

Alain Du Bois Safety Advisor Steenokkerzeel, 03/12/2013



What is it about?



* EBBR occurrence

- **▶** 31/07/2013
- ► Inadequate separation
- ▶ Partly involved
- ► Severity B



- **▶** 23/09/2011
- ► Inadequate separation
- ▶ Partly involved
- ► Severity B



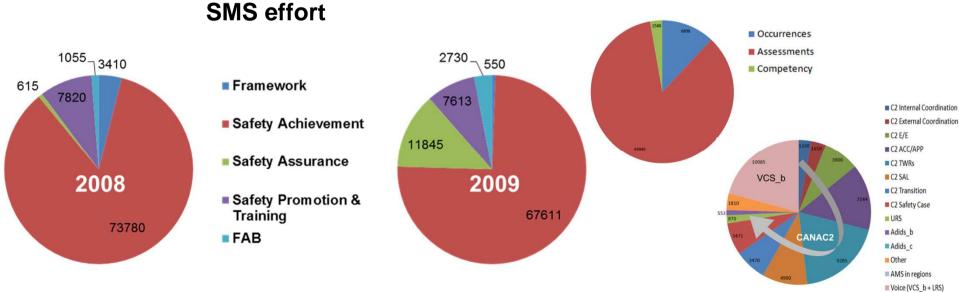


Chronology of effort 2008 / 2009



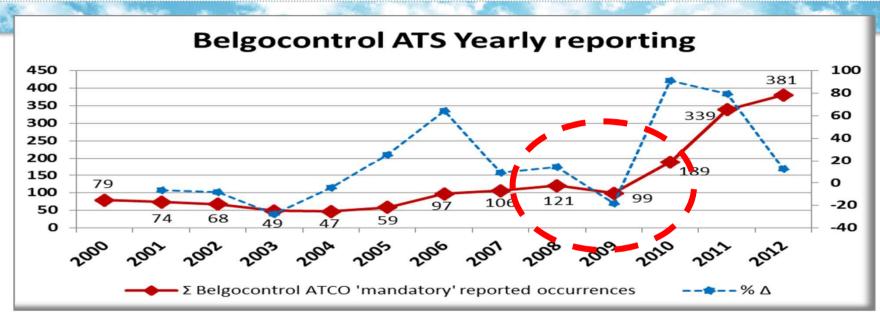
→ CANAC 2 implementation

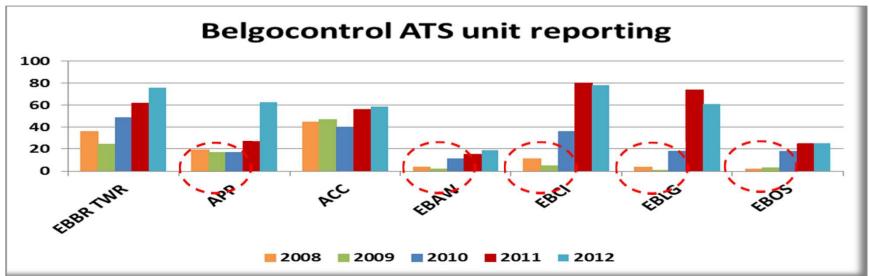




Belgocontrol Reporting Culture







Belgocontrol Reporting Culture



- ₹ 2008/2009: General culture: mandatory reporting limited to losses of separation, runway incursions, ...
- → 2010: Safety Culture Survey
 - ▶ Recommendation: ... Lack of feedback ...
- * Resulting in Roadshow
 - ► Every unit / Every single ATCO
 - ► Main topics : How to report? / What to report?
 - Discussions revealed
 - > difficulty to report
 - > lack of feedback
 - a gap between the legislation and the practices ... such as airspace infringements
 - ► General comments: If we have to do that, we will have to report one every 2 days ...

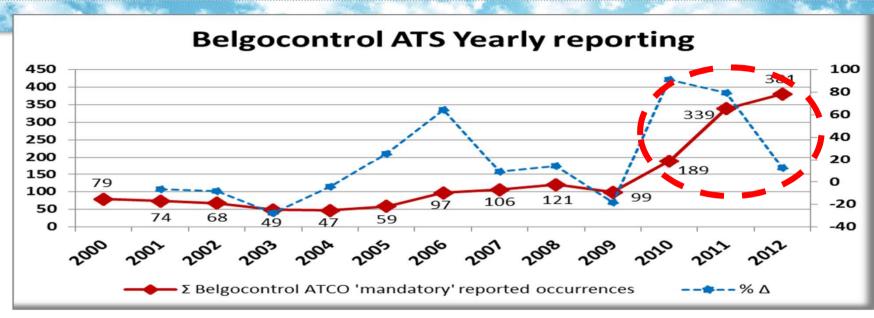
Commitment

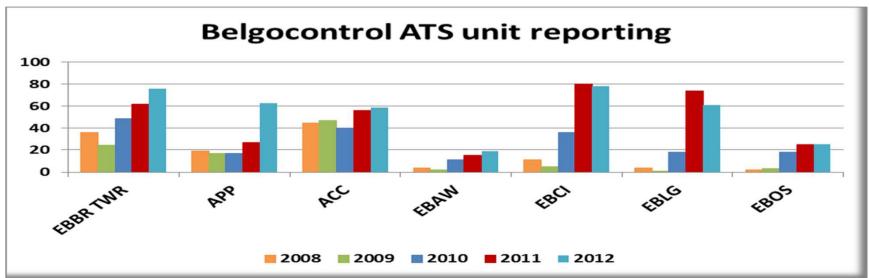


- → Work hard on feedback
- → Make reporting easier
- → Influence the CAA to define airspace infringements as a safety risk

