct to prevent any accident.
FIR-HL149	- the emergency intervention decision (point) is correct to prevent any accident.
FIR-HL150	- the failure status control (supervision) (point) is correct to prevent any accident.

FIR-HL151	- the lockable device ID (status) is correct to prevent any accident.
FIR-HL152	- the failure status of a lockable device (not permitted unlocked) is correct to prevent any accident.
FIR-HL153	- the emergency intervention decision (lockable device) is correct to prevent any accident.
FIR-HL154	- the failure status control (supervision) (lockable device) is correct to prevent any accident.
FIR-HL155	- the LX ID (status) is correct to prevent any accident.
FIR-HL156	- the failure status of a LX (danger zone occupied & not secured) is correct to prevent any accident.
FIR-HL157	- the emergency intervention decision (LX) is correct to prevent any accident.
FIR-HL158	- the failure status control (supervision) (LX) is correct to prevent any accident.
FIR-HL159	- the LX ID (command) is correct to prevent any accident.
FIR-HL160	- the activation command to a LX (LX activation) is correct to prevent any accident.
FIR-HL161	- the TVP ID (status) is correct to prevent any accident.
FIR-HL162	- the failure status of a TVP (not permitted occupied) is correct to prevent any accident.
FIR-HL163	- the emergency intervention decision (TVP) is correct to prevent any accident.
FIR-HL164	- the failure status control (supervision) (TVP) is correct to prevent any accident.
FIR-HL165	- the emergency intervention decision (signal) is correct to prevent any accident.
FIR-HL166	- the failure status control (supervision) (signal) is correct to prevent any accident.
FIR-HL167	- the signal ID (command) is correct to prevent any accident.
FIR-HL168	- the signal aspect command to a signal / all signals (stop aspect) is correct to prevent any accident.
FIR-HL169	- the emergency intervention decision (ATP) is correct to prevent any accident.
FIR-HL170	- the failure status control (supervision) (ATP) is correct to prevent any accident.
FIR-HL171	- the ATP ID (command) is correct to prevent any accident.
FIR-HL172	- the activation command to an ATP / all ATP (activate) is correct to prevent any accident.
FIR-HL173	- the USO ID (status) is correct to prevent any accident.
FIR-HL174	- the hazardous status of an USO is correct to prevent any accident.
FIR-HL175	- the emergency intervention decision (USO) is correct to prevent any accident.
FIR-HL176	- the failure status control (supervision) (USO) is correct to prevent any accident.
FIR-HL177	2.18 TVP Section Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL178	- the detected occupation values of a TVP section (occupied & not occupied) are correct to prevent any accident.
FIR-HL179	- the status control of a TVP section (supervision) is correct to prevent any accident.
FIR-HL180	- the reset driving values to a TVP section are correct to prevent any accident.

FIR-HL181	- the occupancy state change of a TVP section is correct to prevent any accident.
FIR-HL182	2.19 IL Route - TVP Section Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL183	- the TVP section ID (status) is correct to prevent any accident.
FIR-HL184	- the occupation status of a TVP section (occupied & not occupied) is correct to prevent any accident.
FIR-HL185	- the route initialisation & completion (TVP) is correct to prevent any accident.
FIR-HL186	- the route use & cancellation (TVP) is correct to prevent any accident.
FIR-HL187	- the TVP section ID (command) is correct to prevent any accident.
FIR-HL188	2.20 TCCS Safety Requirements Table
	The Interlocking system shall ensure that:
FIR-HL189	- the TCCS point ID (status) is correct to prevent any accident.
FIR-HL190	- the TCCS statuses of points (left & right) are correct to prevent any accident.
FIR-HL191	- the TCCS statuses of points (trailed) are correct to prevent any accident.
FIR-HL192	- the TCCS status displaying control (point) is correct to prevent any accident.
FIR-HL193	- the TCCS signaller (system) driving value control (point) is correct to prevent any accident.
FIR-HL194	- the TCCS derailer ID (status) is correct to prevent any accident.
FIR-HL195	- the TCCS status information of a derailer (on rail & off rail) is correct to prevent any accident.
FIR-HL196	- the TCCS status displaying control (derailer) is correct to prevent any accident.
FIR-HL197	- the TCCS signaller (system) driving value control (derailer) is correct to prevent any accident.
FIR-HL198	- the TCCS lockable device ID (status) is correct to prevent any accident.
FIR-HL199	- the TCCS status information of a lockable device (locked & released for operation & usable & not usable) is correct to prevent any accident.
FIR-HL200	- the TCCS status displaying control (lockable device) is correct to prevent any accident.
FIR-HL201	- the TCCS signaller (system) driving value control (lockable device) is correct to prevent any accident.
FIR-HL202	- the TCCS LX ID (status) is correct to prevent any accident.
FIR-HL203	- the TCCS status information of a LX (secured & not secured & failure) is correct to prevent any accident.
FIR-HL204	- the TCCS status displaying control (LX) is correct to prevent any accident.
FIR-HL205	- the TCCS signaller (system) driving value control (LX) is correct to prevent any accident.
FIR-HL206	- the TCCS LX ID (command) is correct to prevent any accident.
FIR-HL207	- the TCCS command to a LX (manual release) is correct to prevent any accident.
FIR-HL208	- the TCCS TVP ID (status) is correct to prevent any accident.

FIR-HL209	- the TCCS status information of a TVP (occupied & not occupied & undetected) is correct to prevent any accident.
FIR-HL210	- the TCCS status displaying control (TVP) is correct to prevent any accident.
FIR-HL211	- the TCCS signaller (system) driving value control (TVP) is correct to prevent any accident.
FIR-HL212	- the TCCS TVP section ID (command) is correct to prevent any accident.
FIR-HL213	- the TCCS command to a TVP (manual reset) is correct to prevent any accident.
FIR-HL214	- the TCCS line block ID (status) is correct to prevent any accident.
FIR-HL215	- the TCCS status information of a line block (line clear & line in use & line normal) is correct to prevent any accident.
FIR-HL216	- the TCCS status displaying control (line block) is correct to prevent any accident.
FIR-HL217	- the TCCS signaller (system) driving value control (line block) is correct to prevent any accident.
FIR-HL218	- the TCCS USO ID (statuses) is correct to prevent any accident.
FIR-HL219	- the TCCS status information of an USO (active & not active & value) is correct to prevent any accident.
FIR-HL220	- the TCCS status displaying control (USO) is correct to prevent any accident.
FIR-HL221	- the TCCS signaller (system) driving value control (USO) is correct to prevent any accident.
FIR-HL222	- the TCCS USO ID (commands) is correct to prevent any accident.
FIR-HL223	- the TCCS command to an USO (manual activation & deactivation & reset) is correct to prevent any accident.
FIR-HL224	- the TCCS signal ID (status) is correct to prevent any accident.
FIR-HL225	- the TCCS status information of a signal (shown aspect & lighting failure) is correct to prevent any accident.
FIR-HL226	- the TCCS status displaying control (signal) is correct to prevent any accident.
FIR-HL227	- the TCCS signaller (system) driving value control (signal) is correct to prevent any accident.
FIR-HL228	- the TCCS adjacent IL ID (status) is correct to prevent any accident.
FIR-HL229	- the TCCS status information of an IL-IL-IF (Interface) (completion route incl. signal aspect) is correct to prevent any accident.
FIR-HL230	- the TCCS status displaying control (IL-IL-IF) is correct to prevent any accident.
FIR-HL231	- the TCCS signaller (system) driving value control (IL-IL-IF) is correct to prevent any accident.
FIR-HL232	- the TCCS route ID (status) is correct to prevent any accident.
FIR-HL233	- the TCCS status information of a route (availability & completeness & use & release) is correct to prevent any accident.
FIR-HL234	- the TCCS status displaying control (route) is correct to prevent any accident.
FIR-HL235	- the TCCS signaller (system) driving value control (route) is correct to prevent any accident.
FIR-HL236	- the TCCS route ID (command) is correct to prevent any accident.
FIR-HL237	- the TCCS route request command to a route logic is correct to prevent any accident.
FIR-HL238	3 ATP System
FIR-HL239	The following table is the list of extracted data for 'ATP Systems' from the Generic Hazard Methodology Document.

