dgac

DSNA

GROUPE ADP

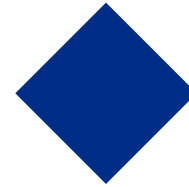**Cofinancé par l'Union européenne**
Le mécanisme pour l'interconnexion en Europe

2017 CPS:

RWSL@CDG

RWSL@ CDG

HISTORY OF RWSL
PURPOSE AND PRINCIPLE
DEPLOYMENT @ CDG
SAFETY RECORD

◆**History of RWSL**

- **Developed in cooperation between FAA and MIT Lincoln labotory**

- **Tested between 2005 and 2009 in DFW, LAX, SAN**

- **Evaluated in 2008 by Eurocontrol and CDG Runway Safety Team**

◆Reasons to develop RWSL

- In 2008, ground situation detection becoming more accurate

- More than 50% of runway incursion are filed as "pilot error"

- Short term alert at destination of main actor to react : pilots

- No system at that time to convey direct alert to pilots
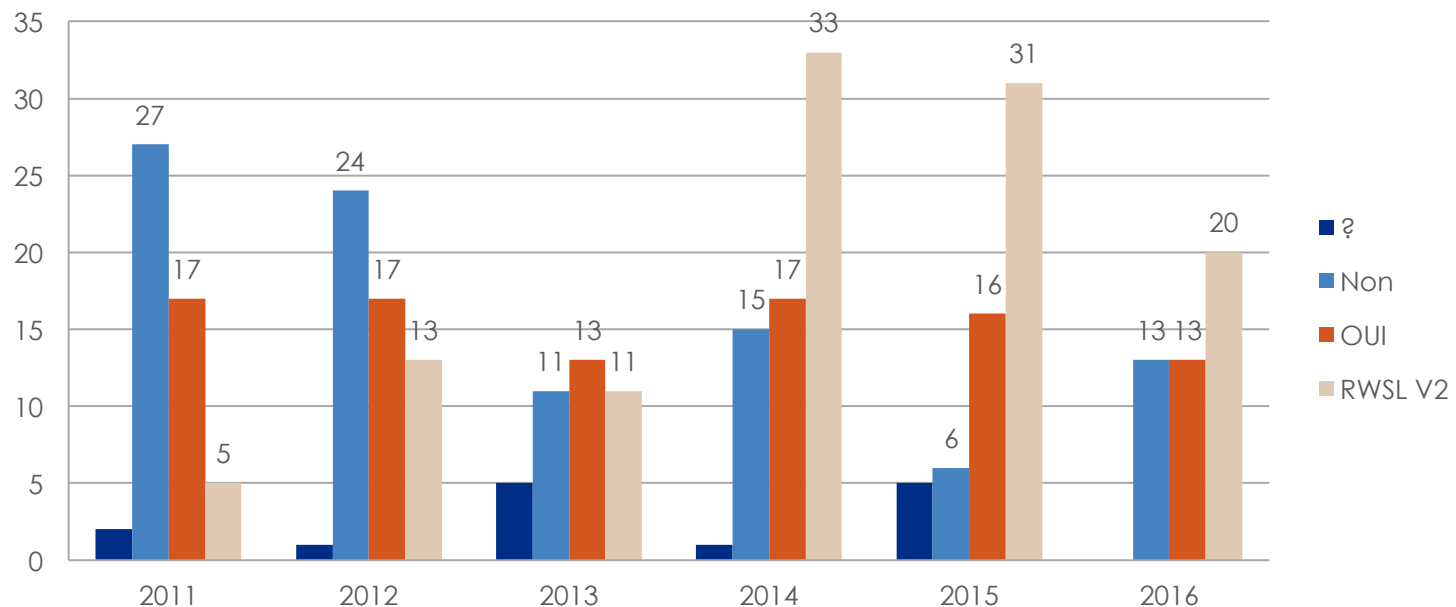
◆ **Reasons to deploy RWSL@CDG**

- **Two pairs of parallel runways : 700 crossings of inner runways per day**
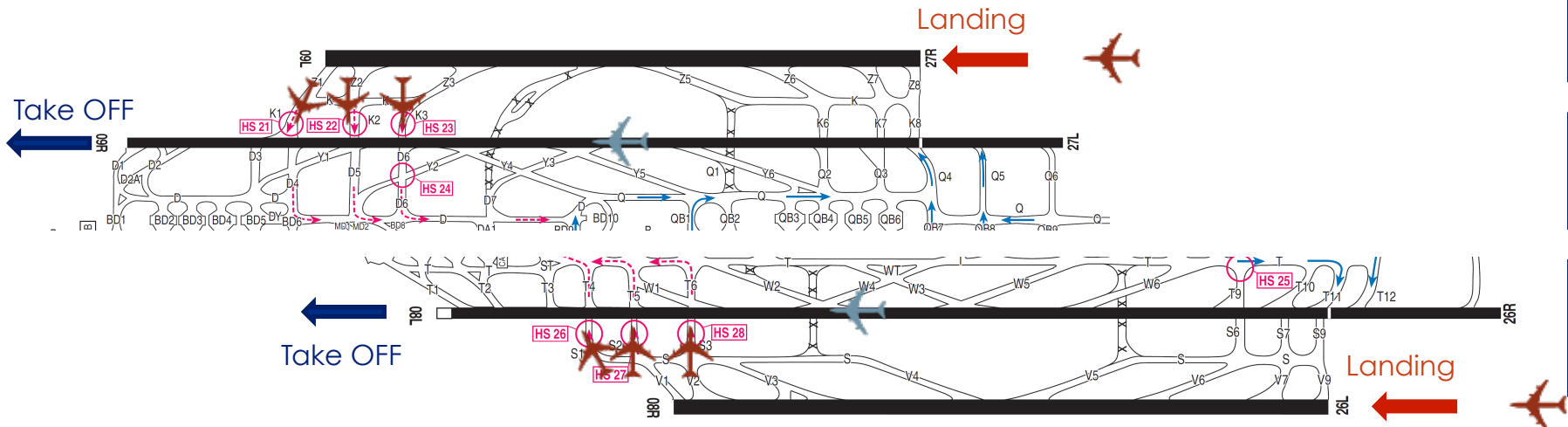
◆**Reasons to deploy RWSL@CDG**

