

**SIGURNOSNA  
INFORMACIJA**

**BROJ: 2015/005 Rev.00**

**SAFETY INFORMATION**

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CRNA GORA  
AGENCIJA ZA CIVILNO VAZDUHOPLOVSTVO

**Naslov / Title:**

**Implementacija Evropskog akcionog plana za smanjenje rizika od neodobrenog izlaska na PSS  
(European Action Plan for the Prevention of Runway Incursions)**

Na osnovu člana 6 stav 1 tačka 10 Zakona o vazдушnom saobraćaju („Službeni list CG“, br. 30/12), Agencija za civilno vazduhoplovstvo (u daljem tekstu: ACV) donijela je:

**SIGURNOSNU INFORMACIJU**

**Broj: 2015/005 Rev.00**

**Na inicijativu:**

Agencija za civilno vazduhoplovstvo

**Referentni propisi:**

- Zakon o vazдушnom saobraćaju („Službeni list CG“, br. 30/12),
- Tačka 2.2.6 Nacionalnog plana sigurnosti 2015-2018,
- Evropski akcioni plan za smanjenje rizika od neodobrenog izlaska na poletno-sletnu stazu (u nastavku teksta: PSS)  
(*European Action Plan for the Prevention of Runway Incursions*)
- ESSIP cilj AOP03 – Pобољшanje sigurnosti prevencijom neodobrenih izlazaka na poletno-sletne staze kojim se od vazduhoplovnih subjekata zahtijeva da implementiraju odgovarajuće dijelove Evropskog akcionog plana

**Primjena:**

Ova Sigurnosna informacija odnosi se na sve vazduhoplovne subjekte iz tačke 3 ove sigurnosne informacije.

**1. Uvod**

Nacionalni program sigurnosti vazdušnog saobraćaja (u daljem tekstu: Nacionalni program) je dokument koji je donijela Vlada Crne Gore na sjednici od 28. juna 2012. godine i predstavlja spoj regulatornih zahtjeva i aktivnosti koje vazduhoplovni subjekti preduzimaju u cilju održavanja i unapređenja sigurnosti u vazдушnom saobraćaju, a razvijen je u skladu sa standardima Međunarodne organizacije civilnog vazduhoplovstva – ICAO i Evropskim programom za sigurnost vazdušnog saobraćaja – donijetim od strane Evropske Komisije. Implementacija Nacionalnog programa je obavezujuća za sve vazduhoplovne subjekte u određenoj mjeri i u skladu sa propisima na koje upućuje.

Nacionalni plan sigurnosti vazdušnog saobraćaja 2015-2018 (u daljem tekstu: Plan sigurnosti) donijet je na sjednici Nacionalnog odbora za sigurnost 27. februara 2015. godine. Nacionalnim planom utvrđuju se aktivnosti i mjere za implementaciju Nacionalnog programa.

Tačkom 2.2.6 Plana sigurnosti definisani su faktori koji doprinose neodobrenom izlasku na PSS i na osnovu toga su utvrđene akcije koje mogu doprinijeti smanjenju rizika od neodobrenog izlaska na PSS, sa ciljem poboljšanja sigurnosti.

Evropski akcioni plan za smanjenje rizika od neodobrenog izlaska na PSS definiše subjekte i korake koji se preduzimaju u cilju smanjenja rizika od neodobrenog izlaska na PSS. Prikaz aktivnosti iz Evropskog akcionog plana (EAP) dat je u Prilogu 2 ove sigurnosne informacije.

Ovom Sigurnosnom informacijom se dodatno pojašnjava vazduhoplovnim subjektima u Crnoj Gori koje se aktivnosti od njih očekuju u okviru implementacije tačke 2.2.6 Plana sigurnosti, u skladu sa smjernicama iz Evropskog akcionog plana.



## 2. Prikaz stanja

Evropski akcioni plan je set mjera za poboljšanje sigurnosti definisanih u poglavljima od 1.1. do 1.10. Ideja implementacije Evropskog akcionog plana je po elu nakon što je utvr eno da broj doga aja neodobrenog izlaska na PSS raste. Utvr eno je da se najmanje dva neodobrena ulaska na PSS dnevno dogode na aerodromima širom Evrope.

Zbog toga je jedno od podru ja za koje su Nacionalnim programom predvi ena moguća poboljšanja i smanjenje rizika od neodobrenog izlaska na PSS. Za to podru je predvi eno je nekoliko aktivnosti, me u kojima je i donošenje ove Sigurnosne informacije.

Aktivnosti vezane za smanjenje ovog rizika, izme u ostalog, zahtijevaju od subjekata iz ta ke 3 ove sigurnosne informacije pripremu plana za implementaciju mjera Evropskog akcionog plana, u skladu sa Nacionalnim programom.

## 3. Na in implementacije

Aktivnosti su grupisane kao preporuke prema nadležnostima pojedinih subjekata. Svaka preporuka ima svoj redni broj (#), subjekta/e zaduženog za implementaciju (*ACTION*) i smjernice koje pojašnjavaju na koji na in se preporuka najbolje može implementirati (*GUIDANCE*).

#	RECOMMENDATION	ACTION	GUIDANCE
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Slika 1. Primjer mjere za poboljšanje sigurnosti sa rednim brojem (#), subjektima zaduženim za implementaciju (Action) i smjericama koje pojašnjavaju na koji na in se preporuka može najbolje implementirati (Guidance).