	These are to be linked to each relevant Hazard I.D List derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL240	3.1 ATP System Logic Hazard Identification Table
FIR-HL241	3.1.1 Subsets ATP1 and ATP2 (not IL-K Responsible)
FIR-HL242	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected activation values of intermittent ATP system (active & not active).
FIR-HL243	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected signal aspect values of continuous ATP system (current signal aspect).
FIR-HL244	3.1.2 Subset - ATP3
FIR-HL245	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of intermittent ATP system (supervision).
FIR-HL246	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status control of intermittent ATP system (supervision).
FIR-HL247	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status control of intermittent ATP system (supervision).
FIR-HL248	3.1.3 Subset - ATP4
FIR-HL249	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of continuous ATP system (supervision).
FIR-HL250	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status control of continuous ATP system (supervision).
FIR-HL251	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status control of continuous ATP system (supervision).
FIR-HL252	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status control of continuous ATP system (supervision).
FIR-HL253	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status control of continuous ATP system (supervision).
FIR-HL254	3.1.4 Subset - ATP5
FIR-HL255	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation driving values

	to intermittent ATP system (activate & deactivate).
FIR-HL256	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect activation driving values to intermittent ATP system (activate & deactivate).
FIR-HL257	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect activation driving values to intermittent ATP system (activate & deactivate).
FIR-HL258	3.1.5 Subset - ATP6
FIR-HL259	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal aspect driving values to continuous ATP system (current signal aspect).
FIR-HL260	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal aspect driving values to continuous ATP system (current signal aspect).
FIR-HL261	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal aspect driving values to continuous ATP system (current signal aspect).
FIR-HL262	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal aspect driving values to continuous ATP system (current signal aspect).
FIR-HL263	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal aspect driving values to continuous ATP system (current signal aspect).
FIR-HL264	3.1.6 Subset - ATP7 and ATP8 (not IL-K Responsible)
FIR-HL265	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation state change of an ATP.
FIR-HL266	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect activation state change of an ATP.
FIR-HL267	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect activation state change of an ATP.
FIR-HL268	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect activation state change of an ATP.
FIR-HL269	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect activation state change of an ATP.
FIR-HL270	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal aspect transmission by continuous ATP.
FIR-HL271	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal aspect transmission by continuous ATP.

FIR-HL272	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal aspect transmission by continuous ATP.
FIR-HL273	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal aspect transmission by continuous ATP.
FIR-HL274	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal aspect transmission by continuous ATP.
FIR-HL275	3.2 IL Route - ATP Systems Logic Hazard Identification Table
FIR-HL276	3.2.1 Subset - ATP1 - ATP3
FIR-HL277	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect ATP ID (status).
FIR-HL278	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation status of intermittent ATP system (active & not active).
FIR-HL279	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal aspect status of continuous ATP system (current signal aspect).
FIR-HL280	3.2.2 Subset - ATP4
FIR-HL281	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (ATP).
FIR-HL282	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route initialisation & completion (ATP).
FIR-HL283	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route initialisation & completion (ATP).
FIR-HL284	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route initialisation & completion (ATP).
FIR-HL285	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route initialisation & completion (ATP).
FIR-HL286	3.2.3 Subset - ATP5
FIR-HL287	Not currently in use
FIR-HL288	3.2.4 Subset - ATP6
FIR-HL289	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route aspect phase (ATP).

FIR-HL290	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route aspect phase (ATP).
FIR-HL291	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route aspect phase (ATP).
FIR-HL292	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route aspect phase (ATP).
FIR-HL293	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route aspect phase (ATP).
FIR-HL294	3.2.5 Subset - ATP7
FIR-HL295	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (ATP).
FIR-HL296	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route use & cancellation (ATP).
FIR-HL297	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route use & cancellation (ATP).
FIR-HL298	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route use & cancellation (ATP).
FIR-HL299	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route use & cancellation (ATP).
FIR-HL300	3.2.6 Subset - ATP8
FIR-HL301	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect ATP ID (command).
FIR-HL302	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect ATP ID (command).
FIR-HL303	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect ATP ID (command).
FIR-HL304	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect ATP ID (command).
FIR-HL305	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect ATP ID (command).
FIR-HL306	3.2.7 Subset - ATP9
FIR-HL307	Not currently in use
FIR-HL308	3.2.8 Subset - ATP10
FIR-HL309	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation command to

	intermittent ATP logic.
FIR-HL310	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect activation command to intermittent ATP logic.
FIR-HL311	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect activation command to intermittent ATP.
FIR-HL312	3.2.9 Subset - ATP11
FIR-HL313	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation command to continuous ATP system.
FIR-HL314	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect activation command to continuous ATP system.
FIR-HL315	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect activation command to continuous ATP system.
FIR-HL316	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect activation command to continuous ATP system.
FIR-HL317	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect activation command to continuous ATP system.
FIR-HL318	4 Derailer
FIR-HL319	The following table is the list of extracted data for 'Derailer' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL320	4.1 Derailer Logic Hazard Identification Table
FIR-HL321	4.1.1 Subset Dr-1
FIR-HL322	The possibility of a collision between one railway vehicle and another due to incorrect detected state of a derailer.
FIR-HL323	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect detected state values of a derailer (on rail & off rail) .
FIR-HL324	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect detected state values of a derailer (on rail & off rail).
FIR-HL325	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected state values of a derailer (on rail & off rail).