Belgocontrol Reporting Culture



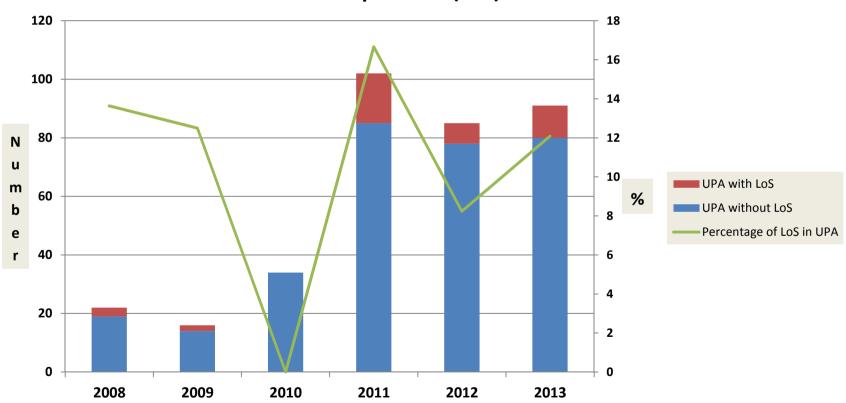




Airspace Infringement reports

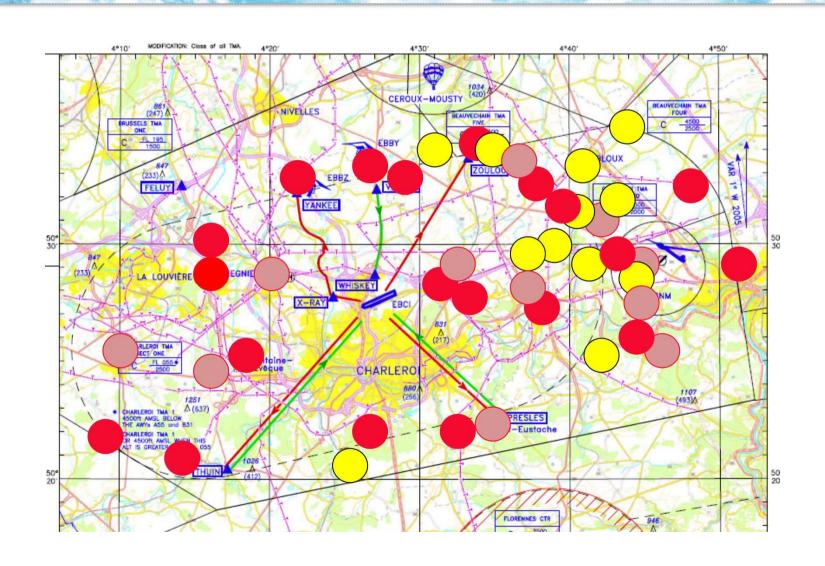


Unauthorised penetration of airspace (UPA) with & without Loss of Separation (LoS)