U skladu sa Evropskim akcionim planom, slede i subjekti su odgovorni, svako u okviru svojih nadležnosti, za implementaciju pojedinih aktivnosti (prilog 1):

1. Operatori aerodroma koji podliježu sertifikaciji,
2. Pružalac usluga u vazdušnoj plovidbi,
3. Operatori vazduhoplova ija je MTOM jednaka ili ve a od 5.700 kg,
4. Lokalni tim za sigurnost PSS (*Local Runway Safety Team*) ( u nastavku teksta: LRST),
5. Agencija za civilno vazduhoplovstvo

Prikaz svih aktivnosti iz plana dat je, po poglavljima, u prilogu 2 ove sigurnosne informacije:

- 1.1. Opšti principi za LRST
- 1.2. Operatori sertifikovanih aerodroma (u daljem tekstu: operatori aerodroma)
- 1.3. Pružalac usluga u vazdušnoj plovidbi
- 1.4. Operatori vazduhoplova

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#### 1.5. Agencija za civilno vazduhoplovstvo

Navedeni subjekti u saradnji sa lokalnim tijelom zaduženim za sigurnost PSS (LRST) na aerodromu moraju razviti sopstveni Plan implementacije za smanjenje rizika od neodobrenog izlaska na PSS na konkretnom aerodromu, na na in kako smatraju najboljim i primjerenim svojim operacijama (*Self-Appropriate Implementation Plan*), te na na in da se u najve o j mogu o j mjeri implementiraju preporu ene aktivnosti Evropskog akcionog plana. Plan implementacije treba da obuhvati i predložene aktivnosti za koje subjekt procijeni da mogu imati uticaj na umanje nje ovog rizika. Ukoliko neka aktivnost nije primjenjiva za odre enog subjekta, unutar svog plana implementacije treba da obrazloži razlog neprimjenljivosti.

Agencija za civilno vazduhoplovstvo e za ostale subjekte:

- operatore aerodroma koji nisu sertifikovani,
- operatore vazduhoplova ija je MTOM manja od 5.700 kg

razviti nacionalni opšti plan za implementaciju odredbi Evropskog akcionog plana u cilju pridržavanja smjernica Evropskog akcionog plana ili organizovati upoznavanje sa aktivnostima putem održavanja predavanja, radionica i sl.

#### 4. Prihvatanje i pra enje sprovo enja planova implementacije

U roku od 3 mjeseca od dana stupanja na snagu ove Sigurnosne informacije, subjekti odgovorni za implementaciju pojedinih aktivnosti dužni su da planove implementacije dostave Agenciji za civilno vazduhoplovstvo. Agencija za civilno vazduhoplovstvo e pratiti implementaciju planova i aktivnosti koje nadležni subjekti preduzimaju u cilju smanjenja rizika od neodobrenog izlaska na PSS.

Ministarstvo odbrane je nadležno za implementaciju i nadzor sprovo enja propisanih mjera Evropskog akcionog plana u skladu sa pojedinim odredbama ta ke 1.10 (Prilog 1).

#### 5. Dodatne informacije

Pitanja i dodatna objašnjenja (sa naznakom Sigurnosna Informacija 2015/005) u vezi sa na inom implementacije ove Sigurnosne informacije treba dostaviti na e-mail adresu ACV-a: [acv@caa.me](mailto:acv@caa.me).

#### 6. Stupanje na snagu

Ova Sigurnosna informacija stupa na snagu danom donošenja i objavljuje se na internet stranici Agencije.

**Direktor / Director**  
**Dragan urovi**

**Datum / Date**



**PRILOG 1**

**Popis subjekata odgovornih za implementaciju pojedinih poglavlja Evropskog akcionog plana (EAP)**

U sledećim tabelama (od 1.1. do 1.7.) u skladu sa Evropskim akcionim planom, za svaku aktivnost definisanu rednim brojem određeni su subjekti koji će biti odgovorni za implementaciju pojedine aktivnosti.

**1.1. Opšti principi za LRST**

Poglavlje iz EAP	Subjekti koji će biti odgovorni za implementaciju pojedine aktivnosti
1.1.1	<ul style="list-style-type: none"> <li>- Operatori aerodroma,</li> <li>- Pružalac usluga u vazdušnoj plovidbi,</li> <li>- Operatori vazduhoplova.</li> </ul>
1.1.2	<ul style="list-style-type: none"> <li>- LRST</li> </ul>
1.1.3	<ul style="list-style-type: none"> <li>- Operatori aerodroma,</li> <li>- Pružalac usluga u vazdušnoj plovidbi.</li> </ul>
1.1.4	<ul style="list-style-type: none"> <li>- LRST,</li> <li>- Pružalac usluga u vazdušnoj plovidbi,</li> <li>- Agencija za civilno vazduhoplovstvo,</li> <li>- Operatori aerodroma.</li> </ul>
1.1.5	<ul style="list-style-type: none"> <li>- Operatori vazduhoplova,</li> <li>- Pružalac usluga u vazdušnoj plovidbi,</li> <li>- Operatori aerodroma,</li> <li>- Organizacija za osposobljavanje pilota,</li> <li>- Agencija za civilno vazduhoplovstvo.</li> </ul>
1.1.6	<ul style="list-style-type: none"> <li>- Operatori vazduhoplova,</li> <li>- Pružalac usluga u vazdušnoj plovidbi,</li> <li>- Operatori aerodroma,</li> <li>- LRST,</li> <li>- Eurocontrol.</li> </ul>
1.1.7	<ul style="list-style-type: none"> <li>- Pružalac usluga u vazdušnoj plovidbi,</li> <li>- Operatori aerodroma,</li> <li>- Operatori vazduhoplova.</li> </ul>