FIR-HL326	4.1.2 Subset Dr-2
FIR-HL327	The possibility of a collision between one railway vehicle and another due to incorrect state control of a derailer (on rail & off rail).
FIR-HL328	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect state control of a derailer (on rail & off rail).
FIR-HL329	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect state control of a derailer (on rail & off rail).
FIR-HL330	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect state control of a derailer (on rail & off rail).
FIR-HL331	4.1.3 Subset Dr-3
FIR-HL332	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of a derailer (supervision).
FIR-HL333	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status control of a derailer (supervision).
FIR-HL334	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status control of a derailer (supervision).
FIR-HL335	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status control of a derailer (supervision).
FIR-HL336	4.1.4 Subset Dr-4
FIR-HL337	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect state driving values to a derailer (move on rail & move off rail).
FIR-HL338	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect state driving values to a derailer (move on rail & move off rail).
FIR-HL339	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect state driving values to a derailer (move on rail & move off rail).
FIR-HL340	4.1.5 Subset Dr-5
FIR-HL341	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect state change of a derailer.
FIR-HL342	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect state change of a derailer.

FIR-HL343	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect state change of a derailer.
FIR-HL344	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect state change of a derailer.
FIR-HL345	4.2 I/L Route - Derailer Logic Hazard Identification Table
FIR-HL346	4.2.1 Subset RDr- 1
FIR-HL347	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect derailer ID (status).
FIR-HL348	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect derailer ID (status).
FIR-HL349	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect derailer ID (status).
FIR-HL350	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect derailer ID (status).
FIR-HL351	4.2.2 Subset RDr-2
FIR-HL352	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect availability status of a derailer (available & log. locked & released).
FIR-HL353	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect availability status of a derailer (available & log. locked & released).
FIR-HL354	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect availability status of a derailer (available & log. locked & released).
FIR-HL355	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect availability status of a derailer (available & log. locked & released).
FIR-HL356	4.2.3 Subset RDr-3
FIR-HL357	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation status of a derailer (on rail & off rail).
FIR-HL358	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect activation status of a derailer (on rail & off rail).
FIR-HL359	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect activation status of a derailer (on rail & off rail).
FIR-HL360	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect activation status of a derailer (on rail & off rail).
FIR-HL361	4.2.4 Subset RDr-4

FIR-HL362	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking status of a derailer (locked & released).
FIR-HL363	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect locking status of a derailer (locked & released).
FIR-HL364	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect locking status of a derailer (locked & released).
FIR-HL365	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking status of a derailer (locked & released).
FIR-HL366	4.2.5 Subset RDr-5
FIR-HL367	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (derailer).
FIR-HL368	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route initialisation & completion (derailer).
FIR-HL369	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route initialisation & completion (derailer).
FIR-HL370	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route initialisation & completion (derailer).
FIR-HL371	4.2.6 Subset RDr-6
FIR-HL372	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route locking & proving (derailer).
FIR-HL373	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route locking & proving (derailer).
FIR-HL374	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route locking & proving (derailer).
FIR-HL375	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route locking & proving (derailer).
FIR-HL376	4.2.7 Subset RDr-7
FIR-HL377	Not currently in use
FIR-HL378	4.2.8 Subset RDr-8

FIR-HL379	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (derailer).
FIR-HL380	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route use & cancellation (derailer).
FIR-HL381	The possibility of a derailment of a railway vehicle on a fixed element due to incorrect route use & cancellation (derailer)
FIR-HL382	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route use & cancellation (derailer).
FIR-HL383	4.2.9 Subset RDr-9
FIR-HL384	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect derailer ID (command).
FIR-HL385	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect derailer ID (command).
FIR-HL386	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect derailer ID (command).
FIR-HL387	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect derailer ID (command).
FIR-HL388	4.2.10 Subset RDr-10
FIR-HL389	Not currently in use.
FIR-HL390	4.2.11 Subset RDr-11
FIR-HL391	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect moving command to a derailer logic.
FIR-HL392	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect moving command to a derailer logic.
FIR-HL393	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect moving command to a derailer logic.
FIR-HL394	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect moving command to a derailer logic.
FIR-HL395	4.2.12 Subset RDr-12
FIR-HL396	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking command to a derailer logic.
FIR-HL397	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect locking

	command to a derailer logic.
FIR-HL398	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect locking command to a derailer logic.
FIR-HL399	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking command to a derailer logic.
FIR-HL400	4.2.13 Subset RDr-13
FIR-HL401	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect releasing command to a derailer logic.
FIR-HL402	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect releasing command to a derailer logic.
FIR-HL403	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect releasing command to a derailer logic.
FIR-HL404	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect releasing command to a derailer logic.
FIR-HL405	5 Interlocking Logic
FIR-HL406	The following table is the list of extracted data for 'Interlocking Logic' and 'Interlocking - Interlocking Interface' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL407	5.1 IL Logic - IL Interface Logic Hazard Identification Table
FIR-HL408	5.1.1 Subset IL-1 (Not IL-K Responsible)
FIR-HL409	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected route completion values of an IL-IL-IF (completion route incl. signal aspect).
FIR-HL410	5.1.2 Subset IL-2
FIR-HL411	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route completion state control of an IL-IL-IF (completion route incl. signal aspect).
FIR-HL412	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route completion state control of an IL-IL-IF (completion route incl. signal aspect).
FIR-HL413	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route completion state control of an IL-IL-IF (completion route incl. signal aspect).

FIR-HL414	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route completion state control of an IL-IL-IF (completion route incl. signal aspect).
FIR-HL415	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route completion state control of an IL-IL-IF (completion route incl. signal aspect).
FIR-HL416	5.1.3 Subset IL-3
FIR-HL417	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route driving values to adjacent IL (route request).
FIR-HL418	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route driving values to adjacent IL (route request).
FIR-HL419	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route driving values to adjacent IL (route request).
FIR-HL420	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route driving values to adjacent IL (route request).
FIR-HL421	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route driving values to adjacent IL (route request).
FIR-HL422	5.1.4 Subset IL-4 (Not IL-K Responsible)
FIR-HL423	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route processing of an adjacent IL.
FIR-HL424	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route processing of an adjacent IL.
FIR-HL425	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route processing of an adjacent IL.
FIR-HL426	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route processing of an adjacent IL.
FIR-HL427	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route processing of an adjacent IL.
FIR-HL428	5.2 IL Route - IL Interface Logic Hazard Identification Table
FIR-HL429	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect adjacent IL ID.
FIR-HL430	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route completion status of an adjacent IL (completion route incl. signal aspect).

