ICAO European FMG

AFC Update
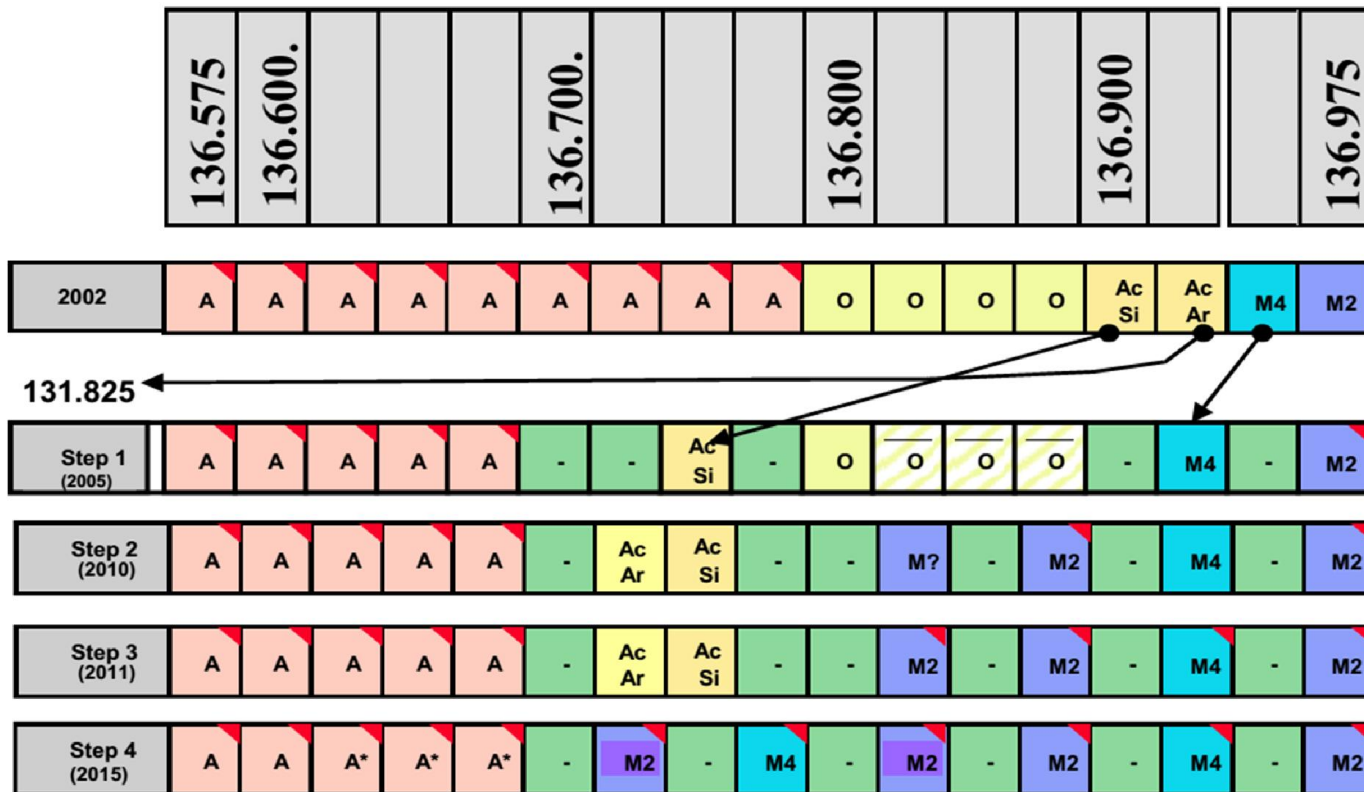## Winter 2014 Meeting

FMG Overview

- To develop recommendations for the ICAO European Air Navigation Planning Group on issues related to aviation spectrum management and frequencies
- Meets twice a year

Activity since the last AFC in June 2013

- One meeting in Brussels
  - December 2013
- Topics relevant to US aviation
  - VDLM2 planning and utilization
  - UAS
  - 8.33k channel assignments
  - GNSS interference

www.ASRI.aero

European VDLM2 deployment plan

VDL 2 sub-band deployment steps

A: protected voice; A*:protected voice only for airborne traffic; M2:VDL Mode2; M4:VDL Mode4

Euro VDLM2 Usage

- Channel utilization at CDG
  - Significant increase from 2012 to 2013
  - Average channel utilization increased from 10% to 20% CU
  - 200,000 to 350,000 PDUs per day
- Honeywell avionics trials (in flight CU indications)
  - In service CMU trace data indicates that VDL mode 2 traffic density is 40-50% observed with peaks of 80%

Euro VDLM2 Usage (cont)

- Compared with simulations results of channel at saturation

  - #VDL 2- active aircraft /hour (300-350 viewed at CDG and FRA)

  - #frames/hour at CDG (50 0000 PDUs)

  - Total kbit/s exchanged at peak time at CDG (11 kBits/s average per min, on peak hour)

- Entering in the traffic range where saturation is possible.

DILSG Future Considrations

- High VDL 2 channel utilization levels now observed over core Europe
- Current End/End performances for CPDLC are at the edge of desired levels
  - Unclear today : VDL2 saturation at some places = the main reason ?
  - (Too?) many VGS present (for availability reason) create instability and overload(?). Need for optimization
- Clear agreement from ACSPs, ANSPs,… to work at MF preparation now!
  - Avionics MF readiness is a first question
  - The group will work at a strategy for progressive testing and operation of MF

Next Meeting in June 2014

- Exact date TBC
  - May conflict with AFC
  - ASRI intends to brief on USA VDLM2 plan
- Any additional points for ASRI to take?
  - Current and predicted US VDLM2 usage data would be beneficial

www.ASRI.aero

Questions

www.ASRI.aero