## 1.2. Operatori aerodroma koji podliježu certifikaciji

Poglavlje iz EAP	Subjekti koji će biti odgovorni za implementaciju pojedine aktivnosti
1.2.1	- Operatori aerodroma
1.2.2	- Operatori aerodroma
1.2.3	- Operatori aerodroma
1.2.4	- Operatori aerodroma
1.2.5	- Operatori aerodroma
1.2.6	- Operatori aerodroma
1.2.7	- Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi
1.2.8	- Agencija za civilno vazduhoplovstvo - Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi
1.2.9	- Operatori aerodroma
1.2.10	- Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi
1.2.11	- Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi - Agencija za civilno vazduhoplovstvo
1.2.12	- Operatori aerodroma
1.2.13	- Operatori aerodroma
1.2.14	- Pružalac usluga u vazdušnoj plovidbi, - Operatori aerodroma
1.2.15	- Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi - Agencija za civilno vazduhoplovstvo
1.2.16	- Operatori aerodroma



### 1.3. Komunikacije

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.3.1	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori vazduhoplova</li><li>- Operatori aerodroma</li></ul>
1.3.2	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori vazduhoplova</li><li>- Operatori aerodroma</li></ul>
1.3.3	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori vazduhoplova</li><li>- Operatori aerodroma</li></ul>
1.3.4	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori vazduhoplova</li><li>- Operatori aerodroma</li></ul>
1.3.5	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori vazduhoplova</li><li>- Operatori aerodroma</li></ul>
1.3.6	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori aerodroma</li></ul>
1.3.7	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori vazduhoplova</li><li>- Operatori aerodroma</li></ul>
1.3.8	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li></ul>
1.3.9	<ul style="list-style-type: none"><li>- Pružalac usluga u vazdušnoj plovidbi</li><li>- Operatori aerodroma</li></ul>



#### 1.4. Operatori vazduhoplova

Poglavlje iz EAP	Subjekti koji će biti odgovorni za implementaciju pojedine aktivnosti
1.4.1	- Operatori vazduhoplova - IAOPA (podrška)
1.4.2	- Operatori vazduhoplova
1.4.3	- Operatori vazduhoplova
1.4.4	- Operatori vazduhoplova
1.4.5	- IATA - ECA/IFALPA (podrška) - Proizvođači vazduhoplova
1.4.6	- IATA - ECA/IFALPA (podrška)
1.4.7	- Operatori vazduhoplova - Proizvođači vazduhoplovnih konstrukcija
1.4.8	- Operatori vazduhoplova
1.4.9	- Operatori aerodroma - Operatori vazduhoplova
1.4.10	- Operatori vazduhoplova - Pružalac usluga u vazdušnoj plovidbi
1.4.11	- Operatori vazduhoplova
1.4.12	- Operatori vazduhoplova
1.4.13	- Operatori vazduhoplova
1.4.14	- Operatori vazduhoplova
1.4.15	- Operatori vazduhoplova

Objašnjenja skraćenica korišćenih u tabeli:

- IAOPA – International Council of Aircraft Owner and Pilot Association
- IATA – International Air Transport Association
- IFALPA – International Federation of Air Line Pilots' Associations



- ECA – European Cockpit Association

### 1.5. Kontrola letenja Srbije i Crne Gore SMATSA doo Beograd

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.5.1	- Pružalac usluga u vazdušnoj plovidbi
1.5.2	- Pružalac usluga u vazdušnoj plovidbi
1.5.3	- Pružalac usluga u vazdušnoj plovidbi
1.5.4	- Pružalac usluga u vazdušnoj plovidbi
1.5.5	- Pružalac usluga u vazdušnoj plovidbi
1.5.6	- Pružalac usluga u vazdušnoj plovidbi
1.5.7	- Pružalac usluga u vazdušnoj plovidbi
1.5.8	- Pružalac usluga u vazdušnoj plovidbi
1.5.9	- Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi
1.5.10	- Pružalac usluga u vazdušnoj plovidbi
1.5.11	- Pružalac usluga u vazdušnoj plovidbi
1.5.12	- Pružalac usluga u vazdušnoj plovidbi - Operatori aerodroma
1.5.13	- Pružalac usluga u vazdušnoj plovidbi
1.5.14	- Pružalac usluga u vazdušnoj plovidbi
1.5.15	- Pružalac usluga u vazdušnoj plovidbi
1.5.16	- Pružalac usluga u vazdušnoj plovidbi
1.5.17	- Pružalac usluga u vazdušnoj plovidbi - Operatori vazduhoplova
1.5.18	- Pružalac usluga u vazdušnoj plovidbi

### 1.6. Prikupljanje podataka i razmjena informacija

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.6.1	- Agencija za civilno vazduhoplovstvo
1.6.2	- Agencija za civilno vazduhoplovstvo - Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi - Operatori vazduhoplova



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### 1.7. Agencija za civilno vazduhoplovstvo

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.7.1	- Agencija za civilno vazduhoplovstvo
1.7.2	- Agencija za civilno vazduhoplovstvo
1.7.3	- Agencija za civilno vazduhoplovstvo
1.7.4	- Agencija za civilno vazduhoplovstvo
1.7.5	- Agencija za civilno vazduhoplovstvo
1.7.6	- Pružalac usluga u vazdušnoj plovidbi - Operatori aerodroma - Operatori vazduhoplova - Agencija za civilno vazduhoplovstvo
1.7.7	- Agencija za civilno vazduhoplovstvo
1.7.8	- Agencija za civilno vazduhoplovstvo
1.7.9	- Agencija za civilno vazduhoplovstvo