FIR-HL431	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (IL).
FIR-HL432	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route locking & proving (IL).
FIR-HL433	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route aspect phase (IL).
FIR-HL434	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (IL).
FIR-HL435	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect IL interface ID.
FIR-HL436	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route completion command to an adjacent IL.
FIR-HL437	6 Level Crossing
FIR-HL438	The following table is the list of extracted data for 'Level Crossing' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL439	6.1 LX Logic Hazard Identification Table
FIR-HL440	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect detected protection values of a LX (secured & not secured).
FIR-HL441	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect detected failure values of a LX (failed & fail-safe).
FIR-HL442	The possibility of a collision of a railway vehicle with other than railway vehicle secured).
FIR-HL443	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status control of a LX (supervision).
FIR-HL444	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect operation driving values to a LX (operate open & operate close).
FIR-HL445	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect protection state change of a LX.
FIR-HL446	6.2 I/L Route - LX Logic Hazard Identification Table
FIR-HL447	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect LX ID (status).
FIR-HL448	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect

	availability status of a LX (available & not available).
FIR-HL449	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect failure status information of a LX (failed & fail-safe).
FIR-HL450	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect protection status of a LX (secured & not secured).
FIR-HL451	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect locking status of a LX (locked, released).
FIR-HL452	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route initialisation & completion (LX).
FIR-HL453	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route locking & proving (LX).
FIR-HL454	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route use & cancellation (LX).
FIR-HL455	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect LX ID (command).
FIR-HL456	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect activation command to an LX logic.
FIR-HL457	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect locking command to a LX logic.
FIR-HL458	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect releasing command to a LX logic.
FIR-HL459	7 Line Block
FIR-HL460	The following table is the list of extracted data for 'Line Block' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL461	7.1 Line Block Logic Hazard Identification Table
FIR-HL462	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected occupation values of a line block (line normal & line in use & line clear).
FIR-HL463	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupation state control of a line block (line normal & line in use & line clear).
FIR-HL464	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupation driving values

	to a line block (line normal & line in use & line clear).
FIR-HL465	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupation state change of a line block (line normal & line in use & line clear).
FIR-HL466	7.2 I/L Route - Line Block Logic Hazard Identification Table
FIR-HL467	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect line block ID (status).
FIR-HL468	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupation status of a line block (line normal & line in use & line clear).
FIR-HL469	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (line block).
FIR-HL470	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route locking & proving (line block).
FIR-HL471	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (line block).
FIR-HL472	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect line block ID (command).
FIR-HL473	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupancy change command to a line block.
FIR-HL474	8 Lockable Devices
FIR-HL475	The following table is the list of extracted data for 'Lockable Devices' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL476	8.1 Lockable Devices Logic Hazard Identification Table
FIR-HL477	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected locking values of a lockable device (locked & released).
FIR-HL478	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected locking values of a lockable device (locked & released).
FIR-HL479	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected availability values of a lockable device (usable & not usable).
FIR-HL480	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected availability values of a lockable device (usable & not usable).
FIR-HL481	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking control of a

	lockable device (locked & released).
FIR-HL482	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking control of a lockable device (locked & released).
FIR-HL483	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of a lockable device (supervision).
FIR-HL484	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status control of a lockable device (supervision).
FIR-HL485	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking driving values to a lockable device (lock & release).
FIR-HL486	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking driving values to a lockable device (lock & release).
FIR-HL487	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking state change of a lockable device.
FIR-HL488	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking state change of a lockable device.
FIR-HL489	8.2 I/L Route - Lockable Devices Hazard Identification Table
FIR-HL490	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lockable device ID (status).
FIR-HL491	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lockable device ID (status).
FIR-HL492	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect availability status of a lockable device (available & not available).
FIR-HL493	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect availability status of a lockable device (available & not available).
FIR-HL494	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking status of a lockable device (locked & released & useable & not useable).
FIR-HL495	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking status of a lockable device (locked & released & useable & not useable).
FIR-HL496	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (lockable device).
FIR-HL497	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route initialisation & completion (lockable device).

FIR-HL498	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route locking & proving (lockable device).
FIR-HL499	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route locking & proving (lockable device).
FIR-HL500	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (lockable device).
FIR-HL501	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route use & cancellation (lockable device).
FIR-HL502	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lockable device ID (command).
FIR-HL503	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lockable device ID (command).
FIR-HL504	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking command to a lockable device logic.
FIR-HL505	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking command to a lockable device logic.
FIR-HL506	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect releasing command to a lockable device logic.
FIR-HL507	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect releasing command to a lockable device logic.
FIR-HL508	9 Point
FIR-HL509	The following table is the list of extracted data for 'Point' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL510	9.1 Point Logic Hazard Identification Table
FIR-HL511	9.1.1 Subset Pt-1
FIR-HL512	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected direction values of a point (left & right)
FIR-HL513	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect detected direction values of a point (left & right)
FIR-HL514	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect

	detected direction values of a point (left & right).
FIR-HL515	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected direction values of a point (left & right).
FIR-HL516	9.1.2 Subset Pt-2
FIR-HL517	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected failure values of a point (trailed & not trailed).
FIR-HL518	9.1.3 Subset Pt-3
FIR-HL519	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect direction control of a point (left & right).
FIR-HL520	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect direction control of a point (left & right).
FIR-HL521	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect direction control of a point (left & right).
FIR-HL522	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect direction control of a point (left & right).
FIR-HL523	9.1.4 Subset Pt-4
FIR-HL524	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of a point (supervision).
FIR-HL525	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status control of a point (supervision).
FIR-HL526	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status control of a point (supervision).
FIR-HL527	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status control of a point (supervision).
FIR-HL528	9.1.5 Subset Pt-5
FIR-HL529	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect direction driving values to a point (move left & move right).
FIR-HL530	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect direction driving values to a point (move left & move right).

FIR-HL531	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect direction driving values to a point (move left & move right).
FIR-HL532	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect direction driving values to a point (move left & move right).
FIR-HL533	9.1.6 Subset Pt-6
FIR-HL534	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect direction change of a point.
FIR-HL535	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect direction change of a point.
FIR-HL536	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect direction change of a point.
FIR-HL537	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect direction change of a point.
FIR-HL538	9.2 I/L Route - Point Logic Hazard Identification Table
FIR-HL539	9.2.1 Subset RPt-1
FIR-HL540	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect point ID (status).
FIR-HL541	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect point ID (status).
FIR-HL542	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect point ID (status).
FIR-HL543	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect point ID (status)
FIR-HL544	9.2.2 Subset RPt-2
FIR-HL545	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect availability status of a point (available & log. locked & released).
FIR-HL546	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect availability status of a point (available & log. locked & released).
FIR-HL547	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect availability status of a point (available & log. locked & released).
FIR-HL548	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect availability status of a

	point (available & log. locked & released).
FIR-HL549	9.2.3 Subset RPt-3
FIR-HL550	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect direction status of a point (left & right).
FIR-HL551	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect direction status of a point (left & right).
FIR-HL552	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect direction status of a point (left & right).
FIR-HL553	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect direction status of a point (left & right).
FIR-HL554	9.2.4 Subset RPt-4
FIR-HL555	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking status of a point (locked & released).
FIR-HL556	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect locking status of a point (locked & released).
FIR-HL557	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect locking status of a point (locked & released).
FIR-HL558	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking status of a point (locked & released).
FIR-HL559	9.2.5 Subset RPt-5
FIR-HL560	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (point).
FIR-HL561	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route initialisation & completion (point).
FIR-HL562	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route initialisation & completion (point).
FIR-HL563	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route initialisation & completion (point).
FIR-HL564	9.2.6 Subset RPt-6

