E4U Workshop #3

Single European Sky

Presenter: Dirk-Roger Schmitt (DLR)
• SESAR considered as input to the E4U study.
• View from SJU and Eurocontrol on the challenges
• Meeting with
  – Denis Koehl, SJU Senior Advisor Military Affairs
  – Edgar Reuber, ECTL SES Military Expert
  – Dominique Colin, ECTL Civil-Military Standardisation Senior Expert
• Summarised view on the following pages:
• Role of Stakeholders:
  – ECTL and SJU focus on science and content
  – SJU research independent of existing regulatory framework (purely R&D)
  – Close the cycle:
    • Activities within ECTL and SJU will be synergetic with envisaged EDA’s activities on deployment of industrialisation and military application.
• UAS-Activities in the past
  – ECTL initiated work on integration of UAS, focus on integration through research. OAT spec, Global Hawk).
  – SJU: First phase: constant observation and discussion of running third party activities and needs. Increased demand: own activities started.

• UAS-Activities in the future
  – ECTL: Support to stakeholders, drive towards harmonisation, civil/mil, support to UAS regulation.
  – SJU: LOT 6 for Associated Partnership. First step: Development of Conops for UAS insertion
• Detect & Avoid (D&A)
  – Still regulatory request also under IFR
  – SESAR research will implement envisages new roles of pilots, controllers and automated systems for 4D-Trajectory
  – SWIM-4D-Trajectory has not assessed D&A principles.
  – D&A function is important (TCAS, ACAS + further layers, not necessary visual imagery)
  – Concept must be proven safe
  – Final system is the target regardless existing regulation, providing benefits to manned aviation. Potential evolution of regulation to match the R&D solutions is assessed.
• SWIM: Major Enabler
  • situation awareness, safety, information security and efficiency…

• Challenges
  – UAS integration step-by-step approach
  – Coordinated track: ECTL, SJU, EDA
  – Harmonised European regulation following ICAO