### 1.8. Upravljanje aeronauti kim informacijama

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.8.1	<ul style="list-style-type: none"> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Operatori aerodroma</li> <li>- Agencija za civilno vazduhoplovstvo</li> </ul>
1.8.2	<ul style="list-style-type: none"> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Vazduhoplovna industrija</li> </ul>
1.8.3	<ul style="list-style-type: none"> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Operatori aerodroma</li> <li>- Operatori vazduhoplova</li> <li>- Eurocontrol (AIM)</li> </ul>
1.8.4	<ul style="list-style-type: none"> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Operatori aerodroma</li> <li>- Operatori vazduhoplova</li> <li>- Eurocontrol</li> </ul>
1.8.5	<ul style="list-style-type: none"> <li>- Operatori aerodroma</li> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Agencija za civilno vazduhoplovstvo</li> <li>- Eurocontrol</li> </ul>
1.8.6	<ul style="list-style-type: none"> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Operatori aerodroma</li> <li>- Agencija za civilno vazduhoplovstvo</li> </ul>

### 1.9. Tehnologija

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.9.1	<ul style="list-style-type: none"> <li>- Operatori aerodroma</li> <li>- Pružalac usluga u vazdušnoj plovidbi</li> <li>- Operatori vazduhoplova</li> </ul>
1.9.2	<ul style="list-style-type: none"> <li>- Eurocontrol</li> <li>- SESAR</li> </ul>



**1.10. Zajedni ke civilno-vojne aerodromske operacije**

Poglavlje iz EAP	Subjekti koji e biti odgovorni za implementaciju pojedine aktivnosti
1.10.1	- Ministarstvo odbrane - Agencija za civilno vazduhoplovstvo
1.10.2	- Ministarstvo odbrane - Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi - LRST
1.10.3	- Operatori aerodroma - Pružalac usluga u vazdušnoj plovidbi - Ministarstvo odbrane - Agencija za civilno vazduhoplovstvo
1.10.4	- Agencija za civilno vazduhoplovstvo - Ministarstvo odbrane
1.10.5	- Operatori aerodroma
1.10.6	- Pružalac usluga u vazdušnoj plovidbi - Operatori vazduhoplova
1.10.7	- Pružalac usluga u vazdušnoj plovidbi - Operatori aerodroma
1.10.8	- Pružalac usluga u vazdušnoj plovidbi - Operatori vazduhoplova
1.10.9	- Pružalac usluga u vazdušnoj plovidbi
1.10.10	- Operatori aerodroma
1.10.11	- Operatori vazduhoplova
1.10.12	- Ministarstvo odbrane - Agencija za civilno vazduhoplovstvo - Operatori aerodroma - Operatori vazduhoplova.

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## PRILOG 2

### Prikaz aktivnosti iz Evropskog akcionog plana (EAP)

U slede im tabelama (od 1.1. do 1.10.) dat je prikaz aktivnosti u skladu sa Evropskim akcionim planom (*European Action Plan for the Prevention of Runway Incursions - Released Edition 2.0 - May 2011*).

## 1.1 GENERAL PRINCIPLES

#	RECOMMENDATION	ACTION	GUIDANCE
1.1.1	At individual aerodromes, as designated by the Regulator, a Runway Safety Team should be established and maintained to lead action on local runway safety issues.	Aerodrome Operators, Air Navigation Service Provider, Aircraft operators Regulator.	APPENDIX B
1.1.2	A local runway safety awareness campaign should be initiated at each aerodrome for Air Traffic Controllers, Pilots and Manoeuvring Area Vehicle Drivers and other personnel who operate on or near the runway. The awareness campaign should be periodically refreshed to maintain interest and operational awareness.	Local Runway Safety Team	APPENDIX B
1.1.3	Confirm that all infrastructure, practices and procedures relating to runway operations are in compliance with ICAO provisions.	Aerodrome Operator (lead), Air Navigation Service Provider.	APPENDIX L APPENDIX J
1.1.4	Where practicable, ensure that specific joint training and familiarisation in the prevention of runway incursions, is provided to Pilots, Air Traffic Controllers and Manoeuvring Area Vehicle Drivers. This may include visits to the manoeuvring area to increase awareness of signage and layout where this is considered necessary.	Local Runway Safety Team, Air Navigation Service Provider, Regulator, Aerodrome Operator.	
1.1.5	Runway safety should be part of initial and recurrent training for operational staff e.g. Air Traffic Controllers, Pilots, Manoeuvring Area Vehicle Drivers and all other personnel involved in manoeuvring area operations.	Aircraft Operator, Air Navigation Service Provider, Aerodrome Operator, Regulator, Flight Training School.	
1.1.6	Ensure that adequate information is collected on all runway incursion incidents so that causal and contributory factors can be identified, lessons can be learned and disseminated for Units, Organisations, National and European regional benefit e.g., in Case Studies created for training purposes.	Aircraft Operator, Air Navigation Service Provider, Aerodrome Operator, Local Runway Safety Team, EUROCONTROL.	
1.1.7	Changes to manoeuvring area practices and procedures, including planned works must take account of runway safety and may require consultation with the local runway safety team. An adequate risk assessment should be the basis for procedural and/or infrastructural changes on the manoeuvring area.	Air Navigation Service Provider, Aerodrome Operator, Aircraft Operator.	APPENDIX G