FIR-HL565	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route locking & proving (point).
FIR-HL566	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route locking & proving (point).
FIR-HL567	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route locking & proving (point).
FIR-HL568	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route locking & proving (point).
FIR-HL569	9.2.7 Subset RPt-7
FIR-HL570	Not currently used
FIR-HL571	9.2.8 Subset RPt-8
FIR-HL572	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (point).
FIR-HL573	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route use & cancellation (point).
FIR-HL574	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route use & cancellation (point).
FIR-HL575	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route use & cancellation (point).
FIR-HL576	9.2.9 Subset RPt-9
FIR-HL577	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect point ID (command).
FIR-HL578	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect point ID (command).
FIR-HL579	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect point ID (command).
FIR-HL580	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect point ID (command).
FIR-HL581	9.2.10 Subset RPt-10
FIR-HL582	Not currently used

FIR-HL583	9.2.11 Subset RPt-11
FIR-HL584	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect moving command to a point logic.
FIR-HL585	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect moving command to a point logic.
FIR-HL586	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect moving command to a point logic.
FIR-HL587	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect moving command to a point logic.
FIR-HL588	9.2.12 Subset RPt-12
FIR-HL589	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking command to a point logic.
FIR-HL590	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect locking command to a point logic.
FIR-HL591	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect locking command to a point logic.
FIR-HL592	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking command to a point logic.
FIR-HL593	9.2.13 Subset RPt-13
FIR-HL594	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect releasing command to a point logic.
FIR-HL595	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect releasing command to a point logic.
FIR-HL596	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect releasing command to a point logic.
FIR-HL597	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect releasing command to a point logic.
FIR-HL598	10 Signal
FIR-HL599	The following table is the list of extracted data for 'Signal' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower

	level functional requirements that relate directly to them in mitigation.
FIR-HL600	10.1 Signal Logic Hazard Identification Table
FIR-HL601	10.1.1 Subset S11 (Not IL-K Responsible)
FIR-HL602	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected lighting values of a signal (lamp on & lamp off).
FIR-HL603	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect detected lighting values of a signal (lamp on & lamp off).
FIR-HL604	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect detected lighting values of a signal (lamp on & lamp off).
FIR-HL605	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect detected lighting values of a signal (lamp on & lamp off).
FIR-HL606	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected lighting values of a signal (lamp on & lamp off).
FIR-HL607	10.1.2 Subset S12 (Not IL-K Responsible)
FIR-HL608	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected failure values of a signal (lamp failure).
FIR-HL609	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect detected failure values of a signal (lamp failure).
FIR-HL610	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect detected failure values of a signal (lamp failure).
FIR-HL611	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect detected failure values of a signal (lamp failure).
FIR-HL612	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect detected failure values of a signal (lamp failure).
FIR-HL613	10.1.3 Subset S13
FIR-HL614	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of a signal (supervision).
FIR-HL615	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status control of a signal (supervision).

FIR-HL616	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status control of a signal (supervision).
FIR-HL617	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status control of a signal (supervision).
FIR-HL618	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status control of a signal (supervision).
FIR-HL619	10.1.4 Subset Si4
FIR-HL620	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lamp control of a signal (aspect to lamp).
FIR-HL621	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect lamp control of a signal (aspect to lamp).
FIR-HL622	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect lamp control of a signal (aspect to lamp).
FIR-HL623	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect lamp control of a signal (aspect to lamp).
FIR-HL624	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lamp control of a signal (aspect to lamp).
FIR-HL625	10.1.5 Subset Si5
FIR-HL626	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lighting driving values to a signal lamp (lamp on & lamp off).
FIR-HL627	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect lighting driving values to a signal lamp (lamp on & lamp off).
FIR-HL628	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect lighting driving values to a signal lamp (lamp on & lamp off).
FIR-HL629	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lighting driving values to a signal lamp (lamp on & lamp off).
FIR-HL630	10.1.6 Subset Si6 (Not IL-K Responsible)
FIR-HL631	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lighting state change of a signal.
FIR-HL632	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect lighting state

	change of a signal.
FIR-HL633	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect lighting state change of a signal.
FIR-HL634	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect lighting state change of a signal.
FIR-HL635	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lighting state change of a signal.
FIR-HL636	10.2 I/L Route - Signal Logic Hazard Identification Table
FIR-HL637	10.2.1 Subset RSi1
FIR-HL638	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal ID (status).
FIR-HL639	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal ID (status).
FIR-HL640	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal ID (status).
FIR-HL641	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal ID (status).
FIR-HL642	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal ID (status).
FIR-HL643	10.2.2 Subset RSi2
FIR-HL644	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect availability status of a signal (available & not available).
FIR-HL645	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect availability status of a signal (available & not available).
FIR-HL646	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect availability status of a signal (available & not available).
FIR-HL647	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect availability status of a signal (available & not available).
FIR-HL648	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect availability status of a signal (available & not available).
FIR-HL649	10.2.3 Subset RSi3
FIR-HL650	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking status of a signal

	(locked & released).
FIR-HL651	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect locking status of a signal (locked & released).
FIR-HL652	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect locking status of a signal (locked & released).
FIR-HL653	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect locking status of a signal (locked & released).
FIR-HL654	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking status of a signal (locked & released).
FIR-HL655	10.2.4 Subset RSi4
FIR-HL656	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect aspect status of a signal (shown aspect).
FIR-HL657	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect aspect status of a signal (shown aspect).
FIR-HL658	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect aspect status of a signal (shown aspect).
FIR-HL659	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect aspect status of a signal (shown aspect).
FIR-HL660	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect aspect status of a signal (shown aspect).
FIR-HL661	10.2.5 Subset RSi5
FIR-HL662	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (signal).
FIR-HL663	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route initialisation & completion (signal).
FIR-HL664	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route initialisation & completion (signal).
FIR-HL665	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route initialisation & completion (signal).
FIR-HL666	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route initialisation & completion (signal).

FIR-HL667	10.2.6 Subset RSi6
FIR-HL668	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route locking & proving (signal).
FIR-HL669	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route locking & proving (signal).
FIR-HL670	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route locking & proving (signal).
FIR-HL671	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route locking & proving (signal).
FIR-HL672	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route locking & proving (signal).
FIR-HL673	10.2.7 Subset RSi7
FIR-HL674	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route aspect phase (signal).
FIR-HL675	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route aspect phase (signal).
FIR-HL676	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route aspect phase (signal).
FIR-HL677	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route aspect phase (signal).
FIR-HL678	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route aspect phase (signal).
FIR-HL679	10.2.8 Subset RSi8
FIR-HL680	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (signal).
FIR-HL681	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route use & cancellation (signal).
FIR-HL682	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route use & cancellation (signal).
FIR-HL683	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route use & cancellation (signal).