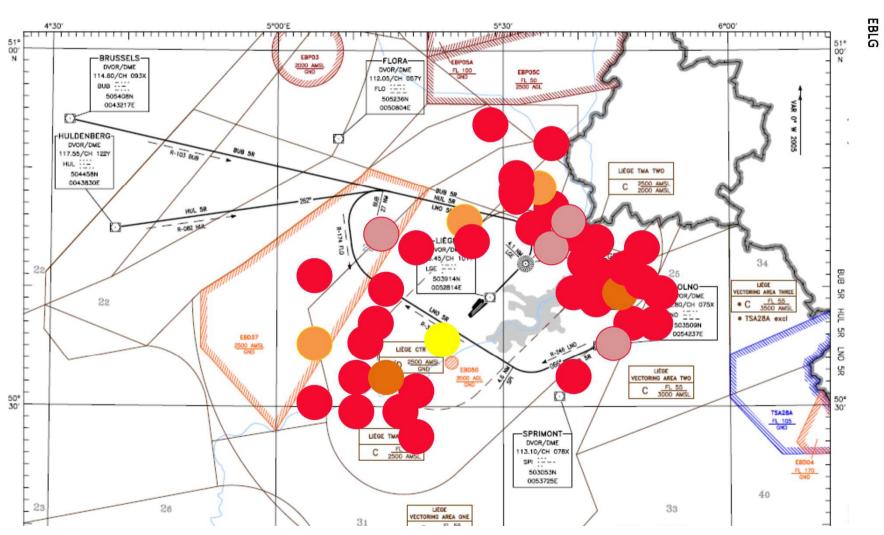
Map EBCI





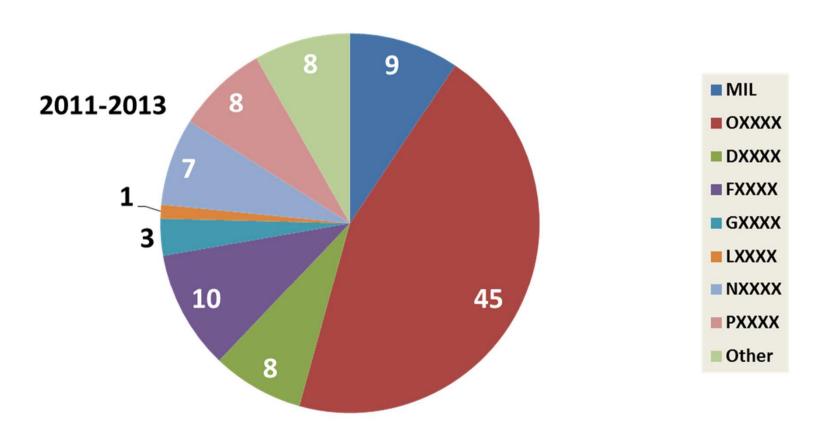
Map EBLG





Origin of infringers



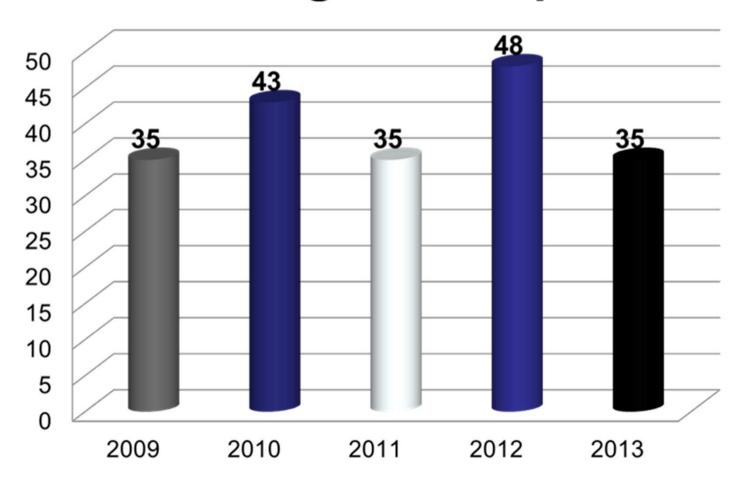


Less than half the reported Al's are with Belgian registrations

Military data



GA infringement reports



Belgian Safety Plan

BELGIAN SAFETY PLAN

2010-2014

2012 Update



Outline

Link between the European Avia

General Actions (GA) to further develop the Belgian Safety Programme (BSP)

GA1: Establishing a National Safety Library

GA2: Developing Safety Performance Indicators (SPI's)

GA3: Developing a strategy with respect to safety training and safety promotion

Operational Actions (OA) to Improve civil aviation safety

OA1: Establishing a Belgian Aviation Wildlife Hazard Committee and drafting a national action plan to prevent collisions with animals

OA2: Resolving problems related to ground handling in partnership with the market sector

OA3: Drafting regulations with respect to unruly passengers

OA4: Annual check of the reliability of flight controls for commercial aircraft in Belgium

OA5: Complete the regulation with respect to the "Targeting of Aircraft with Lasers'

Cho: Implementation of the European Action Plan for the Prevention of Runway Incursions (EARPRI)

OA7: Implementation of the National Action Plan for Airspace Infringement Risk Reduction

Appendix 1: Outline of risks in the Belgian civil aviation secto

Appendix 2: Belgian Civil Aviation Safety Policy

CONTENTS



Belgian Safety Plan



22 Belgian Safety Plan 2010-2014 • 2012 Update

OA7: Implementation of a National Action Plan for Airspace Infringement Risk Reduction

a. Description

Airspace infringement is also referred to as unauthorized penetration of airspace and is generally defined as a flight into notified airspace without previously requesting and obtaining approval from the controlling authority of that airspace in accordance with international and national regulations.

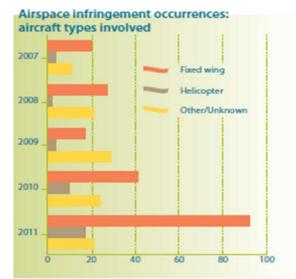
The table below shows the number of reported infringements for the period 2007-2011.

Since 2007 the overall number of reported incidents is almost constantly increasing. The upward trend may also be influenced by the increasing awareness of this type of risk and other improvements in the general reporting culture.

The analysis of the reported incidents clearly indicates that the majority of infringements are committed by General Aviation VFR flights.

	2007	2008	2009	2010	2011
Airspace Infringements	30	43	41	62	130





The BCAA will take the following actions:

- New Action OA7.1 (date: July 2013): establish a national action plan for airspace infringement risk reduction derived from the European Action Plan for Airspace Infringement Risk Reduction;
- New Action OA7.2 (date: end 2014): promote and verify the implementation of the national action plan for airspace infringement risk reduction.



Ambition versus Influence



* Situation:

- ► Bottom up approach
- ► All motivated to work on the issue

A STATE OF THE STA

- ▶ No resource commitment from TOP MGT avl
 - > Manpower
 - > €
- ► Flight organizations who have additional issues
- ► Tick in the box attitude versus safety improvement

WG

BCAA
BSA-ANS
Military
Flight Orgs
Eurocontrol
Belgocontrol

Lessons Learned

- ▶ Top management commitment and mandate = CSQN
- ► Importance of indicators to measure success from start
- ► Be prepared to handle an increase in reports @ ANSP & CAA

Contributing factors



- → Navigation errors
- → Reduced navigation skills
- → Not aware of changes in airspace
- → Lack of flight preparation
- ➤ Poor ATC radio communication skills resulting in a preference to fly through narrow VFR-corridors, in between CTR's, just to remain in G-class airspace

Slight distraction, loss of situational awareness, crosswind, reduced visibility may easily lead to an infringement.