- **Absolute necessity to develop a mean to reduce and protect runway incursions**

**CDG potential RWSL impact on incursions during
2011-2016 period**

6

◆Purpose of RWSL

- Protect inner runway and crossing
- Protect :
  - Aircraft / vehicles waiting for crossing the runway
  - Aircraft waiting for lining up
  - Aircraft lined-up

- Don't protect
  - Aircraft on final (not directly)
  - Runway incursion from high speed turn off taxiway

◆Principle of RWSL

- Uses primary and secondary surveillance radar

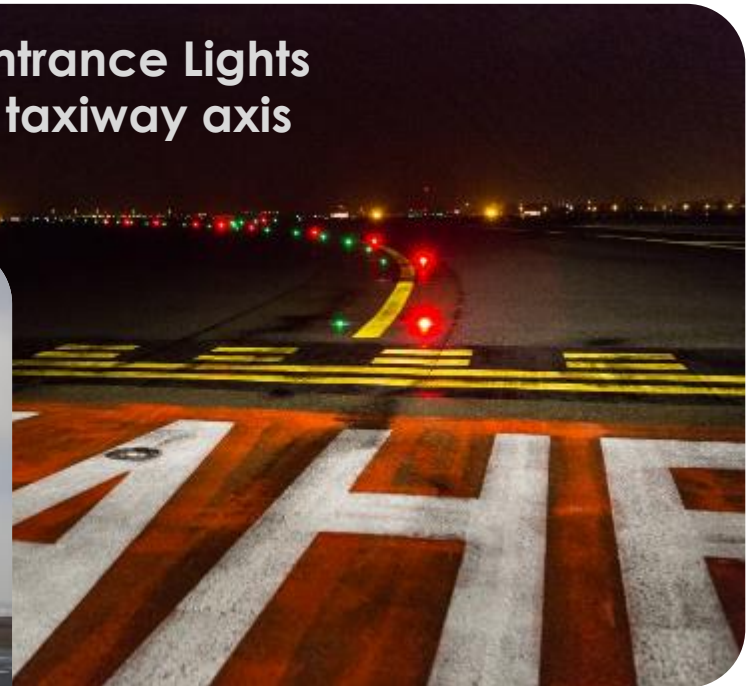- Conveying information through in-paved red lights :

  RELs and THLs
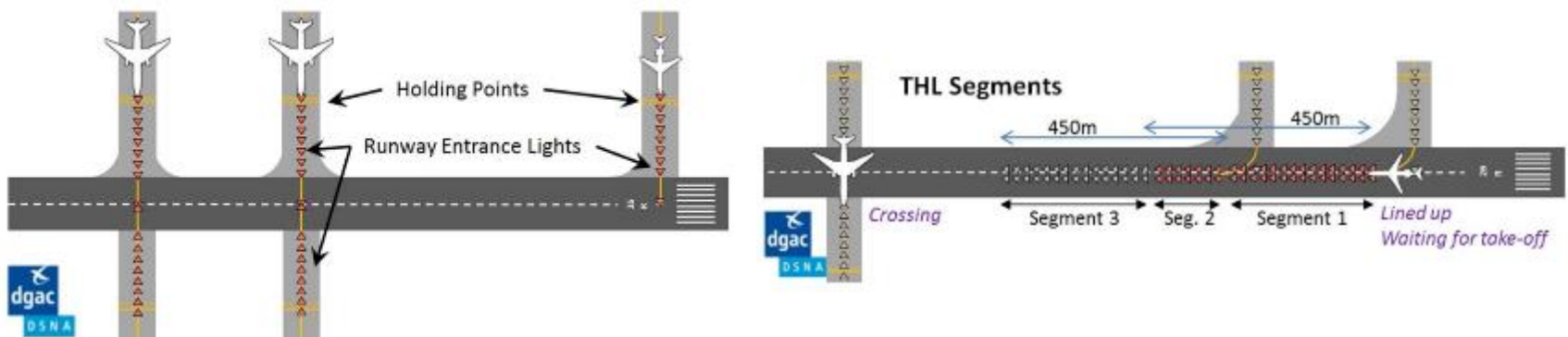
- Fully autonomous and independently of ATCO