FIR-HL684	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route use & cancellation (signal).
FIR-HL685	10.2.9 Subset RSi9
FIR-HL686	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal ID (command).
FIR-HL687	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal ID (command).
FIR-HL688	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal ID (command).
FIR-HL689	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal ID (command).
FIR-HL690	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal ID (command).
FIR-HL691	10.2.10 Subset RSi10
FIR-HL692	Not currently in use
FIR-HL693	10.2.11 Subset RSi11
FIR-HL694	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect locking command to a signal logic.
FIR-HL695	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect locking command to a signal logic.
FIR-HL696	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect locking command to a signal logic.
FIR-HL697	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect locking command to a signal logic.
FIR-HL698	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect locking command to a signal logic.
FIR-HL699	10.2.12 Subset RSi12
FIR-HL700	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect aspect command to a signal.
FIR-HL701	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect aspect command to a signal.
FIR-HL702	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect aspect

	command to a signal.
FIR-HL703	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect aspect command to a signal.
FIR-HL704	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect aspect command to a signal.
FIR-HL705	10.2.13 Subset RSi13
FIR-HL706	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect releasing command to a signal logic.
FIR-HL707	The possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect releasing command to a signal logic.
FIR-HL708	The possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect releasing command to a signal logic.
FIR-HL709	The possibility of a derailment of a railway vehicle on a fixed track element due to incorrect releasing command to a signal logic.
FIR-HL710	The possibility of a derailment of a railway vehicle on a flexible track element due to incorrect releasing command to a signal logic.
FIR-HL711	10.3 Signal Monitoring Logic Hazard Identification Table
FIR-HL712	10.3.1 Subset Sm-1 / 2 / 3 / 4 / 5
FIR-HL713	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect point ID (status)
FIR-HL714	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect failure status of a point (trailed)
FIR-HL715	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect emergency intervention decision (point)
FIR-HL716	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect failure status control (supervision) (point)
FIR-HL717	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lockable device ID (status)
FIR-HL718	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lockable device ID (status)
FIR-HL719	10.3.2 Subset Sm - 6 / 7 / 8 / 9 / 10
FIR-HL720	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect failure status of a lockable device (not permitted unlocked)

FIR-HL721	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect failure status of a lockable device (not permitted unlocked)
FIR-HL722	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect emergency intervention decision (lockable device)
FIR-HL723	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect emergency intervention decision (lockable device)
FIR-HL724	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect failure status control (supervision) (lockable device)
FIR-HL725	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect failure status control (supervision) (lockable device)
FIR-HL726	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect LX ID (status)
FIR-HL727	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect failure status of a LX (danger-zone occupied & not secured)
FIR-HL728	10.3.3 Subset Sm - 11 / 12 / 13 / 14 / 15
FIR-HL729	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect emergency intervention decision (LX)
FIR-HL730	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect failure status control (supervision) (LX)
FIR-HL731	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect LX ID (command)
FIR-HL732	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation command to a LX (LX activation)
FIR-HL733	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect TVP section ID (status)
FIR-HL734	10.3.4 Subset Sm - 16 / 17 / 18
FIR-HL735	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect failure status of a TVP section (not permitted occupied)
FIR-HL736	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect emergency intervention decision (TVP section)
FIR-HL737	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect failure status control (supervision) (TVP section)

FIR-HL738	10.3.5 Subset Sm - 19
FIR-HL739	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect emergency intervention decision (signal)
FIR-HL740	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect emergency intervention decision (signal)
FIR-HL741	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect emergency intervention decision (signal)
FIR-HL742	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect emergency intervention decision (signal)
FIR-HL743	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect emergency intervention decision (signal)
FIR-HL744	10.3.6 Subset Sm - 20
FIR-HL745	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect failure status control (supervision) (signal)
FIR-HL746	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect failure status control (supervision) (signal)
FIR-HL747	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect failure status control (supervision) (signal)
FIR-HL748	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect failure status control (supervision) (signal)
FIR-HL749	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect failure status control (supervision) (signal)
FIR-HL750	10.3.7 Subset Sm - 21
FIR-HL751	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal ID (command)
FIR-HL752	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal ID (command)
FIR-HL753	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal ID (command)
FIR-HL754	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal ID (command)
FIR-HL755	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal ID (command)

FIR-HL756	10.3.8 Subset Sm - 22
FIR-HL757	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal aspect command to a signal / all signals (stop aspect)
FIR-HL758	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal aspect command to a signal / all signals (stop aspect)
FIR-HL759	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal aspect command to a signal / all signals (stop aspect)
FIR-HL760	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal aspect command to a signal / all signals (stop aspect)
FIR-HL761	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal aspect command to a signal / all signals (stop aspect)
FIR-HL762	10.3.9 Subset Sm - 23
FIR-HL763	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect emergency intervention decision (ATP)
FIR-HL764	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect emergency intervention decision (ATP)
FIR-HL765	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect emergency intervention decision (ATP)
FIR-HL766	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect emergency intervention decision (ATP)
FIR-HL767	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect emergency intervention decision (ATP)
FIR-HL768	10.3.10 Subset Sm - 24
FIR-HL769	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect failure status control (supervision) (ATP)
FIR-HL770	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect failure status control (supervision) (ATP)
FIR-HL771	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect failure status control (supervision) (ATP)
FIR-HL772	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect failure status control

	(supervision) (ATP)
FIR-HL773	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect failure status control (supervision) (ATP)
FIR-HL774	10.3.11 Subset Sm - 25
FIR-HL775	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect ATP ID (command)
FIR-HL776	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect ATP ID (command)
FIR-HL777	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect ATP ID (command)
FIR-HL778	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect ATP ID (command)
FIR-HL779	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect ATP ID (command)
FIR-HL780	10.3.12 Subset Sm - 26
FIR-HL781	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect activation command to an ATP / all ATP (activate)
FIR-HL782	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect activation command to an ATP / all ATP (activate)
FIR-HL783	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect activation command to an ATP / all ATP (activate)
FIR-HL784	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect activation command to an ATP / all ATP (activate)
FIR-HL785	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect activation command to an ATP / all ATP (activate)
FIR-HL786	10.3.13 Subset Sm - 27
FIR-HL787	Possibility of an accident due to nature because of incorrect USO ID (status)
FIR-HL788	Possibility of an accident due to fire because of incorrect USO ID (status)
FIR-HL789	Possibility of an accident due to chemicals & biohazards because of incorrect USO ID (status)
FIR-HL790	Possibility of an accident due to electricity because of incorrect USO ID (status)
FIR-HL791	Possibility of an accident due to radiation because of incorrect USO ID (status)
FIR-HL792	10.3.14 Subset Sm - 28