#### NOTE:

*To mitigate the effect of a runway excursion it is agreed that runway end safety areas (which may include arresting systems) and runway strips are useful, although they are not excursion prevention measures.*

*Runway strips and RESAs are the subject of ICAO Standards and Recommended Practices.*



## 1.2 AERODROME OPERATOR ISSUES

#	RECOMMENDATION	ACTION	GUIDANCE
1.2.1	Verify the implementation of ICAO Annex 14 provisions and implement maintenance programmes relating to Runway operations e.g. markings, lighting, signage. Ensure that signs and markings are clearly visible, adequate and unambiguous in all relevant conditions.	Aerodrome operator.	APPENDIX L APPENDIX J
1.2.2	Works in progress - Ensure that information about temporary work areas is adequately disseminated and that temporary signs and markings are clearly visible, adequate and unambiguous in all relevant conditions.	Aerodrome operator.	APPENDIX L APPENDIX J
1.2.3	Implement safety management systems in accordance with ICAO provisions.	Aerodrome operator.	APPENDIX G
1.2.4	Ensure a continued focus on runway safety in internal audit activities.	Aerodrome operator.	APPENDIX F
1.2.5	Introduce a formal Driver training and assessment programme, or where already in place review against driver training guidelines.	Aerodrome operator.	APPENDIX C
1.2.6	Introduce formal communications training and assessment for Drivers and other personnel who operate on or near the runway.	Aerodrome operator.	APPENDIX A APPENDIX C
1.2.7	Implement the ICAO standard naming convention for the manoeuvring area to eliminate ground navigation error and communication confusion.	Aerodrome operator (lead), Air Navigation Service Provider (support).	APPENDIX K
1.2.8	Ensure all vehicles on the manoeuvring area are in radio contact with the appropriate Air Traffic Control service, i.e. ground and/or the tower either directly or through an escort, including Emergency services.	Regulator, Aerodrome Operator, Air Navigation Service Provider.	APPENDIX A APPENDIX C
1.2.9	Ensure all Manoeuvring Area Vehicle Drivers are briefed at the start of a shift and that situational awareness is maintained throughout the shift.	Aerodrome Operator.	APPENDIX C
1.2.10	Enable the tracking of vehicle movements on the manoeuvring area when possible.	Aerodrome Operator, Air Navigation Service Provider.	
1.2.11	Ensure that a policy and robust procedure for Runway Inspections are in place. Example - Identify any potential safety benefits of carrying out runway inspections in the opposite direction to runway movements and if appropriate adopt the procedure.	Aerodrome Operator, Air Navigation Service Provider, Regulator.	
1.2.12	New aerodrome infrastructure and changes to existing infrastructure should be designed to prevent runway incursions.	Aerodrome operator.	APPENDIX K
1.2.13	The aerodrome operator should ensure that a procedure exists and Manoeuvring Area Vehicle Drivers are trained for those occasions where they become uncertain of their position on the manoeuvring area.	Aerodrome Operator.	APPENDIX A APPENDIX B APPENDIX C
1.2.14	Avoid infringing lines of sight from the air traffic control tower. Assess visibility restrictions from the tower, which have a potential impact on the ability to see the manoeuvring area. Recommend improvement to restricted lines of sight and develop appropriate mitigation procedures. Disseminate this information as appropriate.	Air Navigation Service Provider, Aerodrome Operator.	APPENDIX K
1.2.15	Regularly review the operational use of aeronautical ground lighting e.g. stop bars, to ensure a robust policy to protect the runway.	Aerodrome Operator, Air Navigation Service Provider, Regulator.	APPENDIX C APPENDIX K APPENDIX J
1.2.16	Manoeuvring Area Vehicle Drivers shall not cross illuminated red lights, e.g. stop bars, when entering or crossing a runway, unless contingency procedures are in force, i.e. to cover cases where the stop bars or controls are unserviceable. The period that a stop bar is out of service must be time limited.	Aerodrome Operator.	APPENDIX C APPENDIX K APPENDIX J



## 1.3 COMMUNICATIONS (LANGUAGE, RADIOTELEPHONY, PHRASEOLOGIES AND PROCEDURES)

#	RECOMMENDATION	ACTION	GUIDANCE
1.3.1	To avoid the possibility of call sign confusion, use full aircraft or vehicle call signs for all communications with runway operations.	Air Navigation Service Provider (lead), Aircraft Operator (lead), Aerodrome Operator (lead).	APPENDIX A APPENDIX E
1.3.2	Verify the use of standard ICAO RTF phraseologies.	Air Navigation Service Provider (lead), Aircraft Operator (lead), Aerodrome Operator (lead).	APPENDIX L APPENDIX A APPENDIX B APPENDIX E
1.3.3	Use the ICAO read-back procedure (also applicable to Manoeuvring Area Drivers and other personnel who operate on the manoeuvring area).	Air Navigation Service Provider (lead), Aircraft Operator (lead), Aerodrome Operator (lead).	APPENDIX L APPENDIX A APPENDIX D
1.3.4	Improve situational awareness, when practicable, by conducting all communications associated with runway operations using aviation English.	Air Navigation Service Provider (lead), Aircraft Operator (lead), Aerodrome Operator (lead).	APPENDIX A
1.3.5	Improve situational awareness, when practicable, by conducting all communications associated with runway operations on a common frequency. <i>Note - Aerodromes with multiple runways may use a different frequency for each runway</i>	Air Navigation Service Provider (lead), Aircraft Operator (lead), Aerodrome Operator (lead).	APPENDIX A
1.3.6	Avoid call sign confusion at an aerodrome by giving discrete RTF call signs to manoeuvring area vehicles.	Air Navigation Service Provider, Aerodrome Operator.	APPENDIX B APPENDIX E
1.3.7	Consider implementing a regular evaluation of radio telephony practices, looking at such things as frequency loading and use of ICAO compliant phraseology.	Air Navigation Service Provider, Aerodrome Operator, Aircraft Operators.	APPENDIX A APPENDIX B APPENDIX E
1.3.8	If conditional clearances are used, in accordance with ICAO provisions, ensure a policy and robust procedures are developed and implemented.	Air Navigation Service Provider.	
1.3.9	Significant aerodrome information which may affect operations on or near the runway, in addition to that found in NOTAMS and on the ATIS, should be provided to Manoeuvring Area Drivers and Pilots 'real-time' using radio communication.	Air Navigation Service Provider (lead), Aerodrome Operator.	APPENDIX A APPENDIX H



