| Deployment Scenario Title | Flight-centric ATC and improved distribution of separation responsibility in ATC |
|---|---|
| Deployment Scenario Description | Flight-centric ATC and improved distribution of separation responsibility in ATC: this activity relates to a concept involving assigning aircraft to ATCOs without reference to geographical sector, and having the aircraft controlled by that same ATCO across two or more geographical sectors. It requires flight-centric specific allocation, visualisation (traffic filtering), coordination tools (e.g. in the event of a conflict, to establish which controller is responsible for its resolution) and, for high traffic densities, advanced conflict detection and resolution (CD&R) tools (that are not flight-centric specific). In addition, it covers the concept of collaborative control with planned boundaries, in which sectors are retained as they are today, with aircraft being assigned to a sector according to its geographical location. The boundaries between sectors have planned coordination conditions, as in current operations, but with some additional flexibility by allowing controllers to issue clearances without prior coordination to aircraft in a different sector. |
| Essential Operational Change | Fully Dynamic and Optimised Airspace |
| Maturity | In development phase: Key R&D Activities |

| Applicable Operating Environment | | | |
|---|---|---|---|
| Airport | Terminal Airspace | En-Route | Network |
| | | | |

| Timeline | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |

| Performance Contribution of the DS | | | | |
|---|---|---|---|---|
| Capacity | Safety | Environment | Cost-efficiency | Operational efficiency |
| | | | | |

| Stakeholders affected (at least one enabler to be deployed) | | | | | | |
|---|---|---|---|---|---|---|
| ANSP | | AO | | AU | | Network Manager |
| Civil | Military | Civil | Military | Civil | Military | |
| APP, ENR, CNS | | | | Scheduled, BA Fixed, BA Rotorcraft | Transport, Fighter | |

| SESAR Solutions | | | |
|---|---|---|---|
| Solution Code | Solution Title | Solution Description | Related Elements |
| PJ.10-01b | Flight-Centric ATC | Flight-Centric ATC sees the provision of ground-based automated support for managing separation... | SOL PJ OI DS EOC |
| PJ.10-06 | Generic' (non-geographical) Controller Validations | Generic (non-geographical) Controller Validations refer to the development of advanced tools and... | SOL PJ OI DS EOC |
| PJ.10-W2-73 | Flight-centric ATC and Improved Distribution of Separation Responsibility in ATC | The key R&D activity covers a concept that consists of assigning aircraft to ATCOs without... | PJ DS EOC |

| Operational Improvement Steps | | | |
|---|---|---|---|
| **OI Step Code** | **OI Step Title** | **OI Step Description** | **Related Elements** |
| CM-0200-B | Flight-centric ATC in Non-Geographically-Constrained, Low and Medium complexity environments | In Low and Medium complexity environments above a certain Altitude / Flight Level, depending on... | SOL OI EN DS |
| CM-0200-C | Flight-centric ATC in Non-Geographically-Constrained High and very High Complexity environment | In High and very High complexity environments, depending on local organization and working... | SOL OI EN DS |
| SDM-0203 | Generic' (non-geographical) Controller Validations | Advanced automation and other future concepts (e.g. 4D Trajectory management), harmonising ATC... | SOL DS |

| Enablers | | | | | | |
|---|---|---|---|---|---|---|
| **Required/ Optional** | **New/ Inherited** | **Develop/ Use** | **Enabler Code** | **Enabler Title** | **Enabler Description** | **Related Elements** |
| 🔒 | | | ER APP ATC 174 | ATC System to Support Flight-Centric ATC | The ATC system is modified to permit Flight Centric ATC, whereby a flight is assigned to a... | STK OI DS |
| 🔒 | | | HUM-017 | New working methods for operation within FC-ATC Environment | Thanks to appropriate training, new HMI solutions and task sharing procedures, ATCO situational... | STK OI DS |
| → | | | A/C-31a | Controller pilot data link communication (CPDLC) compliant with ATN baseline 2 (FANS 3/C) | Data link exchange for ATN/VDL2 baseline 2 (FANS 3/C) i.e. for Departure Clearance,... | STK OI EN DS |
| → | | | A/C-37a | Downlink of trajectory data according to contract terms (ADS-C) compliant to ATN baseline 2 (FANS 3/C) | Downlink of trajectory data (waypoints or pseudo waypoints with associated constraints and/or... | STK OI EN DS PCP |
| → | | | AAMS-19 | Dynamic Airspace Configuration tools for the Integrated local DCB working position | To prepare the future integration of DAC and DCB at local level, new Dynamic Airspace... | OI DS |
| → | | | CTE-C01b | New Digital A/G Voice | 'The migration from analogue to digital Air-ground voice is carried out provided that an... | STK OI DS |
| → | | | NIMS-36 | Enhanced Complexity assessment tools | Provision of enhanced complexity assessment tools to the traffic manager... | OI DS |