FIR-HL793	Possibility of an accident due to nature because of incorrect hazardous status of an USO
FIR-HL794	Possibility of an accident due to fire because of incorrect hazardous status of an USO
FIR-HL795	Possibility of an accident due to chemicals & biohazards because of incorrect hazardous status of an USO
FIR-HL796	Possibility of an accident due to electricity because of incorrect hazardous status of an USO
FIR-HL797	Possibility of an accident due to radiation because of incorrect hazardous status of an USO
FIR-HL798	10.3.15 Subset Sm - 29
FIR-HL799	Possibility of an accident due to nature because of incorrect emergency intervention decision (USO)
FIR-HL800	Possibility of an accident due to fire because of incorrect emergency intervention decision (USO)
FIR-HL801	Possibility of an accident due to chemicals & biohazards because of incorrect emergency intervention decision (USO)
FIR-HL802	Possibility of an accident due to electricity because of incorrect emergency intervention decision (USO)
FIR-HL803	Possibility of an accident due to radiation because of incorrect emergency intervention decision (USO)
FIR-HL804	10.3.16 Subset Sm - 30
FIR-HL805	Possibility of an accident due to nature because of incorrect failure status control (supervision) (USO)
FIR-HL806	Possibility of an accident due to fire because of incorrect failure status control (supervision) (USO)
FIR-HL807	Possibility of an accident due to chemicals & biohazards because of incorrect failure status control (supervision) (USO)
FIR-HL808	Possibility of an accident due to electricity because of incorrect failure status control (supervision) (USO)
FIR-HL809	Possibility of an accident due to radiation because of incorrect failure status control (supervision) (USO)
FIR-HL810	11 TCCS
FIR-HL811	The following table is the list of extracted data for the 'TCCS' from the Generic Hazard Methodology Document. These are to be linked to each relevant Hazard I.D List derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL812	11.1 TCCS System Logic Hazard Identification Table
FIR-HL813	11.1.1 Subset TCCS - 1
FIR-HL814	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect point ID (status)
FIR-HL815	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect point ID (status)
FIR-HL816	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect point ID (status)
FIR-HL817	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect point ID (status)

FIR-HL818	11.1.2 Subset TCCS - 2
FIR-HL819	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect statuses of points (left & right)
FIR-HL820	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect statuses of points (left & right)
FIR-HL821	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect statuses of points (left & right)
FIR-HL822	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect statuses of points (left & right)
FIR-HL823	11.1.3 Subset TCCS - 3
FIR-HL824	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect statuses of points (trailed)
FIR-HL825	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect statuses of points (trailed)
FIR-HL826	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect statuses of points (trailed)
FIR-HL827	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect statuses of points (trailed)
FIR-HL828	11.1.4 Subset TCCS - 4
FIR-HL829	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (point)
FIR-HL830	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status displaying control (point)
FIR-HL831	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status displaying control (point)
FIR-HL832	Possibility of a derailment of a railway vehicle on a moveable track element due to incorrect status displaying control (point)
FIR-HL833	11.1.5 Subset TCCS - 5
FIR-HL834	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control
FIR-HL835	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signaller (system) driving value control (point)
FIR-HL836	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signaller

	(system) driving value control (point)
FIR-HL837	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signaller (system) driving value control (point)
FIR-HL838	11.1.6 Subset TCCS - 6
FIR-HL839	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect derailer ID (status)
FIR-HL840	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect derailer ID (status)
FIR-HL841	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect derailer ID (status)
FIR-HL842	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect derailer ID (status)
FIR-HL843	11.1.7 Subset TCCS - 7
FIR-HL844	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of a derailer (on rail & off rail)
FIR-HL845	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status information of a derailer (on rail & off rail)
FIR-HL846	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status information of a derailer (on rail & off rail)
FIR-HL847	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status information of a derailer (on rail & off rail)
FIR-HL848	11.1.8 Subset TCCS - 8
FIR-HL849	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (derailer)
FIR-HL850	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status displaying control (derailer)
FIR-HL851	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status displaying control (derailer)
FIR-HL852	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status displaying control (derailer)
FIR-HL853	11.1.9 Subset TCCS - 9
FIR-HL854	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (derailer)

FIR-HL855	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signaller (system) driving value control (derailer)
FIR-HL856	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signaller (system) driving value control (derailer)
FIR-HL857	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signaller (system) driving value control (derailer)
FIR-HL858	11.1.10 Subsets TCCS - 10 / 11 / 12
FIR-HL859	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect lockable device ID (status)
FIR-HL860	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect lockable device ID (status)
FIR-HL861	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of a lockable device (locked & released for operation & usable & not usable)
FIR-HL862	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status information of a lockable device (locked & released for operation & usable & not usable)
FIR-HL863	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (lockable device)
FIR-HL864	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status displaying control (lockable device)
FIR-HL865	11.1.11 Subsets TCCS - 13 / 14 / 15 / 16
FIR-HL866	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (lockable device)
FIR-HL867	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signaller (system) driving value control (lockable device)
FIR-HL868	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect LX ID (status)
FIR-HL869	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status information of a LX (secured & not secured & failure)
FIR-HL870	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status displaying control (LX)
FIR-HL871	11.1.12 Subsets TCCS - 17 / 18 / 19 / 20 / 21
FIR-HL872	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signaller

	(system) driving value control (LX)
FIR-HL873	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect LX ID (command)
FIR-HL874	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect command to a LX (manual release)
FIR-HL875	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect TVP section ID (status)
FIR-HL876	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of a TVP section (occupied & not occupied & undetected)
FIR-HL877	11.1.13 Subsets TCCS - 22 / 23 / 24 / 25 / 26
FIR-HL878	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (TVP section)
FIR-HL879	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (TVP section)
FIR-HL880	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect TVP section ID (command)
FIR-HL881	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect command to a TVP section (manual reset)
FIR-HL882	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect line block ID (status)
FIR-HL883	11.1.14 Subsets TCCS - 27 / 28 / 29
FIR-HL884	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of a line block (line clear & line in use & line normal)
FIR-HL885	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (line block)
FIR-HL886	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (line block)
FIR-HL887	11.1.15 Subset TCCS - 30
FIR-HL888	Possibility of an accident due to nature because of incorrect USO ID (status)
FIR-HL889	Possibility of an accident due to fire because of incorrect USO ID (status)
FIR-HL890	Possibility of an accident due to chemicals & biohazards because of incorrect USO ID (status)
FIR-HL891	Possibility of an accident due to electricity because of incorrect USO ID (status)
FIR-HL892	Possibility of an accident due to radiation because of incorrect USO ID (status)