Highlights B/AIRP



Inform on the risks of airspace infringements

Stimulation of recurrent training of pilot license holders

Encouragement of all to regularly attend refresher courses

Stimulation of instructors and examiners to check pilots' radio communication skills

Voluntary reporting culture for the benefit of learning

Fostering of the (correct!) use of emerging technologies

Simplification of the Belgian airspace (where possible)

Leaflet / Questionnaire



- **→** LEAFLET, issued in Jul 2013
 - ► Nbr of downloads on Belgocontrol website:
 - > Jul: 1333
 - > Aug: 274
 - > Sep: 215
 - > Oct: 185





Y Questionnaire to be filled in by 'infringers' to understand why it happened

Lessons Learned

- + good start (1st common tangible result)
- + pilot view on occurrences
- completely missing the timing for leaflet
- ► leaflet effectiveness: 1 (on a scale 1 to 4), comparable to ... 18







To be continued



To be continued



- ★ Introduction of questionnaire & continuous pressure of ANSP's for feedback, lead to change of roles and responsibilities at CAA level and a dedicated procedure
- → Use of ECCAIRS for internal follow up actions
- → Start of work of a student ... for data analysis and preparing a VFR guide, based on some best practices around Belgium

Lesson learned

Conflict between trying to gather as much as possible information (Questionnaire) and former culture of PV for applying correctly the law (> making an infringingement)

Last minute efforts



- **→** Meeting Nov 2013
- * Presentation newly reported occurrences, statistics, preparation of updated leaflet
- → Some hotspots identified and preparation VFR guide
- * Brainstorming
 - → 16 possible working areas
 - → Scored on effectiveness and complexity
 - * Selection
 - * Roadmap with some milestones

Effectiveness Safety benefit Complexity Effort Manpower Interdependancy

Still missing: Management commitment

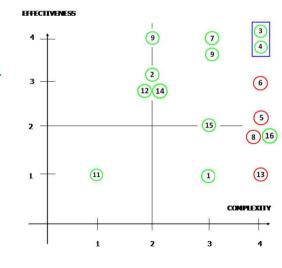
Brainstorm actions



- KPI to measure success: 3/1
- 2. Statistical analysis of the data: 2/3
- 3. Airspace design recommendations: 4/4
- 4. Charts/maps: 4/4
- 5. AIP: 4/2
- 6. NOTAMS: 4/3
- 7. VFR-Guide: 3/4
- 8. Optimization/Standardization FIS: 4/2
- 9. Stimulate use of GPS/Tablet apps for navigation: 2/4
- 10. Training pilots RT/Navigation skills/Refreshers: 4/2
- 11. Leaflet: 1/1
- 12. Questionnaire: 2/3
- 13. Voluntary reporting: 4/1
- 14. Briefing package: 2/3
- 15. Letter for commitment/resources/support for B/AIRP: 1/4
- 16. Road show/presentations: 3/2

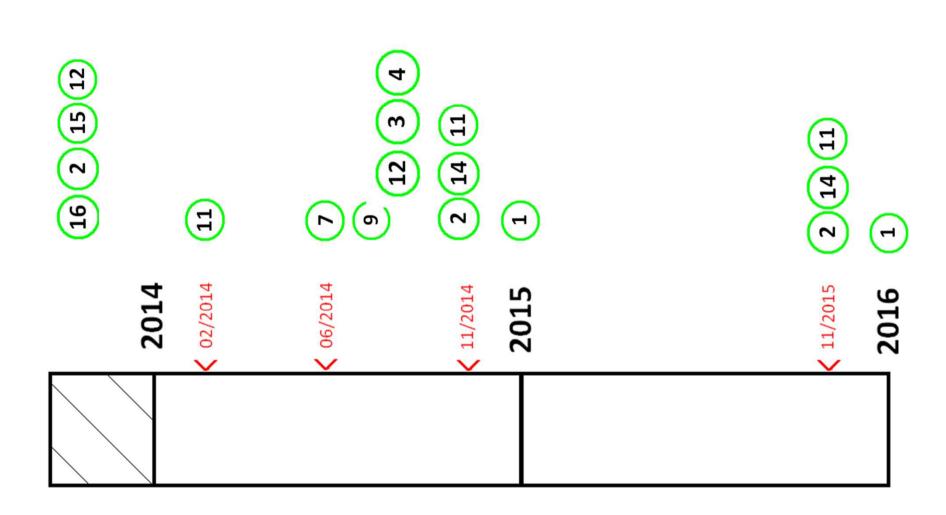
X/Y:

- X: Complexity to install
- Y: Effectiveness of effort



Roadmap proposal





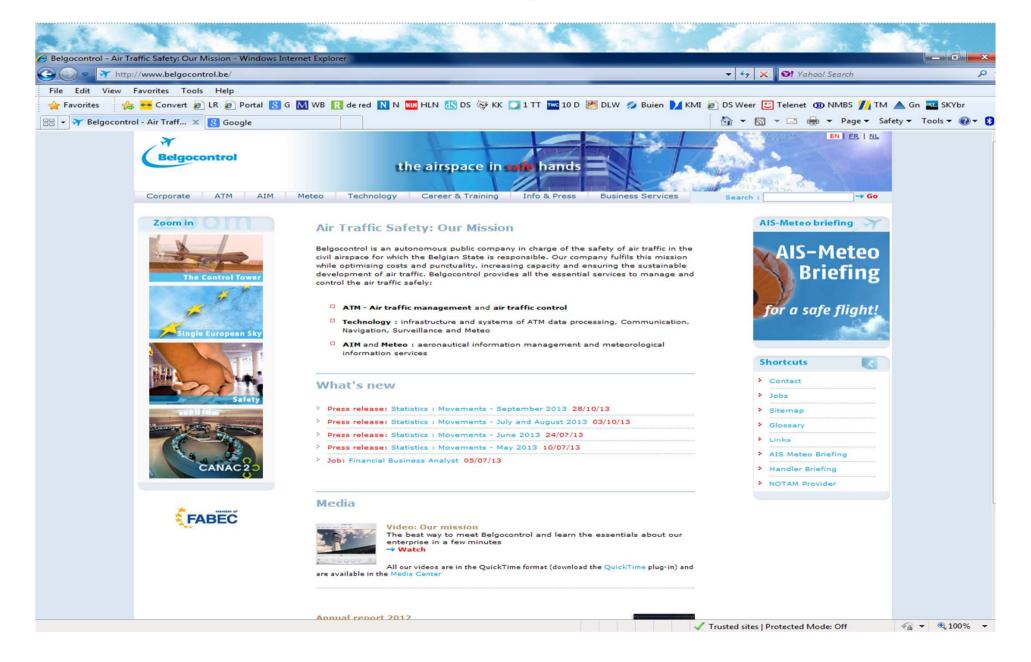
Achievements so far

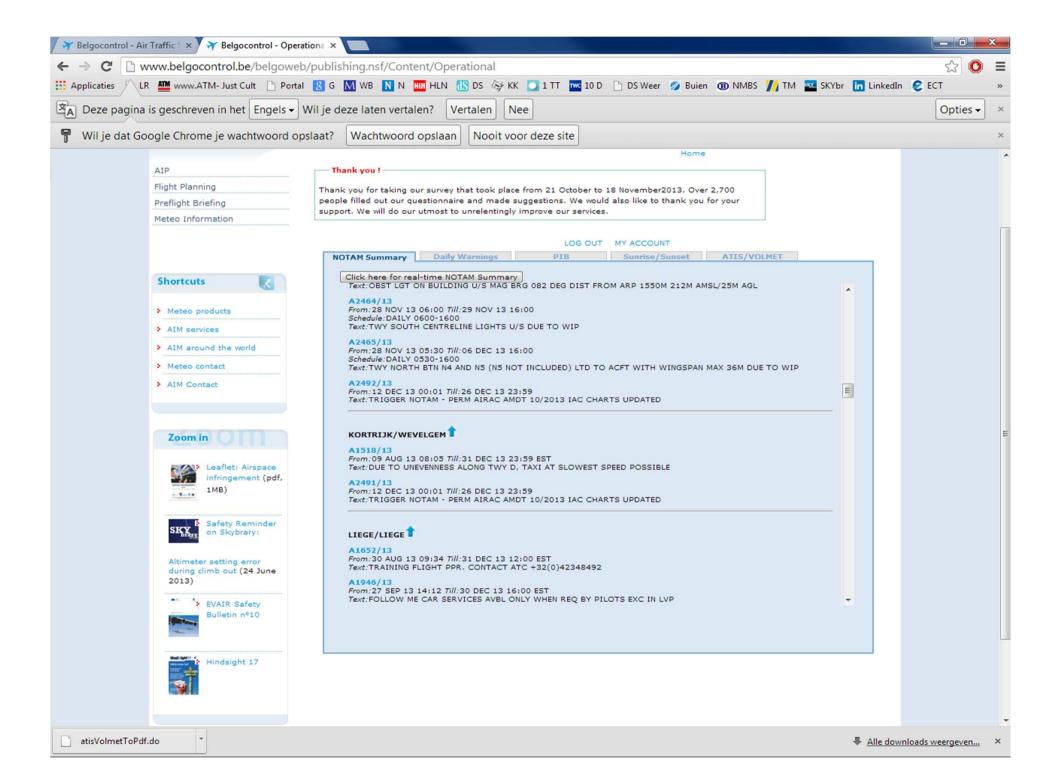


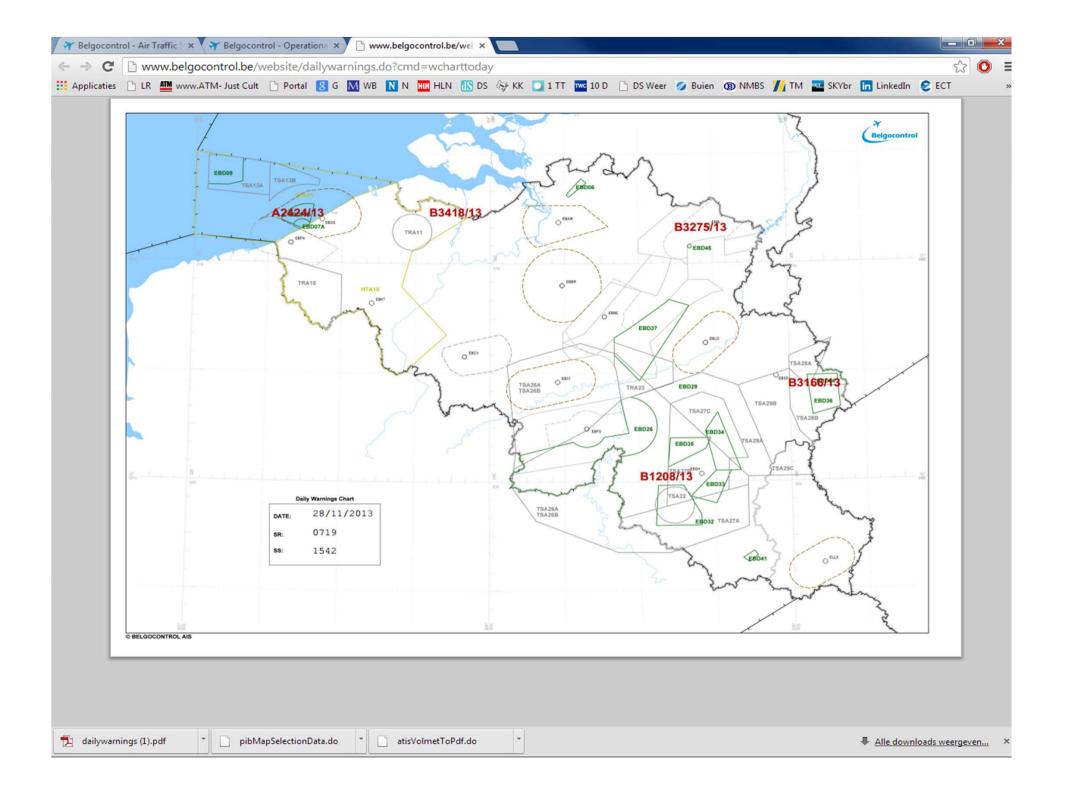
- ► Less infringements?
- ► Good communication/cooperation between MIL, CAA, Flight Organization, Belgocontrol on a common issue!!!