## 1.4 AIRCRAFT OPERATOR ISSUES

#	RECOMMENDATION	ACTION	GUIDANCE
1.4.1	Provide training and assessment for Pilots regarding Aerodrome signage, markings and lighting.	Aircraft Operator (lead), IAOPA (support).	APPENDIX D
1.4.2	Pilots shall not cross illuminated red lights, e.g. stop bars when lining up or crossing a runway, unless contingency procedures are in force, i.e. to cover cases where the stop bars or controls are unserviceable. The period that a stop bar is out of service must be time limited.	Aircraft Operator.	APPENDIX L APPENDIX D APPENDIX E APPENDIX K APPENDIX J
1.4.3	Ensure that flight deck procedures contain a requirement for specific clearances to cross any runway. <i>Includes non-active runways.</i>	Aircraft operator.	APPENDIX A
1.4.4	Flight Crew should not enter a runway for departure if not ready to take off. Flight Crew must advise Air Traffic Control without delay if additional time on the runway is required for operational reasons.	Aircraft Operator.	APPENDIX D
1.4.5	Promote best practices in flight deck procedures while taxiing and during final approach - to include the "Sterile flight deck" concept.	IATA (lead), ECA/IFALPA (support), Aircraft Manufacturer.	APPENDIX D
1.4.6	Promote best practices for Pilots' planning of ground operations.	IATA (Lead), ECA/IFALPA (Support).	APPENDIX D
1.4.7	Ensure a means to indicate receipt of landing / line-up / take off / crossing clearances in the cockpit.	Airframe Manufacturer, Aircraft Operator.	
1.4.8	Pilots are advised to switch on forward facing lights when in receipt of a take off clearance and show forward facing lights on the approach.	Aircraft Operator.	APPENDIX D
1.4.9	Pilots must be made aware of current safety significant airport information.	Aerodrome Operator, Aircraft Operator.	APPENDIX A APPENDIX H
1.4.10	During taxi for departure or during approach, Pilots should not accept a runway change proposal if time to re-programme the FMS / re-brief is not sufficient. This includes a change of departure intersection.	Aircraft Operator, Air Navigation Service Provider.	APPENDIX D
1.4.11	If Pilots have any doubt as to their exact position on the surface of an aerodrome, they should contact Air Traffic Control and follow the associated ICAO procedure (PANS-ATM, Doc 4444).	Aircraft Operator.	APPENDIX B
1.4.12	A Pilot should avoid being "head-down" to ensure a continuous watch while taxiing.	Aircraft Operator.	APPENDIX D
1.4.13	If there is any doubt when receiving a clearance or instruction, clarification should be requested immediately from Air Traffic Control.	Aircraft Operator.	APPENDIX A
1.4.14	Aerodrome charts or an equivalent electronic device should be displayed on the flight deck during taxi. This includes when operating at the home aerodrome.	Aircraft Operator.	APPENDIX D
1.4.15	Avoid accepting rapid exit taxiways or oblique or angled taxiways for line-up that limits the ability of the Flight crew to see the runway threshold or the final approach area.	Aircraft Operator.	APPENDIX D