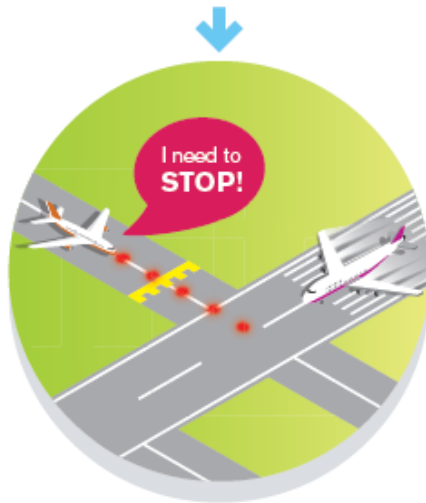# ◆ Principle of RWSL

**Runway Entrance Lights
Along the taxiway axis**

**Take off Hold Lights
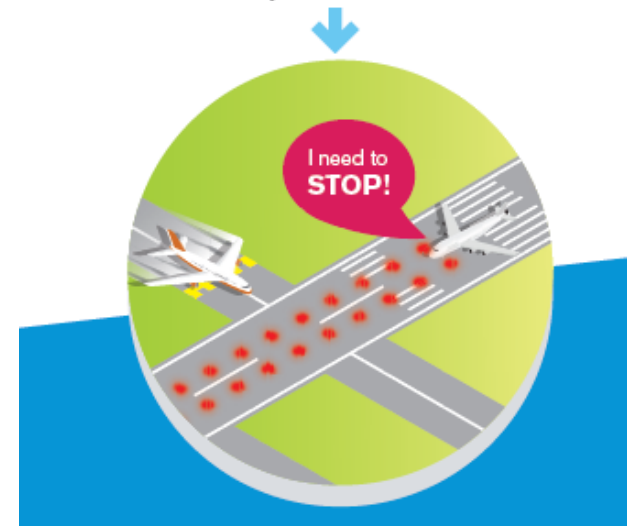450m long from each lining up point**

◆Principle for the crew

Runway Entrance Lights (RELs)
Illuminated RELs mean **STOP**!
The runway is unsafe to enter or cross.

I need to **STOP**!

Take off Hold Lights (THLs)
Illuminated red THLs mean **STOP**!
The runway is unsafe for take off.
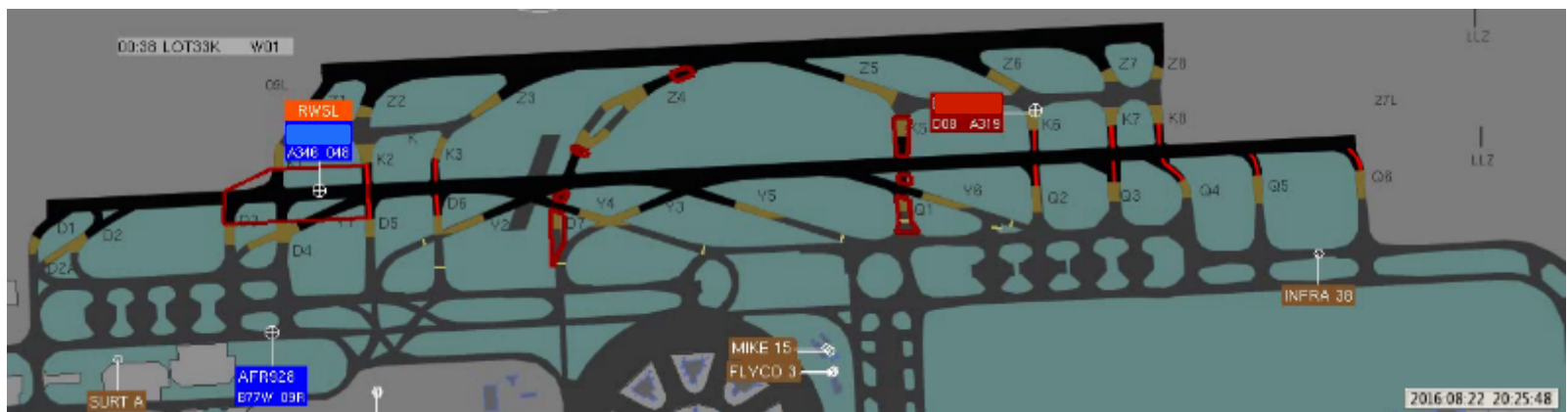
I need to **STOP**!

◆ Deployment at CDG

- **Runway 09R/27L :**
  - **In service 24h a day since 28th June 2016**

- **Runway 08L/26R :**
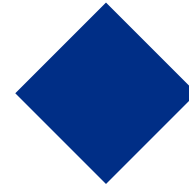 - **In service 24h a day since 3rd March 2017**

◆Safety record

- One runway incursion avoided on 22nd august 2016

THANKS FOR YOUR ATTENTION