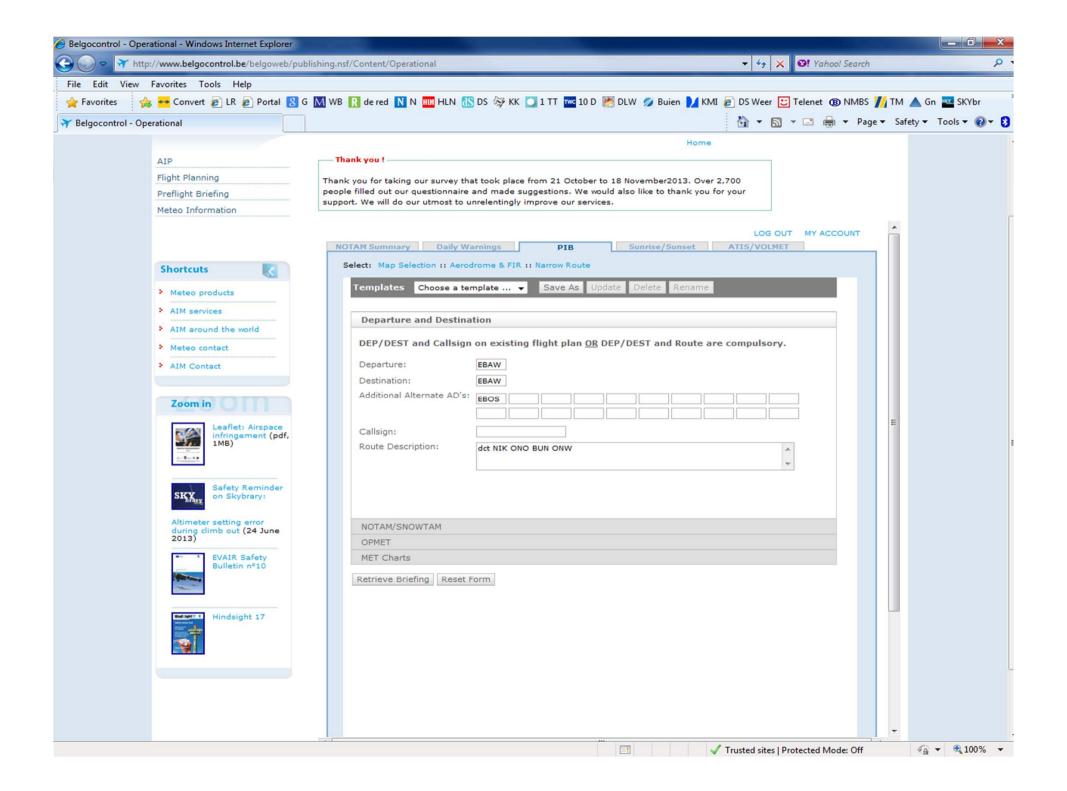
What else ... www.belgocontrol.be

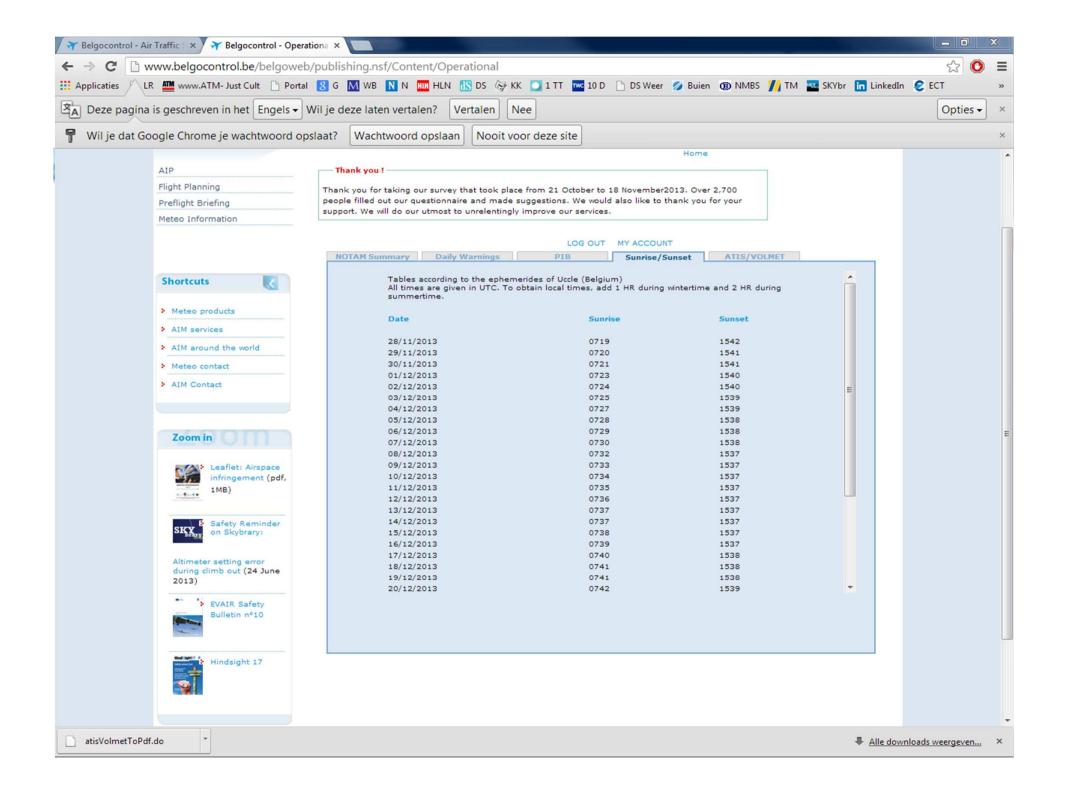


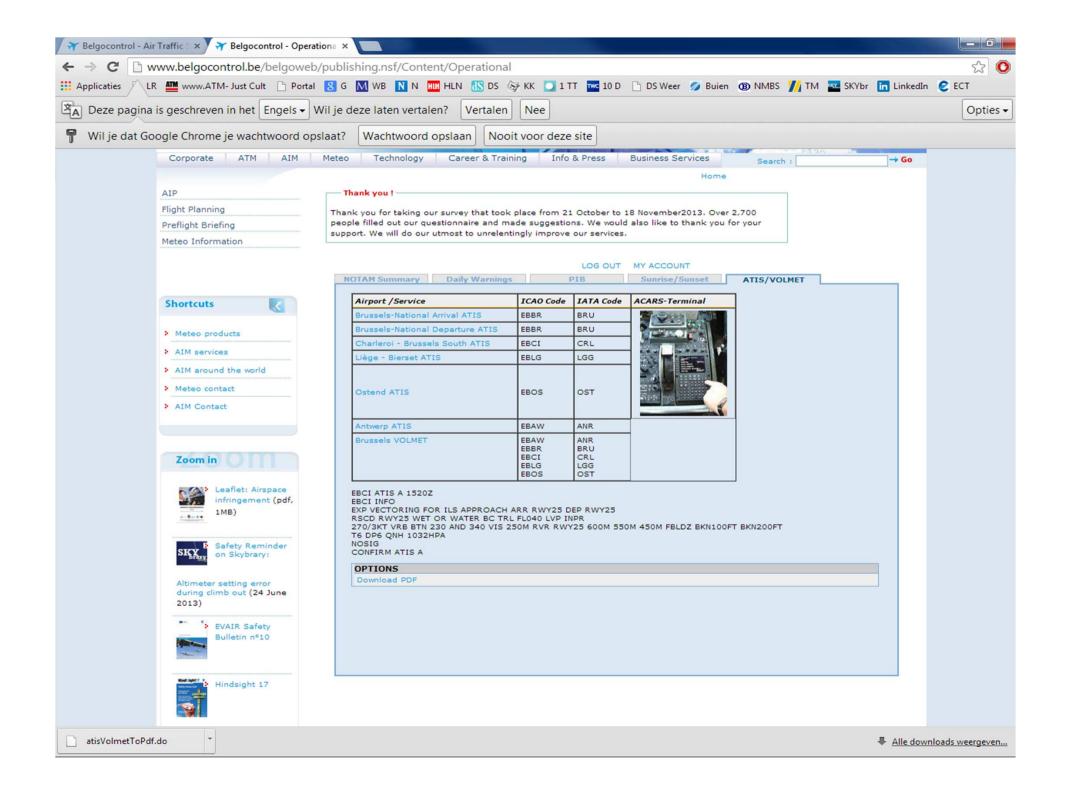


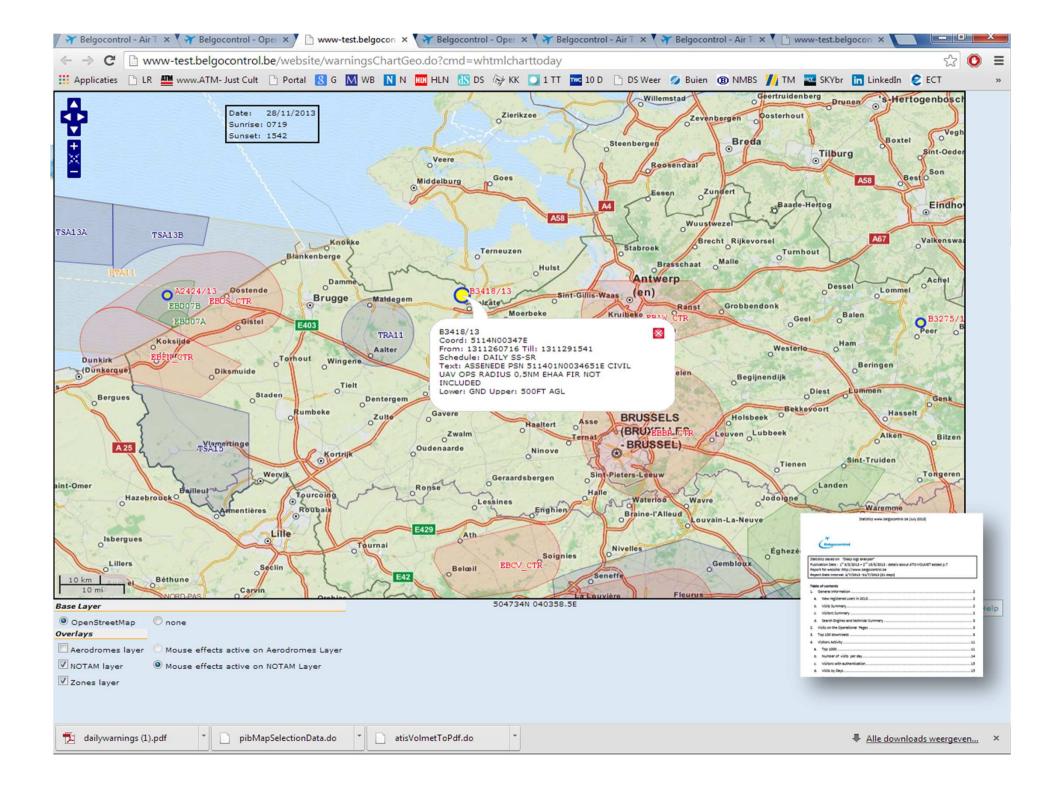












Home

AIP

Flight Planning

Preflight Briefing

Meteo Information





Leaflet: Airspace infringements

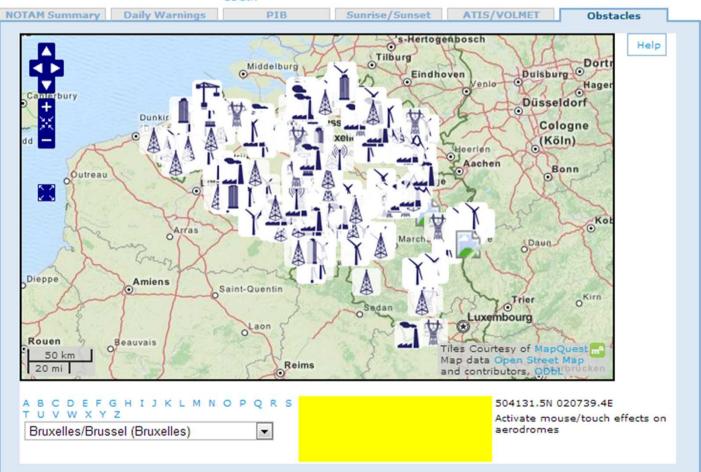


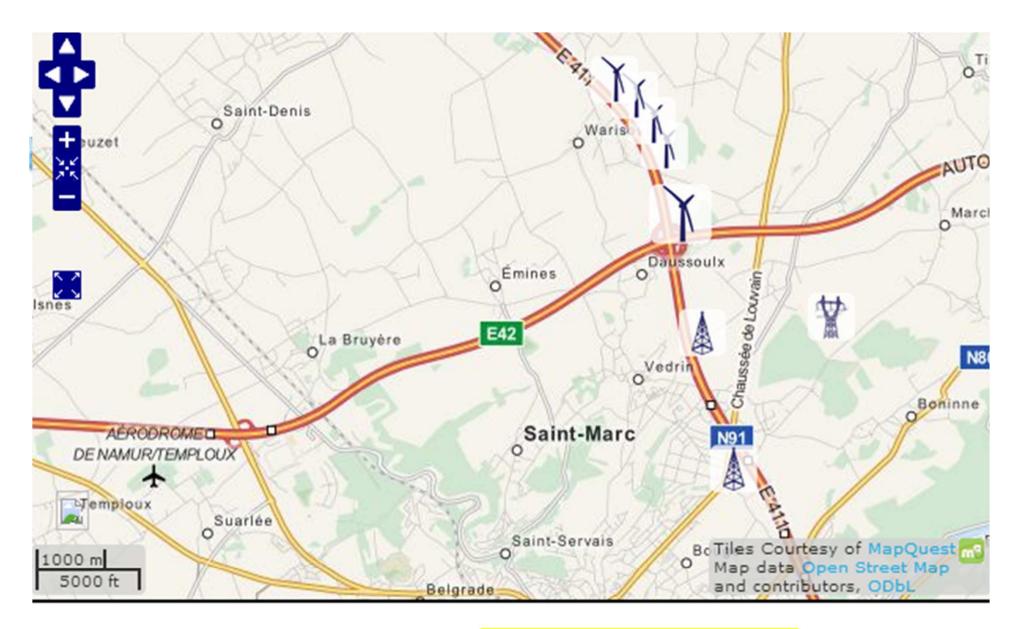
Airspace infringements are intrusions into an area of controlled airspace without prior authorization from the air traffic control unit in charge. These incidents mainly concern VFR (Visual Flight Rules) flights and were in 2012 the 2nd cause of incident in the Belgian airspace behind the recent phenomenon of laser pointers. A new leaflet is now available and includes key information in order to avoid airspace infringements and to

improve safety in the Belgian airspace.

→ Download the leaflet: Airspace infringements in the Belgian airspace

LOGIN





A B C D E F G H I J K L M N O P Q R S NAME: EBBU03772
F U V W X Y Z HEIGHT: 132 m

Temploux (Namur)

NAME: EBBU03772 HEIGHT: 132 m ELEV: 332 m TYPE: WINDMILL

COORD: 503129N 0045300E

503129.6N 045300.2I

Activate mouse/touch

aerodromes