## 1.5 AIR NAVIGATION SERVICE PROVIDER ISSUES

#	RECOMMENDATION	ACTION	GUIDANCE
1.5.1	Implement safety management systems in accordance with ESARR3 provisions.	Air Navigation Service Provider.	APPENDIX G
1.5.2	Ensure a clear and robust procedure is in place, and where practicable, appropriate technology is used to show that a runway is occupied, obstructed or unavailable.	Air Navigation Service Provider.	APPENDIX B
1.5.3	Whenever practical give en-route clearance prior to taxi.	Air Navigation Service Provider.	APPENDIX E
1.5.4	If an aircraft, vehicle or person becomes lost or uncertain of its position on the manoeuvring area, Air Traffic Control must re-establish full situational awareness without delay.	Air Navigation Service Provider.	APPENDIX A APPENDIX B
1.5.5	Regularly review the operational use of aeronautical ground lighting e.g. stop bars, to ensure a robust policy to protect the runway from the incorrect presence of traffic.	Air Navigation Service Provider.	APPENDIX L APPENDIX B APPENDIX E APPENDIX K APPENDIX J
1.5.6	Aircraft or vehicles shall not be instructed to cross illuminated red lights, e.g. stop bars when entering or crossing a runway unless contingency procedures are in force, e.g. to cover cases where the stop bars or controls are unserviceable. Stop Bars that protect the runway must be controllable by the runway controller.	Air Navigation Service Provider.	APPENDIX L APPENDIX B APPENDIX E APPENDIX K APPENDIX J
1.5.7	Ensure that Air Traffic Control communication messages are not over long or complex.	Air Navigation Service Provider.	APPENDIX A APPENDIX E
1.5.8	Ensure that Air Traffic Control procedures contain a requirement to issue a specific clearance to cross any runway. <i>Includes non-active runways.</i>	Air Navigation Service Provider	APPENDIX L APPENDIX E
1.5.9	Identify any potential safety benefits of carrying out runway inspections in the opposite direction to runway movements and if appropriate adopt the procedure.	Aerodrome Operator, Air Navigation Service Provider (Joint activity).	
1.5.10	Use standard taxi routes when practical to minimise the potential for pilot confusion, on or near the runway.	Air Navigation Service Provider.	APPENDIX L
1.5.11	Where applicable use progressive taxi instructions to reduce pilot workload and the potential for confusion.	Air Navigation Service Provider.	APPENDIX E
1.5.12	Avoid infringing sight lines from the tower and assess visibility restrictions from the tower, which have a potential impact on the ability to see the runway, and disseminate this information as appropriate. Recommend improvement when possible and develop appropriate procedures.	Air Navigation Service Provider, Aerodrome Operator.	APPENDIX L APPENDIX K
1.5.13	Ensure that runway safety issues are included in training and briefing for Air Traffic Control staff.	Air Navigation Service Provider.	APPENDIX B APPENDIX E
1.5.14	Identify any potential hazards of runway capacity enhancing procedures when used individually or in combination and, if necessary, develop appropriate mitigation strategies. (Intersection departures, multiple line-up, conditional clearances etc.)	Air Navigation Service Provider.	APPENDIX G
1.5.15	Do not issue a line up clearance if the aircraft will be expected to wait on the runway for more than 90 seconds beyond the time it will normally be expected to depart.	Air Navigation Service Provider	
1.5.16	Avoid using oblique or angled taxiways for line-up that limit the ability of the flight crew to see the runway threshold or the final approach area.	Air Navigation Service Provider.	APPENDIX D
1.5.17	When planning a runway change for departing or arriving traffic, consider the time a pilot will require to prepare / re-brief.	Air Navigation Service Provider, Aircraft Operator.	APPENDIX D
1.5.18	As far as practicable, controllers should be "head-up" for a continuous watch of aerodrome operations.	Air Navigation Service Provider.	





## 1.6 DATA COLLECTION AND LESSON SHARING

#	RECOMMENDATION	ACTION	GUIDANCE
1.6.1	Promote the implementation of occurrence reporting, compatible with an international, harmonised reporting system e.g. ADREP 2000, ECCAIRS.	Regulator.	APPENDIX B
1.6.2	Disseminate de-identified information on actual runway incursions locally to increase understanding of causal and contributory factors to enhance lesson learning. Where appropriate, send de-identified information to the EURO-CONTROL Runway Safety Office for the benefit of the European runway safety programme.	Regulator, Aerodrome Operator, Air Navigation Service Provider, Aircraft Operator.	APPENDIX B

## 1.7 REGULATORY ISSUES

#	RECOMMENDATION	ACTION	GUIDANCE
1.7.1	Confirm that all infrastructure, practices and procedures relating to runway operations are in compliance with ICAO provisions.	Regulator.	APPENDIX L APPENDIX J
1.7.2	Ensure implementation of safety management systems is in accordance with the applicable standards.	Regulator.	APPENDIX G
1.7.3	Ensure that safety assurance documentation for operational systems (new and modified) demonstrates compliance with regulatory and safety management system requirements.	Regulator.	APPENDIX G
1.7.4	Regulators should focus on runway safety in their oversight activities e.g. preventing runway incursion risks.	Regulator.	APPENDIX F
1.7.5	Certify aerodromes according to ICAO provisions, Annex 14.	Regulator.	APPENDIX L
1.7.6	Ensure that Aerodrome Operators and Air Navigation Service Providers regularly review the operational use of aeronautical ground lighting e.g. stop bars, to ensure a robust policy to protect the runway from the incorrect presence of traffic.	Air Navigation Service Provider, Aerodrome Operator, Aircraft Operator, Regulator.	APPENDIX G APPENDIX K APPENDIX J
1.7.7	Ensure that the content of training materials for Pilots, Air Traffic Controllers and Drivers working on the manoeuvring area includes runway incursion prevention measures and awareness.	Regulator.	
1.7.8	Noise mitigation rules should not increase, and, should seek to reduce where possible, the risk of runway incursion. Noise mitigation rules that could potentially adversely affect runway incursion risk should undergo a risk assessment.  <i>Guidance note Those noise mitigation elements that could potentially affect runway incursion/excursion risk include (but are not limited to): Airfield design and alignment based on noise consideration, noise preferred runway or runway operational mode, time-based runway selection to share noise load, runway specific curfews, arrival/departure curfews etc. which may (e.g.) require additional backtrack, runway crossings or other similar and otherwise avoidable risk.</i>	Regulator.	
1.7.9	Ensure an adequate risk assessment as the basis for procedural and/or infrastructural changes on the manoeuvring area.	Regulator.	