FIR-HL893	11.1.16 Subset TCCS - 31
FIR-HL894	Possibility of an accident due to nature because of incorrect status information of an USO (active & not active value)
FIR-HL895	Possibility of an accident due to fire because of incorrect status information of an USO (active & not active value)
FIR-HL896	Possibility of an accident due to chemicals & biohazards because of incorrect status information of an USO (active & not active value)
FIR-HL897	Possibility of an accident due to electricity because of incorrect status information of an USO (active & not active value)
FIR-HL898	Possibility of an accident due to radiation because of incorrect status information of an USO (active & not active value)
FIR-HL899	11.1.17 Subset TCCS - 32
FIR-HL900	Possibility of an accident due to nature because of incorrect status displaying control (USO)
FIR-HL901	Possibility of an accident due to fire because of incorrect displaying control (USO)
FIR-HL902	Possibility of an accident due to chemicals & biohazards because of incorrect displaying control (USO)
FIR-HL903	Possibility of an accident due to electricity because of incorrect displaying control (USO)
FIR-HL904	Possibility of an accident due to radiation because of incorrect displaying control (USO)
FIR-HL905	11.1.18 Subset TCCS - 33
FIR-HL906	Possibility of an accident due to nature because of incorrect signaller (system) driving value control (USO)
FIR-HL907	Possibility of an accident due to fire because of incorrect signaller (system) driving value control (USO)
FIR-HL908	Possibility of an accident due to chemicals & biohazards because of incorrect signaller (system) driving value control (USO)
FIR-HL909	Possibility of an accident due to electricity because of incorrect signaller (system) driving value control (USO)
FIR-HL910	Possibility of an accident due to radiation because of incorrect signaller (system) driving value control (USO)
FIR-HL911	11.1.19 Subset TCCS - 34
FIR-HL912	Possibility of an accident due to nature because of incorrect USO ID (commands)
FIR-HL913	Possibility of an accident due to fire because of incorrect USO ID (commands)
FIR-HL914	Possibility of an accident due to chemicals & biohazards because of incorrect USO ID (commands)
FIR-HL915	Possibility of an accident due to electricity because of incorrect USO ID (commands)
FIR-HL916	Possibility of a derailment of a railway vehicle on a moveable track element due to incorrect USO ID (commands)
FIR-HL917	11.1.20 Subset TCCS - 35
FIR-HL918	Possibility of an accident due to nature because of incorrect command to an USO (manual activation & deactivation &

	reset)
FIR-HL919	Possibility of an accident due to fire because of incorrect command to an USO (manual activation & deactivation & reset)
FIR-HL920	Possibility of an accident due to chemicals & biohazards because of incorrect command to an USO (manual activation & deactivation & reset)
FIR-HL921	Possibility of an accident due to electricity because of incorrect command to an USO (manual activation & deactivation & reset)
FIR-HL922	Possibility of an accident due to radiation because of incorrect command to an USO (manual activation & deactivation & reset)
FIR-HL923	11.1.21 Subset TCCS - 36
FIR-HL924	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signal ID (status)
FIR-HL925	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signal ID (status)
FIR-HL926	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signal ID (status)
FIR-HL927	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signal ID (status)
FIR-HL928	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signal ID (status)
FIR-HL929	11.1.22 Subset TCCS - 37
FIR-HL930	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of a signal (shown aspect & lighting failure)
FIR-HL931	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status information of a signal (shown aspect & lighting failure)
FIR-HL932	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status information of a signal (shown aspect & lighting failure)
FIR-HL933	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status information of a signal (shown aspect & lighting failure)
FIR-HL934	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status information of a signal (shown aspect & lighting failure)
FIR-HL935	11.1.23 Subset TCCS - 38
FIR-HL936	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (signal)
FIR-HL937	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status displaying

	control (signal)
FIR-HL938	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status displaying control (signal)
FIR-HL939	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status displaying control (signal)
FIR-HL940	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status displaying control (signal)
FIR-HL941	11.1.24 Subset TCCS - 39
FIR-HL942	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (signal)
FIR-HL943	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signaller (system) driving value control (signal)
FIR-HL944	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signaller (system) driving value control (signal)
FIR-HL945	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signaller (system) driving value control (signal)
FIR-HL946	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signaller (system) driving value control (signal)
FIR-HL947	11.1.25 Subset TCCS - 40 / 41 / 42 / 43
FIR-HL948	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect adjacent IL ID (status)
FIR-HL949	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of an IL-IL Interface (completion route incl. signal aspect)
FIR-HL950	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (IL-IL Interface)
FIR-HL951	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (IL-IL Interface)
FIR-HL952	11.1.26 Subset TCCS - 44
FIR-HL953	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route ID (status)
FIR-HL954	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route ID (status)
FIR-HL955	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route ID (status)

FIR-HL956	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route ID (status)
FIR-HL957	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route ID (status)
FIR-HL958	11.1.27 Subset TCCS - 45
FIR-HL959	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status information of a route (availability & completeness & use & release)
FIR-HL960	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status information of a route (availability & completeness & use & release)
FIR-HL961	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status information of a route (availability & completeness & use & release)
FIR-HL962	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status information of a route (availability & completeness & use & release)
FIR-HL963	11.1.28 Subset TCCS - 46
FIR-HL964	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status displaying control (route)
FIR-HL965	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect status displaying control (route)
FIR-HL966	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect status displaying control (route)
FIR-HL967	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect status displaying control (route)
FIR-HL968	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect status displaying control (route)
FIR-HL969	11.1.29 Subset TCCS - 47
FIR-HL970	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect signaller (system) driving value control (route)
FIR-HL971	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect signaller (system) driving value control (route)
FIR-HL972	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect signaller (system) driving value control (route)
FIR-HL973	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect signaller (system) driving value control (route)

FIR-HL974	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect signaller (system) driving value control (route)
FIR-HL975	11.1.30 Subset TCCS - 48
FIR-HL976	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route ID (command)
FIR-HL977	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route ID (command)
FIR-HL978	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route ID (command)
FIR-HL979	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route ID (command)
FIR-HL980	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route ID (command)
FIR-HL981	11.1.31 Subset TCCS - 49
FIR-HL982	Possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route request command to a route logic
FIR-HL983	Possibility of a collision of a railway vehicle with other than railway vehicle on track due to incorrect route request command to a route logic
FIR-HL984	Possibility of a collision of a railway vehicle with other than railway vehicle on level crossing due to incorrect route request command to a route logic
FIR-HL985	Possibility of a derailment of a railway vehicle on a fixed track element due to incorrect route request command to a route logic
FIR-HL986	Possibility of a derailment of a railway vehicle on a flexible track element due to incorrect route request command to a route logic
FIR-HL987	12 TVP Section
FIR-HL988	The following table is the list of extracted data for 'TVP Section' from the Generic Hazard Methodology Document. These are to be linked to each relevant High Level Requirement derived from the Hazard I.D process, and to the relevant lower level functional requirements that relate directly to them in mitigation.
FIR-HL989	12.1 TVP Section Logic Hazard Identification Table
FIR-HL990	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect detected occupation values of a TVP section (occupied & not occupied).
FIR-HL991	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect status control of a TVP section (supervision).

FIR-HL992	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect reset driving values to a TVP section.
FIR-HL993	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupancy state change of a TVP section (occupied & not occupied).
FIR-HL994	12.2 I/L Route - TVP Section Logic Hazard Identification Table
FIR-HL995	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect TVP section ID (status).
FIR-HL996	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect occupation status of a TVP section (occupied & not occupied).
FIR-HL997	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route initialisation & completion (TVP section).
FIR-HL998	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect route use & cancellation (TVP section).
FIR-HL999	The possibility of a collision of a railway vehicle with another railway vehicle due to incorrect TVP section ID (command).