## 1.8 AERONAUTICAL INFORMATION MANAGEMENT

#	RECOMMENDATION	ACTION	GUIDANCE
1.8.1	Ensure that the content of aeronautical information provided is in accordance with the ICAO standards and recommended practices and that it is regularly reviewed to ensure it is up to date and relevant to the pilot.	Air Navigation Service Provider, Aeronautical Information Service Provider (lead), Aerodrome operator support), Regulator.	APPENDIX L APPENDIX H
1.8.2	Providers of aeronautical databases and charts should establish a process with the Aeronautical Information Service Provider, with the objective of ensuring the accuracy, timeliness and integrity of the data.	Aeronautical Information Service Provider, Industry.	APPENDIX H
1.8.3	Ensure the means and procedures are established to allow users to provide feedback on the availability and quality of aeronautical information.	Aeronautical Information Service Provider, Aerodrome Operator, Aircraft Operator, EUROCONTROL (AIM).	APPENDIX H
1.8.4	The ergonomics of aeronautical maps and charts and relevant documentation should be improved to enhance their readability and usability.	Air Navigation Service Provider, Aeronautical Information Service Provider, Aerodrome Operator, Aircraft Operator, EUROCONTROL.	APPENDIX H
1.8.5	Move towards digital aeronautical information management, to provide and use high quality data in an interoperable exchange format.	Aerodrome Operator, Air Navigation Service Provider, Aeronautical Information Service Provider, Regulator, EUROCONTROL.	APPENDIX H
1.8.6	Aerodrome Operators and Aeronautical Information Service Providers should establish formal arrangements and assign responsibilities for maintaining direct and continuous liaison.	Air Navigation Service Provider, Aeronautical Information Service Provider, Aerodrome Operator, Regulator.	APPENDIX H

## 1.9 TECHNOLOGY

#	RECOMMENDATION	ACTION	GUIDANCE
1.9.1	Improve situational awareness by considering the use of technologies that enable operational staff on the manoeuvring area to confirm their location in relation to the runway e.g. via GPS with transponder or airport moving maps, visual aids, signs.	Aerodrome Operator, Air Navigation Service Provider, Aircraft Operator.	
1.9.2	Promote the integration of safety nets to provide immediate and simultaneous runway and traffic proximity alerts for Pilots, Air Traffic Controllers and Manoeuvring Area Vehicle Drivers.	EUROCONTROL, SESAR.	



## 1.10 CIVIL/MILITARY JOINT-USE AERODROME OPERATIONS

#	RECOMMENDATION	ACTION	GUIDANCE
1.10.1	Where more than one aerodrome operator exists at a joint-use aerodrome, a leading aerodrome operator should be identified to secure a harmonised, consistent and coordinated application of the recommendations for the prevention of runway incursions.	Military Aviation Authority, Regulator.	APPENDIX I
1.10.2	New investment or reconstruction work on the manoeuvring area should be planned, coordinated and safety assessed between civil and military entities, in consultation with the Local Runway Safety Team.	Military Aviation Authority, Regulator, Aerodrome Owner/Operator, Air Navigation Service Provider, Local Runway Safety Team.	APPENDIX B APPENDIX I
1.10.3	Differences in application of Civil and Military traffic procedures that can affect operational safety should be published in accordance with Annex 15, Aeronautical Information Services.	Aerodrome Operator, Air Navigation Service Provider, Aeronautical Information Service Provider, Military Aviation Authority, Regulator.	APPENDIX L APPENDIX I
1.10.4	Coordinate civil and military inspection/audit activities and subsequent safety recommendations with civil and military authorities.	Regulator, Military Aviation Authority.	APPENDIX G APPENDIX I
1.10.5	Timely planning and coordination of aerodrome operations between civil and military aerodrome entities should be established as appropriate.	Aerodrome Operator.	APPENDIX I
1.10.6	Standard ICAO phraseology should be in use during civil operations at joint use aerodromes.	Air Navigation Service Provider, Aircraft Operator.	APPENDIX A APPENDIX E APPENDIX I
1.10.7	When practicable, procedures to use VHF frequency for communications or cross coupled UHF/VHF associated with runway operations should be developed for civil and military traffic operating simultaneously. The objective is to maintain the required level of situational awareness with civil and military Pilots, Manoeuvring Area Vehicle Drivers and Air Traffic Controllers.	Air Navigation Service Provider, Aerodrome Operator.	APPENDIX A APPENDIX B APPENDIX C APPENDIX E APPENDIX I
1.10.8	Once a formation of military aircraft is established on the manoeuvring area, the formation should be treated as one entity.	Air Navigation Service Provider, Aircraft Operator.	APPENDIX I
1.10.9	Conditional clearances should not be used for civilian traffic during military formation flight operations.	Air Navigation Service Provider.	APPENDIX L APPENDIX I
1.10.10	Standard ICAO Annex 14 aerodrome signs, lights and markings should be used where civil and military share a manoeuvring area.	Aerodrome Operator.	APPENDIX L APPENDIX I
1.10.11	Wherever practicable military aircraft should display lights in accordance with ICAO Annex 2. If required, additional procedures should be applied to maintain the required level of situational awareness at joint-use aerodromes.	Aircraft Operator.	APPENDIX L APPENDIX D APPENDIX I
1.10.12	Ensure that military Pilots and Manoeuvring Area Vehicle Drivers who are deployed at civil aerodromes are competent to operate within the remit of ICAO provisions and local procedures.	Military Aviation Authority, Regulator, Aerodrome Operator, Aircraft Operator.	APPENDIX L APPENDIX C APPENDIX D APPENDIX I